

**Institutions and Endowments: State Credibility,
Fiscal Institutions and Divergence, Argentina and
Australia, c. 1880-1980**

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Abstract

The thesis compares Argentine and Australian fiscal systems from the late nineteenth to the late twentieth centuries. It uses institutionalist and endowments approaches to evaluate the importance of state credibility and taxation on long run economic development. After rapid convergence in the early twentieth century, Argentina and Australia clearly diverged in the latter twentieth century. Divergence emanated from different institutional experiences, which ultimately originated from dissimilar experiences of state credibility. State credibility is the extent to which society trusts the state to act in its interests. Fiscal institutions are a clear and comparable measure of state credibility over time as they frankly express underlying political economy. As Argentina and Australia were once similarly successful settler economies with comparable geographic prospects for development, the comparison promises to transcend geographically deterministic explanations for development. Geography primarily consists of factor endowments and location. In fact Argentina was better placed to succeed in geographic terms than Australia. Yet Australia, not Argentina, secured the status of a developed country. Australia and Argentina exemplify the relative insignificance of geography in shaping development. Divergence resulted from a failure of Argentine institutions to generate sufficient space for negotiation and compromise, and a 'latent civil war' was entered from the 1930s until the early 1980s. A key finding of the thesis is that divergence in fiscal institutions, especially differing capacities to embed progressive systems of direct taxation was crucial to divergence in development. This finding is based upon the discovery of new evidence and the harmonisation of fragmented time series which enable comparison over a long period of time. Argentina and Australia took different paths in the latter half of the twentieth century due to distinct institutional environments and their legacies for social consensus and development.

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‘Australia’s total area is roughly similar to that of Brazil’s ... but Brazil’s soil is more than twice as fertile. ... Brazil abounds in large rivers ... whereas Australia is very poor in waters and soil fertility, with only one river of medium size. ... Nonetheless Brazil not only has a much inferior level of productivity than Australia, but is also much poorer in production, income, industry, wealth, culture and political and intellectual liberty. ... [Yet] Brazil has a constitutional government under the most able monarchy, ... with more than three centuries of colonisation, while Australia has not even been colonised for a century! ... How will the generally backward Latin populations, superstitious and ignorant, with so many physical and moral obstacles to progress, ever compete with the noble, intelligent, strong, free and industrious Anglo-Saxon and Germanic races? *Only with good and progressive governments*, such as we [Argentina] and Brazil have today, will we approach the degree of freedom, skill and culture that they display. ... *This inferiority is not due to race or character*. Fortunately it is due solely to a complete lack of intellectual and moral liberty, and of political, scientific, and industrial education.’

(Newton and Llerena 1882), Volume V, pp.322-4

‘No deus ex machina translates endowments into political outcomes. Were it so, Argentina would be as rich as the United States; and Hong Kong, Japan, and South Africa would never have become rich.’

(North, Summerhill et al. 2000), p.19

[Italics and translations in quotations above are mine.]

Origins and Aims of Thesis

Argentina and Australia shared similar contexts and opportunities for development, yet took starkly different paths. After rapid convergence in development in the late nineteenth and early twentieth centuries, divergence increasingly emerged and was clear from the mid twentieth century. This paradox once attracted much attention. It raises the broad question of what determines development, which is the primary concern of this thesis. Development is a sustained rise in living standards throughout a society over time. The key indicator of development is growth in income per capita, which is necessary but not sufficient, as development is more than economic growth. Economic historians sought to explain Australian and Argentine divergence in order to gain greater insights into development, to measure Argentina's failure, and to warn Australia of a darker future. Yet no durable explanations for divergence appeared. This thesis revives the Argentine-Australian comparison from the perspective of New Institutional Economics (NIE), which was yet to be formalised when much of the earlier work was done.¹ The NIE perspective provides a more enduring answer as to why divergence occurred after such a long period of convergence, and the particular comparison proposes some answers as to what determines development.

Argentina and Australia both developed on the periphery of the world market. This presented them with similar opportunities, which were originally determined by their underlying wealth in land. Australia used these opportunities to transform limited factor endowments into development from the early nineteenth century. Argentina did not do so until much later in the nineteenth century, despite evidently more abundant factor endowments. Both countries turned towards their national markets as potential engines for development as export led development became problematic in the interwar period, namely between the World Wars. Internal led development ultimately proved an unsuccessful strategy. In the post World War II period Australia re-engaged with external markets, continuing and diversifying exports, whereas Argentina did not. How did similar geography, i.e. similar opportunities and contexts for development, translate into such different experiences of development? Geography primarily consists of factor

¹ The theoretical framework of NIE is discussed extensively in Chapter One. An important statement of NIE is North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press.

endowments and location (the spatial interaction between economic agents).² This thesis shows that institutions determined the ability of geography to engender development in Argentina and Australia. To state that their geography was comparable actually gives a favourable bias to Argentina, as Australian endowments and spatial location were weaker. Judging by geography alone, Argentina should have been more, not equally successful. The comparison also gets beyond the argument that highly concentrated land tenure was to blame for Argentina's later difficulties, as Australia also had highly concentrated land tenure.³ If these countries had so much in common geographically, why did they take such starkly different paths? The answer is their differing institutional environments, and the legacies these had for social consensus and collective action.

Within the institutional approach, property rights are often seen as the fundamental causation of development. A different approach is taken here. The state and its credibility, as the largest potential collective actor, is seen as more fundamental. State credibility is the faith a society has in the state to act collectively in the interests of society. How can state credibility be measured and compared? Fairly direct measurements are fiscal institutions (the ability to raise revenue), the provision of public goods, and public credit. Without credibility the state will struggle to erect viable and substantial fiscal institutions, as society will be highly uncooperative in providing taxation. The state will be largely limited to indirect, regressive and relatively unproductive sources of tax, and is more likely to resort to inflation taxation or seigniorage. A deficiency of lucrative fiscal institutions hinders the state's ability to provide the public goods (directly or via regulation of the market) that are typically necessary for development. Della Paolera and Taylor observe that a key macroeconomic challenge for a small open economy is the construction of institutions and commitments that support stable fiscal and monetary policies.⁴ Long-run price stability and the resulting benefits of financial markets are only possible if a country is successful in constructing such supporting institutions. If a small open economy is unsuccessful it

² Crafts, N. and A. J. Venables (2003). *Globalization in History, A Geographical Perspective. Globalization in historical perspective*. M. D. Bordo, A. M. Taylor and J. G. Williamson. Chicago, University of Chicago Press: ix, 588 p., p.323

³ This is particularly relevant to the arguments put forward in Engerman, S. L. and K. L. Sokoloff (2002). "Factor Endowments, Inequality, and Paths of Development among New World Economies." *National Bureau of Economic Research Working Paper 9259*. They argue that concentrated land tenure ultimately undermined Argentine institutions. See Chapter One for further discussion.

⁴ Della Paolera, G. and A. M. Taylor (2001). *Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935*. Chicago, University of Chicago Press., p.10

risks volatile inflation, leading to increased financial instability and banking and currency crises. Yet how does a society construct the institutions and commitments necessary for stable fiscal and monetary policies? Fiscal institutions are the basis upon which all macroeconomic institutions are built. Monetary institutions, for instance, require solid fiscal institutions to be sustainable.⁵ Otherwise the primary role of a country's currency will likely be as a source of seigniorage (i.e. inflation taxation), which will undermine the development of monetary and financial institutions. Fiscal institutions are the immediate and investigable result of state credibility. They are also a proximate cause of further macroeconomic institutional development. As such they are an ideal focus for the comparative investigation of state credibility. State credibility and ensuing fiscal institutions are the foundation upon which efficient institutions that engender development are built.

Overview of Convergence and Divergence

Argentina and Australia both emerged as new nations over the nineteenth century. Australia quickly began to develop within the institutional shelter provided by Britain, whereas Argentine development was initially delayed by the chaos that ensued from the break-up of the Spanish empire. Nonetheless they began to converge in the latter half of the nineteenth century as Argentine institutions consolidated. Argentina rapidly converged with Australia and other developed countries as GDP grew at an annual average of just over 6% for almost half a century, from 1870-1913.⁶ This high rate of growth became possible once Argentina established an institutional environment, allowing the pursuit of an export led model of development. Only then could Argentina's rich and varied factor endowments become viable means for significant development. By the late nineteenth century Argentina was considered a rising star of development, and its national wealth was listed alongside (and compared favourably with) Europe, the US, Canada, and Australia in the leading statistical compendium of

⁵ A point illustrated in Cortés Conde, R. and G. T. McCandless (2001). Argentina: From Colony to Nation - Fiscal and Monetary Experience of the Eighteenth and Nineteenth Centuries. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p.

⁶ Derived from Maddison, A. (2003). The World Economy: Historical Statistics. Paris, OECD Development Centre. **2005**.

the time.⁷ Australian institutional stability allowed development from an earlier date, but this was somewhat limited by poor factor endowments that amounted to little more than deprived pasture or rangelands and alluvial gold. It was not until the twentieth century that publicly funded technology and ongoing institutional stability allowed for an impressive increase in Australia's range and wealth of endowments. In spite of limited factor endowments, Australian institutions permitted such impressive development in the nineteenth century that Australia was the world's wealthiest country in terms of GDP per capita by the late nineteenth century. Even with Australia's impressive lead, Argentina was nearing Australian GDP per capita by the early twentieth century. Argentina was then so successful that GDP per capita exceeded that of France and Germany, and was nearing the leading 'western offshoots' of Australia, New Zealand, the USA, and Canada.⁸ In fact the use of GDP per capita understates the extent of Argentine convergence, as population growth was much higher than in Australia. Argentina and Australia had almost equal populations in 1870, but by 1913 Argentina's population was 1.6 times as large as Australia's, largely due to immigration. In the late 1920s Argentina reached a relative peak of convergence, when its GDP per capita was 81 and 87 percent of the UK and Australia respectively. Argentina then roughly maintained a developed standard of GDP per capita until the early 1950s, when a clear and sustained divergence began, one that greatly accelerated in the 1970s.⁹

The history of the Argentine-Australian comparison is dynamic. Australia is an excellent standard for comparison as it was not a superstar of development during the twentieth century, unlike the USA for example. Australia and Argentina both struggled with a difficult external context in seemingly similar ways. As that external context became more trying during the interwar period, Australia and Argentina attempted, and largely failed, to develop an internally led alternative via protectionism and import-substitution industrialisation. With the end of World War II the international market re-emerged as a powerful option for development. After a brief lull, Australia revived

⁷ Mulhall, M. G. (1899). The dictionary of statistics. London,, G. Routledge and Sons., p.589 In a related publication Argentina was explicitly compared to Canada and Australia. Mulhall, M. G. and E. T. Mulhall (1892). Handbook of the river Plate. Buenos Ayres, London, M.G. and E. T. Mulhall: K. Paul, Trench & co., p.65

⁸ Maddison, A. (2003). The World Economy: Historical Statistics. Paris, OECD Development Centre. **2005**.

⁹ The timing of convergence and divergence is detailed in Chapter One.

exports in the postwar period, alongside a newer and seemingly expensive protectionist path. Despite Argentina's richer, more easily exploitable factor endowments, and superior proximity to world markets, Argentina was not able to maintain a balance between export led and internal led growth. Argentine exports fell into a long decline despite the renewal of opportunities. For much of the postwar period Argentina was not even able to maintain the volume of agricultural production achieved in the 1920s.

Australia and Argentina exemplify how little important the luck of geography was in their development. Argentina had a much greater natural diversity of potential staple exports, more fertile soils, and was closer to markets. Yet Australia always achieved more impressive development in terms of GDP per capita. Australian institutions played the crucial role. In the nineteenth century they transformed wool, potentially a highly inequitable staple due to the need for large areas of land, into a source of widespread development. In the twentieth century Australian institutions greatly expanded potential endowments via their sponsorship of investment and technology. Institutions translated into much greater means for creating wealth in Australia, whereas they eventually did the opposite in Argentina. Argentine institutions ultimately failed to generate the compromises that were essential for state credibility, which was required for the state to deliver (or prevent the undermining of) development. A primary reason for the undermining of development was the 'latent civil war' that emerged in Argentina from the 1930s onwards.¹⁰ In the 1980s the Argentine state emerged from this half century of latent civil war as a democratic entity, but one that has so far failed to reconsolidate fiscal institutions upon the basis of greater credibility. In contrast Australian institutions achieved much compromise. The 'Australian compromise' between state and society was implemented by the new federal state in the early twentieth century, and was relatively unaltered until the 1980s.¹¹ The Argentine comparison with Australia shows just how expensive the failure of institutions, particularly state credibility, has been.

¹⁰ This is the expression coined by Díaz Alejandro to describe the rupture of Argentine social consensus for much of the twentieth century. Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven, Yale University Press., p.132

¹¹ See Lloyd, C. (2002). "Regime Change in Australian Capitalism: Towards a Historical Political Economy of Regulation." Australian Economic History Review 42(3): 238-266.

Supplements to the literature

A fundamental claim of New Institutional Economics is that property rights are the underlying causation of development.¹² A more fundamental cause is state credibility as property rights in themselves are a public good, a result of underlying state credibility. The most skilfully written rules still depend upon the state and its legal system to deliver them, as North puts it: 'the polity makes and puts in place the economic rules of the game.'¹³ State credibility is a wide concept, reflecting the degree of cohesion and cooperation between state and society. It can be usefully and objectively compared between different societies over long periods of time via fiscal institutions, public goods provision and public credit. Fiscal institutions reflect the willingness of society to fund the state, and are thus a powerful representation of state credibility. Less credible states cannot access as wide a range of fiscal institutions as more credible states can, especially in regards to direct taxation. A state may monopolise violence, but compulsion is highly limited as a tool for collecting tax, and the most lucrative fiscal institutions (such as income taxation) are the most dependent upon consent. Capable fiscal institutions reflect a high degree of cooperation between state and society. Fiscal institutions are the primary tool through which the state can establish credibility, by providing society with desirable public goods. The focus of NIE needs to be redirected away from property rights per se and towards state credibility and resulting fiscal institutions. Property rights are important but proximate. This thesis shifts the emphasis of NIE in long run development from property rights to the more fundamental roles played by state credibility.

Another contribution of the thesis is the construction of new data and amalgamations of data to enable comparisons over a long period of time. The comparison of income taxation required the construction of time series from annually published official sources for both Argentina and Australia. In Argentina the data constructed is from 1935 to 1945, income taxation's most relevant period, which may be expanded in the future. This appears to be the first time such data has been constructed. For Australian federal income tax, a time series from 1915-70 was constructed. Upon these data new

¹² This is explained in detail in Chapter One.

¹³ North, D. C. (2003). "The Role of Institutions in Economic Development - Gunnar Myrdal Lecture." UNECE Occasional Paper, p.4

forms of analysis were used to compare them, which will serve as a model for future studies. Long-term compilations of time series, often over a century, were also constructed from a wide variety of sources, especially in the case of Argentina. They were made in order to disaggregate the fiscal state and reveal the underlying political economy. They include the sources of revenue and taxation, the destination of public expenditure, the experience of budget deficits, and the details of public credit, amongst others. A considerable degree of Argentine statistics, contemporary, and primary sources were also “rediscovered” in the archives, especially from the Argentine Central Bank (BCRA) and the Ministry of the Economy. The historical backgrounds of the key chapters (for instance in public credit, public goods provision, and income taxation) use these sources extensively. Many contemporary and relatively unknown sources were used to judge how well the views of that period fit with statistical findings. For instance the stony silence of the statistics on the decline of Argentine income taxation was filled by sources written at the time, often by highly credible Argentines. In Australia the Parliamentary debates were used to see how statistical graphs and theoretical ideas of the thesis compared with the thoughts of contemporary governors. For instance it was somewhat surprising to see how frequently many Australian Ministers saw the state as a firm in the service of the taxpayer, to whom they must provide a significant return. Finally the analysis allows the validity of some accepted statistics, especially Argentine budget deficits, to be brought more clearly into question, particularly in the postwar period. These new time series and primary sources contribute to the historical knowledge of Argentina and Australia.

Structure

The first part of the thesis outlines the methodology and reviews the literature. Chapter One presents the theoretical foundations of the thesis and explores the comparative literature. The second chapter compares the political and economic histories to reveal the roles played by state and market formation. These chapters form Part One, establishing the foundations and background upon which later chapters are built.

Part Two assesses the role that state credibility played in divergence by comparing fiscal institutions, public goods provision, public credit, and income taxation. Chapter Three contrasts fiscal institutions on a broad scale over a long time period, in particular

fiscal revenues and expenditures, which indicate long-term distribution policies and political economy. It finds that strong elements within convergence and divergence were the ability to shift taxation from indirect to direct, and to whom public goods were provided for. There was an increasing failure in Argentine state credibility in the postwar period that was reflected in fiscal institutions and public goods provision. This fuelled divergence. Chapter Four analyses the links between public credit, public goods and state credibility over time. It finds that postwar Argentine fiscal breakdown was mirrored in a failure of public credit, further restricting room for manoeuvre, and encouraging a negative path dependency of state credibility. It compares public goods provision in greater historical detail, revealing their chaotic financing and poor quality in postwar Argentina. This advances an argument for dramatic postwar divergence in state credibility, reflected in public goods and public credit. Chapter Five investigates the important role played by income taxation, and how this relates to development. Both Argentina and Australia successfully built important progressive and lucrative income taxes, but Argentina's income tax failed in the postwar period while Australia's continued to succeed. This played a crucial role in divergence, as income taxation was the most lucrative and progressive fiscal institution of the twentieth century, crucial to the credible financing of expanding states in the postwar developed world. The considerable postwar expansion of the Argentine state could not be credibly funded, as income taxation declined with state credibility. In the process the Argentine state became dependent upon seigniorage. The decline of Argentine state credibility and fiscal institutions combined with expanding public expenditure to result in extremely high budget deficits that society was unwilling to finance. Ultimately the state turned to seigniorage, which significantly accelerated the decline of credibility.

Chapter One:
The Fiscal Roots of Argentine and
Australian Divergence

The comparison of Argentina and Australia raises the broad question of what determines development. The development of basic state credibility and public order allowed long periods of highly successful development in each. Australia continued to build state credibility, helping to sustain development by increasing the level of social consensus, underwritten by strong democratic institutions. Argentina succeeded in establishing the necessary state credibility and public order for at least half a century of highly successful development. Unfortunately state credibility and institutions began to break down in the decades following the 1930 military coup, which was soon followed by divergence. Argentine state credibility clearly began to deteriorate from the mid twentieth century, reaching profound depths by the hyperinflations of the 1970s and 1980s. The deterioration in state credibility and fiscal institutions corresponded with divergence in the post World War II period.

This chapter establishes the theoretical foundations of the thesis and surveys the comparative literature. It is divided into the following four sections of stylised facts: a theoretical grounding; past themes in the comparative literature; an overview of Argentine and Australian convergence and divergence; and the roots and merits of a fiscal institutional comparison.

I Theoretical Grounding

As an objective is to compare Argentina and Australia from the perspective of New Institutional Economics (NIE), it is important to outline and define this perspective. The economy is often seen as an independent entity, separate from a wider and possibly interfering society. In such a view society is at best a neutral force upon the economy. New Institutional Economics offers an alternative view, placing the economy firmly within society. In NIE the economy emanates from society through society's institutions. These institutions are both formal, such as legislation, and informal, such as public morality. They largely determine the economy's path, but over the long term the economy feeds back into society's institutions helping to sustain that path, which is often called path dependency. The following subsections outline and evaluate: the main ideas of NIE, the ideas of collective action and the state, and the relevance of the comparative approach.

An exposition and evaluation of New Institutionalism

Arguably the best-known proponent of New Institutional Economics is Douglass North. He defines institutions as the rules of the game in society, or the boundaries that shape human interaction.¹⁴ As a result they structure the incentives in all types of human exchange by structuring individuals' options. Ultimately they decrease uncertainty by establishing a stable construction of human interaction, but this construction varies in its efficiency.¹⁵ In other words they are necessary to establish order but their mere existence is not sufficient to ensure that order's quality. The crucial question for economic growth and development from an NIE perspective is how to create efficient institutions, i.e. institutions that create a high quality of public order.

Economic growth, defined as a long-run rise in income per capita, is the result of efficient economic organization.¹⁶ Efficiency is achieved through institutions and property rights that bring the private rate of return close to the social rate of return. Thus efficiency hinges on having institutions and property rights that incorporate externalities into private activity as much as possible. Yet the efficient economic organisation where all externalities are eliminated is highly idealistic, as the transaction costs of establishing such an economic organization would be prohibitive. Externalities persist because the cost of incorporating each exceeds the benefits.¹⁷ In the end North finds that efficient institutions will occur in polities that have built-in incentives to create and enforce efficient property rights.¹⁸ For North, property rights are the foundation stone of efficient institutions.

¹⁴ North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press., p.3-4 See also: North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press.; North, D. C., W. Summerhill, et al. (2000). Order, Disorder and Economic Change: Latin America vs. North America. Governing for prosperity. B. Bueno de Mesquita and H. L. Root. New Haven, Conn., Yale University Press: vi, 266 p.

¹⁵ North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press., p.5-6

¹⁶ North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press., p.1

¹⁷ Ibid., p.91

¹⁸ North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press., p.138+

Property Rights and State Credibility

If property rights are the foundation stone of efficient institutions, and efficient institutions are the key to development, the implication is that property rights are the fundamental means to promote development. Indeed North and Thomas identify property rights as the fundamental vehicle to increase economic growth, via improvements in their definition and enforcement.¹⁹ Two historical reasons are identified as to why property rights have not been able to incorporate externalities: 1) a lack of ability to counter free-riders and compel people to bear their share of transaction costs; and 2) the costs of property rights may exceed their benefits to a group or individual.²⁰ Thus the limits to exclusivity and the costs of property rights emerge as the primary barriers to economic growth and development within the classic NIE framework.

Yet property rights are ultimately a public good provided by the state. The state offers to establish and enforce property rights in return for revenue.²¹ Within the theoretical framework of NIE, states are organisations paid to establish and enforce property rights, but not necessarily those property rights that are the most efficient and productive. For instance states may find it in their immediate interests to provide property rights that promote rent seeking rather than productive activity.²² Bates, in his criticism of NIE, makes a similar point. He also claims that property rights emanate from the state and that the question of which system of property rights will prevail is determined by the nature of a state's political institutions.²³ Property rights that encourage more productive activity than rent seeking are obviously more conducive to development. Unsurprisingly North asserts that many 'developing' countries have property rights more favourable to rent seeking than productive activity.²⁴ The immediate and impending fiscal needs of states may encourage the protection of property rights that impede rather than promote

¹⁹ North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press., p.2-3

²⁰ Ibid., p.4-5

²¹ Ibid., p.6

²² Ibid., p.7

²³ Bates, R. H. (1995). Social Dilemmas and Rational Individuals: An Assessment of the New Institutionalism. The New Institutional Economics and Third World Development. J. Harris, J. Hunter and C. M. Lewis. London, Routledge., pp.45-47

²⁴ North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press., p.8-9

growth.²⁵ NIE thus identifies the role of the state and its fiscal institutions as being important determinants of property rights. Yet the focus of NIE remains upon the more proximate cause of property rights than the more fundamental issue of the state and its fiscal institutions. NIE thereby confuses proximate with more fundamental causes of development. The argument presented here is that property rights are an important proximate cause, but the most fundamental cause is the state and its fiscal institutions.

How can states be usefully compared and contrasted? The fundamental causation of differing institutional structures, and thereby propensities for development, is a state's credibility. State credibility is positively correlated with the state's ability to provide productive and efficient property rights, and thereby plays a decisive role in the formation of efficient institutions. Without credibility, the state does not have a viable monopoly over property rights, and thus has few property rights to sell. The developing world abounds with examples of large legal vacuums where informal property rights flourish, i.e. without legal foundation in the state.²⁶ The greater a state's credibility, the greater the state's ability to provide property rights that are widely distributed and promote efficiency and growth, reinforcing credibility. As the interaction between state and society is somewhat self-reinforcing, state credibility has a high degree of path dependency (i.e. the encouragement of virtuous and vicious cycles).²⁷ State credibility is not emphasised in the NIE literature but is essential to resolving the dilemma of whether states provide property rights that promote rent seeking or productive activity. The state is usually the only collective body large enough within a society to have a chance of overcoming the two problems of establishing property rights: exclusivity and direct cost to the individual. The state is typically the main vehicle for collective action and the minimisation and incorporation of externalities in society. Yet in order for it to do so the state must have the credibility of society entrusted in it. State credibility is a more fundamental cause of development than property rights, as only a credible state is able to provide the extensive public goods typically necessary for development, one of which is property rights.

²⁵ North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press., p.8

²⁶ For instance Peru, see Soto, H. d. (2000). The mystery of capital : why capitalism triumphs in the West and fails everywhere else. New York, Basic Books.

²⁷ See next paragraph for further discussion of path dependency.

A key idea of NIE is path dependence. Path dependence arises from the nature of institutions, which are both created and perpetuated to serve the interests of those with the bargaining power to devise them.²⁸ Path dependence means that society is bound by its history through its institutions, and therefore dramatic, rapid change can be difficult. It means that history is important. Current choices cannot be understood without tracing the evolution of institutions.²⁹ Path dependence partly results from the power of self-interested groups, who continually recreate institutions in their own interests. This ensures that current paths are self-reinforcing, suggesting that historical equilibriums of little change can be reached. Yet institutional change is also the crucial dynamic by which societies evolve over time.³⁰ The path of history itself is very important in NIE. North finds that the path of institutional change is shaped by two factors: 1) the lock-in that results from the symbiotic relationship between institutions and the groups that have evolved from their incentive structure; and 2) the feedback process by which people perceive and react to changes in the opportunity set.³¹ As a result historical paths, whether balanced towards productivity or rent-seeking, tend to persist. Productive institutions may not naturally evolve on their own, and this is an important insight for development policy. Path dependence means that development policy must address institutions and those behind them as a first priority; otherwise its efforts may be undermined.

A fundamental dilemma for NIE is that any state strong enough to protect property rights, enforce contracts, and provide macroeconomic stability is also strong enough to confiscate all citizens' wealth. This is also referred to as the 'commitment problem'.³² The addition of state credibility as a fundamental institution for efficient institutions largely resolves this issue. In the long run, only those states that foster credibility via self-restraint and the fostering of continued development will maintain strong positions of power. If development is largely the result of credible states, widespread confiscation

²⁸ North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press., p.16

²⁹ Ibid., p.100

³⁰ Ibid., p.3

³¹ Ibid., p.7-8

³² North, D. C., W. Summerhill, et al. (2000). Order, Disorder and Economic Change: Latin America vs. North America. Governing for prosperity. B. Bueno de Mesquita and H. L. Root. New Haven, Conn., Yale University Press: vi, 266 p., p.6-7 & Haber, S. H., N. Maurer, et al. (2003). The politics of property rights : political instability, credible commitments, and economic growth in Mexico, 1876-1929. Cambridge ; New York, Cambridge University Press., p.2

of wealth would go against the purpose and construction of the state itself. It is thus unlikely that such states would confiscate their citizens' wealth, unless dramatic change occurs.

NIE's answer of institutions suggests a new path towards engendering development and/or alleviating poverty, as installing and encouraging growth-inducing institutions could achieve these goals. Yet path dependence implies that this isn't easy. Institutional change can occur incrementally and/or dramatically. North sees a tendency for institutions to change incrementally rather than discontinuously due to embedded informal constraints.³³ Formal rules such as legislation can be changed overnight, but informal institutions or norms (e.g. traditions) take time. The institutional matrix that shapes economic performance is a combination of formal rules, informal norms, and their enforcement. Yet policy-makers have no control, at least in the short run, over informal norms, and only very imperfect control over the enforcement of both formal rules and informal norms.³⁴ Thus the possibility for rapid change is limited. The simple changing of legislation is not usually enough to produce real change unless it reflects underlying informal institutions. Ultimately a state must rely on informal norms for its formal rules to be enforced, as it cannot afford to enforce formal rules without widespread societal support. States can only afford to enforce rules that are broken exceptionally and are usually reported. This is true even in the most developed societies with the most capable states. NIE thus proposes how development is engendered, but it does not offer simple, easy solutions. As Olson points out, finding that institutional problems are the main stumbling block to development does not help much.³⁵ Yet the problem has to be understood if answers are to be found.

State credibility is a potentially large and nebulous concept, which may explain NIE's preference for focussing on property rights. State credibility is defined broadly above, but direct and tangible expressions of state credibility are fiscal institutions. Fiscal institutions are the manner and capacity in which a state raises revenue. Fiscal

³³ North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press., p.6

³⁴ North, D. C., W. Summerhill, et al. (2000). Order, Disorder and Economic Change: Latin America vs. North America. Governing for prosperity. B. Bueno de Mesquita and H. L. Root. New Haven, Conn., Yale University Press: vi, 266 p.

³⁵ Olson, M. (1982). The rise and decline of nations: economic growth, stagflation, and social rigidities. New Haven, Yale University Press., p.177

institutions are a clear expression of a society's faith in the state, i.e. state credibility. If a society lacks faith in the state, fiscal institutions should be highly limited in their ability to raise revenue; and vice versa. States require credibility to raise revenue efficiently, productively, and sustainably. Compulsion is highly limited as a tool within fiscal institutions. For instance, once tax evasion (a clear sign of low state credibility) becomes widespread and pervasive, there is little any state can do from a coercive perspective over the long run. Ultimately the state must re-establish credibility. The most lucrative fiscal institutions are forms of direct taxation, especially income taxation, which are also the most dependent upon cooperation. In terms of development, states require credibility to construct the fiscal institutions necessary to fund the incorporation of large and obvious externalities (e.g. through the provision of public goods with high positive externalities and action to minimise negative externalities). State credibility and ensuing fiscal institutions are thus necessary to incorporate externalities and promote development. In fact a state that lacks, or experiences a decline in, credibility and ensuing fiscal institutions will likely aggravate negative externalities in a scramble for resources, especially the use of seigniorage. Extensive seigniorage clearly increases inflation, further destabilising the economy and fiscal institutions, encouraging even greater use of seigniorage, and opening up the possibility of a vicious cycle. States with limited or declining fiscal institutions may also add to negative externalities via the monopolisation of essential public goods for development that are not actually provided (or that are provided inefficiently). State credibility is crucial to fiscal institutions, which in turn enable state capacity for collective action and the incorporation of externalities, which in turn is crucial for development.

Collective Action and the State

The state is primarily an organization, one that provides public goods for its citizens.³⁶ The general purpose of public goods is to enhance positive externalities (e.g. security) and minimise negative externalities (e.g. pollution). They are goods and services provided via the state on behalf of society, and address collective action problems that are often entwined with issues of natural monopoly. Some concrete examples are railways, roads, education, and utilities, but there are less tangible examples such as

³⁶ Olson, M. (1971). The logic of collective action: public goods and the theory of groups. Cambridge, Mass., Harvard University Press., p.15

stable money and property rights. As public goods face a significant free rider problem (i.e. they are non-excludable), markets alone will not provide them sufficiently. The state can rectify this by providing public goods and services directly, on behalf of society and for society's greater benefit. Developed and strong states have increasingly moved to provide them via (likely more efficient) regulation. The provision of public goods via the state (whether by direct provision or regulation) ameliorates the free rider problem by using taxation to increase everyone's well-being, but the state must overcome the collective action problem to do so.

Olson highlights the collective action problem, illustrating how the rational individual interest is not equivalent to the social or collective interest.³⁷ In general the larger a group, the harder it is to achieve an optimal supply of collective goods.³⁸ Collective goods are those goods achieved by a group. At the level of society as a whole they are public goods, but groups within society often seek collective goods that are not public goods. Indeed smaller groups typically seek collective goods that are rent-seeking, benefiting only their particular group. This combines with the greater ability of smaller groups to coordinate collective action, as it is only when groups are quite small (or individuals are coerced) that the rational individual interest will match the collective interest. In small groups individual interests are little separate from those of the group and one individual's efforts can make a visible difference, which means collective goods are easier to achieve. As the size of the group increases, so does the disparity between the individual's cost/benefit ratio and that of the group's. Homogeneity can increase the ability to achieve collective action, as it facilitates consensus.³⁹ Ideology can also help achieve homogeneity. For example nationalism has often been used to create a common tribal identity. Olson also illustrates the situation of groups that contain a large degree of inequality, where the minor members exploit the wealthy members, the 'great'.⁴⁰ This occurs because the wealthy members expect the benefits from collective action to exceed the cost of providing that good, even if they have to

³⁷ Ibid., p.1-2. See also: Olson, M. (1982). The rise and decline of nations: economic growth, stagflation, and social rigidities. New Haven, Yale University Press.; Olson, M. (1993). "Dictatorship, Democracy, and Development." The American Political Science Review 87(3): 567-576.

³⁸ Olson, M. (1971). The logic of collective action: public goods and the theory of groups. Cambridge, Mass., Harvard University Press., p.36

³⁹ Olson, M. (1982). The rise and decline of nations: economic growth, stagflation, and social rigidities. New Haven, Yale University Press., p.25

⁴⁰ Olson, M. (1971). The logic of collective action: public goods and the theory of groups. Cambridge, Mass., Harvard University Press., p.33-5

pay the entire cost of provision. Thus the incorporation of the 'great' into a state's institutional structure should increase the provision of public goods. The probability of a group achieving a collective good depends on the group's size, homogeneity, ideology, degree of inequality, and the value of the collective good. Collective action at the level of the state thus faces a number of difficult hurdles, as the group's size is typically very large, homogeneity may need to be manufactured, there may be a lack of unifying ideology, and the 'great' may lack political power. Public goods should be difficult to achieve even when they are valuable to society.

Olson shows that small groups' better odds of achieving collective action can often be to society's detriment. As small groups are better able to act collectively, they can achieve a disproportionate power relative to the number of individuals they represent. As a result small groups are more inclined towards rent seeking than larger groups.⁴¹ Collective goods that are rent seeking and redistributive are more favorable to the small group, as the overall loss in societal output due to rent seeking has to be astonishingly large before it will impact the small group. Most organizations in society are small and naturally inclined towards rent seeking and redistribution, rather than greater production. This also means that as small groups (each representing their own special interests) become more important, politics becomes more conflictive.⁴² Conflict over distribution can destabilize the political sphere and ultimately make society ungovernable. If society is to achieve public goods, it must find a means of achieving collective action on a large scale. More encompassing organizations for collective action, such as the state, are more likely to act in the broader social interest.⁴³ If productive paths are to be achieved and sustained, the natural bias of small groups towards rent seeking must be counterpoised within a larger collective action orientated towards productive activity. The state is ideally situated to represent such larger collective action. If a society cannot construct such a state, it will remain at the mercy of primarily rent seeking small groups.

⁴¹ Olson, M. (1982). The rise and decline of nations: economic growth, stagflation, and social rigidities. New Haven, Yale University Press., p.41-4

⁴² Ibid., p.47

⁴³ Ibid., p.52

The spread of small groups is thus detrimental to economic efficiency and growth, and this can be greatly compounded by political instability.⁴⁴ Powerful small groups encourage a misallocation of resources through their natural penchant for rent seeking collective goods, and political instability discourages long-term investment. Olson identifies an important negative path dependency for development, i.e. a vicious cycle, that can emerge from the greater capacity of small groups to prosper in unstable societies.⁴⁵ Unstable societies can be doubly burdened. Not only are their states more prone to small group pressures for redistribution, but also their instability discourages long-term investment. Small groups will work hard to perpetuate a path that offers reliable rents, and political instability makes it difficult for the state to counterpoise these small groups within a larger collective action orientated towards productive activity. Once such an arrangement is entered into it should be highly path dependent, locking out the prospect for much productive activity. A rent seeking path dependency of powerful small groups within unstable societies can be self-sustaining. If a society fails to erect larger, more encompassing groups capable of providing public goods and encouraging productive activity, or these groups fail, that society could enter a period of instability that is maintained by self-interested small groups within it. This potential negative path dependency illustrates the importance of the state in development, particularly the capacity of the state for collective action.

The capacity of a state to provide public goods is ultimately a success in overcoming the collective action problem. The difficulty of overcoming the collective action problem is an important aspect of an institutional perspective. As Bates points out, NIE faces an inherent collective action problem. Individuals provide institutions in order to overcome social dilemmas, but in doing so they may also provide public goods that face a free rider problem.⁴⁶ From an individual perspective, the demand for institutions does not mean that they will be supplied. Bates finds this to be a basic contradiction of NIE, but it is one that is easily overcome. NIE does not state that all institutions are public goods meant to overcome social dilemmas. Indeed it makes the explicit case that many institutions could have a selfish, rent seeking basis. From an NIE perspective, the ability

⁴⁴ Ibid., p.165

⁴⁵ Ibid., p.166-7

⁴⁶ Bates, R. H. (1995). Social Dilemmas and Rational Individuals: An Assessment of the New Institutionalism. The New Institutional Economics and Third World Development. J. Harris, J. Hunter and C. M. Lewis. London, Routledge., p.44

of the state to provide an efficient institutional structure that promotes productive activity and development is the primary concern. The provision of public goods through the state is a primary means for establishing a more productive development path via the reduction of externalities. Collective action is thus important to NIE, as it is crucial to the state being able to achieve an efficient institutional structure that promotes development.

Argentina and Australia both constructed states that were capable of providing a basic level of public goods by the late nineteenth century, sufficient to enable considerable development. Yet the Australian state became increasingly strong and capable over the twentieth century, whereas the relative strength and capability of the Argentine state declined. By the late twentieth century the capacity of the Argentine state to provide any public goods, along with state credibility, was much reduced. The Australian state clearly chose a path that reinforced not only state strength and credibility, but also the underlying wealth of the country. The Argentine state largely took the opposite path, one where society was both unstable and the state was seemingly unable to act on behalf of society.

The Comparative Method

As the thesis employs the comparative method, it is important to assess the validity of the approach. The comparative method can be seen as a form of experimental logic where controlled experiments are impossible. It is an attempt to simulate experiments in the social sciences, based on the experimental ideal of “all other factors being equal”.⁴⁷ Therein also lies the problem with the comparative approach. History is always unique, and the natural science ideal of a laboratory experiment is unattainable. As Crafts warns, we should not expect ‘too much from comparative history.’⁴⁸ Yet as he also points out, it is the questions asked of comparative history that need to be careful. The extent that error and chance play in history is always unclear and unknowable. For instance, what would have occurred had Argentina possessed Australian institutions? How large was the role of chance in Australian and Argentine history? Yet the

⁴⁷ Sewell Jr, W. H. (1967). "Marc Bloch and the Logic of Comparative History." *History and Theory* 6(2): 208-18., p.215

⁴⁸ Crafts, N. (1977). "Industrial Revolution in England and France: Some Thoughts on the Question, "Why was England First?"" *The Economic History Review* 30(3)., p. 441

similarities in Australian and Argentine geography and contexts for development stand in such stark contrast to their different outcomes that the comparison is reasonable. Argentina and Australia were European settler societies established to achieve progress at distant locations from world markets, with like factor endowments, concentrated land tenure, spectacular success in development until the mid twentieth century, and dramatic divergence in the post World War II period. What roles did geography and institutions play in divergence, and why? How could such similar geography lead to such ultimately different experiences of development? These are reasonable and important questions to ask of potentially highly similar countries.

The comparative method, if properly framed, can be a particularly useful tool for assessing variables of causation. For instance a theory that inequitable distribution of land is to blame for later development problems may be difficult to deny through one country's particular history alone. If a similar country with a similarly inequitable land distribution is found to have avoided such development problems, it is *prima facie* evidence that the theory is flawed and that land tenure is only a proximate cause.⁴⁹ The comparative method can test theories that might otherwise seem secure from the perspective of only one setting.⁵⁰ Finally the question of whether to use the comparative method or not is largely a hypothetical one. The comparative method is implicit in almost all research, as it is difficult to be completely ignorant of how things operate elsewhere.⁵¹ Even the most particular research problems are ultimately framed implicitly by knowledge beyond the specific case.

II Geographic Themes in Comparative Literature⁵²

A number of guiding theories have previously been used to explain the comparison of Australian and Argentine development paths. All of them posit a predominance of

⁴⁹ See following section for further discussion.

⁵⁰ Sewell Jr, W. H. (1967). "Marc Bloch and the Logic of Comparative History." *History and Theory* 6(2): 208-18., p.209-10

⁵¹ Wong, R. B. (1997). *China transformed : historical change and the limits of European experience*. Ithaca, Cornell University Press., p.5

⁵² See the second half of Chapter Two for an historical discussion of the themes discussed in this section.

causation to geographic factors, but none of them fully and sufficiently explain postwar divergence.⁵³

Factor Endowments and Staple Theory

Staple theory was an early explanation for Argentine and Australian convergence in the late nineteenth and early twentieth centuries. The theory emerged in the mid twentieth century and is based on comparative advantage. It attempts to explain the development trajectories of the settler economies, or countries of recent (European) settlement. These countries include Canada, the United States, Argentina, Australia, New Zealand, Uruguay, South Africa, and others. Settler economies are usually defined as land rich but initially labour and capital poor, being settled by large migrations of immigrants. Ideally the settler economies lacked restraining traditions.⁵⁴ In order to develop they imported labour and capital, developing staple exports (such as cattle, sheep, and wheat) to pay for these imports and continue the process. About two thirds of British foreign investment in the half century prior to 1914 was invested into settler economies, equal to about 4% of British national income.⁵⁵ Argentina and Australia easily fit the staple model in the nineteenth and early twentieth centuries as they were land rich and imported large amounts of capital and labour, developing primary staples for export. Staple theory appears able to explain Argentina and Australia's initial convergence, but confuses causation in seeing the nature of the staple export, rather than institutions, as the primary cause of development.

Staple theory's fundamental assumption is that commodity exports were the leading sector of the economy and determined growth. As domestic markets were limited, comparative advantage resided in resource intensive exports, or staples for the international market. Development was a result of diversification around the commodity

⁵³ Geography includes factor endowments, oceans, rivers, mountains, and location. Location is short-hand for 'spatial interaction between economic agents.' Crafts, N. and A. J. Venables (2003). *Globalization in History, A Geographical Perspective*. Globalization in historical perspective. M. D. Bordo, A. M. Taylor and J. G. Williamson. Chicago, University of Chicago Press: ix, 588 p., p.323

⁵⁴ Watkins, M. H. (1963). "A Staple Theory of Economic Growth." The Canadian Journal of Economics and Political Science **XXIX**(2), p.143-4

⁵⁵ Nurkse, R. (1954). "International Investment To-Day in the Light of Nineteenth-Century Experience." The Economic Journal **64**(256): 744-58., p.750

export base.⁵⁶ It occurred via the spread of income through linkage effects, primarily backward and forward linkages (also a final demand linkage). Backward linkage is investment in the domestic production of inputs, including capital goods, for the staple export, e.g. railways. Forward linkage is investment in domestic industries that use the staple as an input, i.e. value adding to the staple export. Per capita income is ultimately dependent on the staple's productivity, with income distribution dependent on the nature of the staple's production function.⁵⁷ It thus assumes that there is only one potential production function. A later linkage in the literatures is 'fiscal linkage', which helps validate the research approach taken here. Fiscal linkage is the idea that the connection between staple export development and fiscal institutions is important to development. The state captures resources from staple exports directly and/or indirectly to facilitate the provision of public goods, which can potentially engender more widespread development.⁵⁸ This varies from the deterministic focus of staple theory, as the same staple can support two completely different uses of fiscal linkage.⁵⁹ Staple theory gives a minor role to private and public entrepreneurship, which is seen to depend upon institutions and societal values. Sustainable growth requires that at some point staple export societies shift towards new foreign or domestic markets.⁶⁰ This requires institutional flexibility, but institutions are seen as the result of the staple(s) a country has specialised in, which is determined by the fortune of factor endowments. Ultimately the nature of the staple(s) controls prosperity and development, as it dictates the nature of institutions.

Staple theory appears to be the intellectual heritage behind Engerman and Sokoloff's more recent factor endowments theory.⁶¹ Factor endowments theory argues that the

⁵⁶ Watkins, M. H. (1963). "A Staple Theory of Economic Growth." The Canadian Journal of Economics and Political Science XXIX(2), p.144-5

⁵⁷ Ibid., p.146-7

⁵⁸ Hirschman, A. O. (1992). Rival views of market society and other recent essays. Cambridge, Mass., Harvard University Press., pp.67-9; & Hirschman, A. O. (1981). Essays in trespassing : economics to politics and beyond. Cambridge [Eng.] ; New York, Cambridge University Press., p.71

⁵⁹ Hirschman, A. O. (1981). Essays in trespassing : economics to politics and beyond. Cambridge [Eng.] ; New York, Cambridge University Press., p.96

⁶⁰ Watkins, M. H. (1963). "A Staple Theory of Economic Growth." The Canadian Journal of Economics and Political Science XXIX(2), p. 151

⁶¹ Engerman, S. L. and K. L. Sokoloff (2002). "Factor Endowments, Inequality, and Paths of Development among New World Economies." National Bureau of Economic Research Working Paper 9259. & Engerman, S. L. and K. L. Sokoloff (1997). Factor Endowments, Institutions, and Differential Paths of Economic Growth Among New World Economies: A View from Economic Historians of the United States. How Latin America fell behind : essays on the economic histories of Brazil and Mexico, 1800-1914. S. H. Haber. Stanford, Calif., Stanford University Press: xi, 315 p.

nature of staples influences institutions through their production functions, e.g. slave plantations lead to dictatorial institutions whereas small farms lead to democracy. As in staple theory, the staple's production function determines institutions. Engerman and Sokoloff compare development in North and South America and conclude that North America was ultimately more successful due to factor endowments (especially the staple of grain) that encouraged small farms. Small, family-sized farms in the northern colonies of North America (with climates favouring temperate foodstuffs, limited economies of scale, and no slaves) meant relatively equal distributions of human capital and wealth, and thus a productive development path.⁶² Yet Argentina shared these same factor endowments. If the staple production function determines institutions, Argentine factor endowments should also have resulted in small farms and more equitable democracy. Instead Argentina exploited factor endowments via large estates. As a result Argentina was less successful in development as it encouraged the wrong kinds of institutions.⁶³ The Argentine example thus exposes an inherent self-contradiction to the factor endowments argument, as very similar endowments led to different institutional environments. Even if the self-contradiction is accepted, it fails to hold when the comparison is extended to Australia. Inequitable land tenure alone does not necessarily determine poor institutions as Australia also had highly inequitable land tenure and still achieved successful, equitable, and democratic institutions.⁶⁴

Staple theory is unable to explain the Argentine and Australian experience of divergence in the latter half of the twentieth century. The theory postulates that settler economies can fall into a "staple trap" whereby they fail to use the original opportunity of staple exports to diversify beyond them. Staple theory appears to assume that in order to develop economies must go through Rostow's stages of economic development, leaping from primary exports into industrialisation.⁶⁵ This idea is largely refuted by the Australian experience. Australia has long been one of the world's wealthiest countries, but has almost always lacked a substantial manufacturing sector.⁶⁶ Instead Australia has

⁶² Engerman, S. L. and K. L. Sokoloff (2002). "Factor Endowments, Inequality, and Paths of Development among New World Economies." National Bureau of Economic Research Working Paper 9259, p.4

⁶³ Ibid., p.15

⁶⁴ See next subsection for further discussion.

⁶⁵ Rostow, W. W. (1960). The stages of economic growth, a non-Communist manifesto. Cambridge [Eng.], University Press.

⁶⁶ Manufacturing reached an historical but brief high of 29% of GDP in 1960. By 1997 manufacturing had returned to a more historically normal level of 13% of GDP, equal to that in 1911. See Statistics, A.

usually relied upon primary exports for much development. In the latter half of the twentieth century Australia greatly diversified the range of potential staple exports, especially in mining. Attempts to industrialise through import substitution were also made, but this policy and much of the resulting industry were later abandoned. This ‘inward-orientated strategy’ was introduced in the early twentieth century and lasted until the 1960s.⁶⁷ Australia has long been an undeniably developed country with a highly urbanised population and the majority of its economy in the tertiary sector. Australia largely skipped the ‘take off’ stage into industrialisation, but nonetheless avoided falling into the staple trap predicted by staple theory. Argentina on the other hand acted more in accord with staple theory and more fully devoted itself to the leap into industrialisation and diversification out of primary exports, evidenced in the great decline of its primary exports and increase in import substitution industrialisation. Ultimately staple theory is unable to provide either an explanation for Argentine divergence or an explanation for Australia’s continued success in the latter half of the twentieth century.

A version of staple theory called ‘super staple theory’ largely overcomes the lack of entrepreneurial space in staple theory.⁶⁸ It enlarges the role for entrepreneurship in staple development, allowing for a more diverse range of production functions. Entrepreneurs are seen to have developed certain staples to a high degree of quality, becoming world leaders in them. Examples are Canadian wheat, Australian wool, New Zealand lamb, and Argentine beef.⁶⁹ These staples led rapid transformations of their respective economies. In contrast to staple theory, the development of these super staples was not only a response to demand conditions, but was also a means of creating demand.⁷⁰ In this sense super staples were little different than the manufactures of the British Industrial Revolution. The differing experiences of Argentina, Australia and Canada suggest that supply rather than demand alone needs to be incorporated into

B. o. (2001). Manufacturing from settlement to the start of the new century. Year Book Australia, 2001. A. B. o. Statistics. Canberra, Australian Bureau of Statistics.

⁶⁷ The strategy included the White Australia Policy, tariff protection to foster manufacturing, and assistance to exporters in state-subsidised production and marketing arrangements. McLean, I. W. and A. M. Taylor (2001). "Australian Growth: A California Perspective." NBER Working Paper Series Working Paper 8408: 30., p.9

⁶⁸ Fogarty, J. (1985). Staples, Super-Staples and the Limits of Staple Theory: the Experiences of Argentina, Australia and Canada Compared. Argentina, Australia, and Canada - Studies in Comparative Development 1870-1965. D. C. M. Platt and G. Di Tella. Oxford, Macmillan.

⁶⁹ Ibid., p.22

⁷⁰ Ibid., p.22

staple theory. Supply is not only a response to demand, and the supply curve's shape and position is often determined by variables specific to each region.⁷¹ The simple import of labour and capital was enough to create growth in these countries, but not development. Development required the receipt of labour and capital into an open, creative and flexible environment. Institutions and the entrepreneurs they encouraged or discouraged were required for success.⁷² Super staple theory thus turns the original staple theory on its head, and is ultimately an argument for institutions, as entrepreneurship is a result of the institutional environment. Super staple theory overcomes the inability of staple theory to explain why the same staple is not the same everywhere. It also greatly helps to explain why Australia was able to continue its success throughout the twentieth century. Yet super staple theory diverges substantially from staple theory in seeing the ultimate causation in institutions rather than factor endowments.

A major problem of staple and factor endowments theory is the assumption that the same staples are equal everywhere. Yet there is not necessarily only one production function for a staple. For example Canada produced wheat with small family farms while Argentina used tenancy contracts. Canadian wheat was of a higher quality than in Argentina, despite Canada's less favourable climate. Another example is wool. Australian wool, for no obvious reasons of factor endowments, was much cleaner than that of Argentine wool, obtaining higher prices.⁷³ Not only did production functions of the same staples differ, but so did the timing of their exploitation. Staple theory offers little explanation for the questions of: why certain staples had a variety of production functions, why some staples were developed but not others, and for the timing of exploitation. Institutions determined the answers to these questions.

In the late nineteenth and early twentieth centuries Argentina appeared far better placed to succeed within the factor endowments (or staple theory) model than Australia, as it

⁷¹ Ibid., p.30

⁷² Ibid., p.24

⁷³ An important work on the early Argentine wool industry is Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press. See also Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press. There are many works on Australian wool, but an important one is McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press.

had a much more flexible and diversified export bill.⁷⁴ In contrast, Australia remained largely dependent on wool for the bulk of its foreign exchange. Gold was also an important, but erratic and unreliable source of Australian export earnings.⁷⁵ Argentina excelled to a very similar extent as Australia in attracting foreign investment (primarily British) to develop its staple exports; despite its later start in development and that it was not a British colony.⁷⁶ The interest rate on Argentine government bonds converged upon that of Australia by the beginning of the twentieth century, was roughly equal by 1913, and was lower by the 1920s.⁷⁷ Argentina and Australia both attracted large amounts of capital on similar terms in order to develop their factor endowments. Argentina also attracted much more immigrant labour than Australia. Staple theory thus strongly supports an argument for Argentina's rapid convergence in the latter half of the nineteenth and early twentieth centuries, but is unable to explain why this did not occur from an earlier date. Why were Argentina's considerable factor endowments, obvious from the early nineteenth century, left unexploited for so long? Argentina had an obviously greater variety of staple exports, at least until the 1960s-70s, but has had more problematic development than Australia. Factor endowments are an insufficient explanation for Argentina's late economic growth and its later switch to a less productive development path.

The differing experiences of wool in Argentina and Australia highlight the role that institutions played in determining factor endowments. Spanish merino sheep were imported into both New South Wales and Argentina in the same year. British capital was available in both areas, and factor endowments were similar.⁷⁸ Yet Australian wool

⁷⁴ Díaz Alejandro, C. F. and A. Velasco (1988). Trade, development, and the world economy : selected essays of Carlos F. Díaz-Alejandro. Oxford, UK ; New York, NY, USA, B. Blackwell., p.233

⁷⁵ Schedvin, C. B. (1990). "Staples and Regions of Pax Britannica." The Economic History Review 43(4): 533-59., p.545

⁷⁶ Between 1865 and 1914 Argentina and Australia each attracted a total British investment of £349,243,000 and £339,001,000 respectively. Stone, I. (1999). The global export of capital from Great Britain, 1865-1914 : a statistical survey. New York, St. Martin's Press., pp.62-71. By 1930 the proportion of British investment in Argentina and Australia was 12% and 13% respectively. Díaz Alejandro, C. F. and A. Velasco (1988). Trade, development, and the world economy : selected essays of Carlos F. Díaz-Alejandro. Oxford, UK ; New York, NY, USA, B. Blackwell., p.238

⁷⁷ See subsection two of Chapter Four for more detail. For Argentina see Della Paolera, G. and A. M. Taylor (2003). A new economic history of Argentina. Cambridge ; New York, Cambridge University Press. For Australia see Vamplew, W. (1987). Australians: historical statistics. Broadway, NSW, Fairfax Syme & Weldon.

⁷⁸ Fogarty, J. (1985). Staples, Super-Staples and the Limits of Staple Theory: the Experiences of Argentina, Australia and Canada Compared. Argentina, Australia, and Canada - Studies in Comparative Development 1870-1965. D. C. M. Platt and G. Di Tella. Oxford, Macmillan., p.24-5

growing proved far more dynamic and entrepreneurial than in Argentina. In 1885 Australia and Argentina had approximately equal numbers of sheep, but Argentina's wool clip was worth £3.5, while Australia's was worth £6.⁷⁹ Australian pastoral entrepreneurs singularly focused upon wool. Yet a high proportion of Australia's forward linkages from wool production were transferred directly to Britain and Europe.⁸⁰ This suggests that wool was by no means an ideal staple for development, at least according to staple theory. Backward linkages to domestic suppliers of producer goods were also weak because input requirements were so modest. Final demand linkages though were more powerful and extensive, especially in finance. Institutional reasons in Argentina, especially the lack of stability until the latter half of the nineteenth century, likely explains the less intensive development of wool there. The Argentine sheep industry had highly favourable factor endowments, but was less successful than in Australia.⁸¹

A comparison of the experiences in wheat is also indicative.⁸² The Argentine state did not support research and extension services on anything like the scale of Canada or Australia.⁸³ Wheat was an important staple in Argentina, but remained at a relatively primitive level of development. Absolute advantage may have been a long-run impediment, as the ease with which wheat could be grown in Argentina enabled it to greatly expand production without innovation or government assistance.⁸⁴ Poorer factor endowments meant this was not possible in Canada and Australia.

⁷⁹ Ibid., p.25

⁸⁰ Schedvin, C. B. (1990). "Staples and Regions of Pax Britannica." *The Economic History Review* 43(4): 533-59., p.544

⁸¹ See Chapter Two for a fuller discussion.

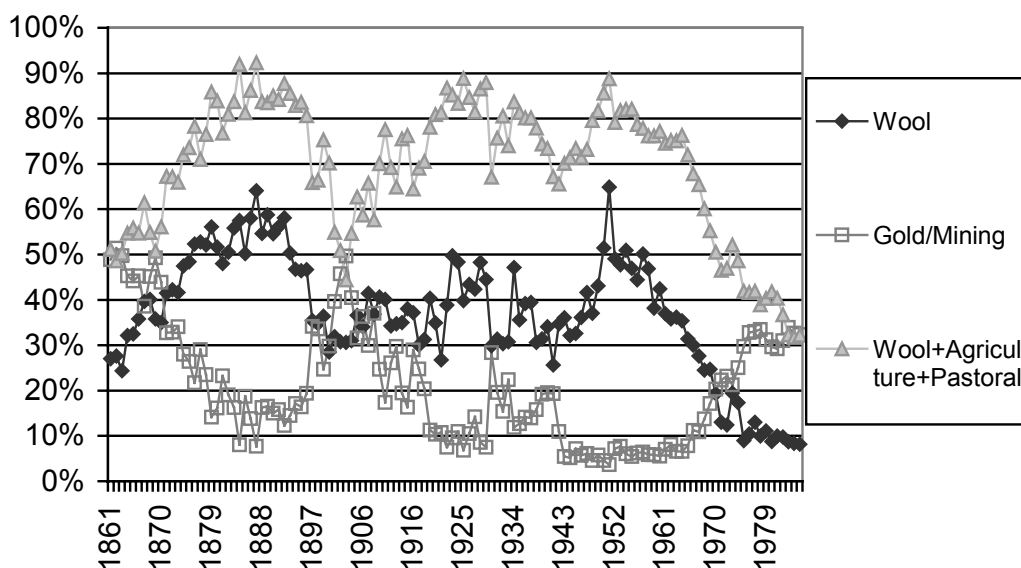
⁸² For a comparison of the Argentine and Canadian wheat experiences see: Adelman, J. (1994). *Frontier development : land, labour, and capital on the wheatlands of Argentina and Canada, 1890-1914*. Oxford ; New York, Oxford University Press.

⁸³ Fogarty, J. (1985). Staples, Super-Staples and the Limits of Staple Theory: the Experiences of Argentina, Australia and Canada Compared. *Argentina, Australia, and Canada - Studies in Comparative Development 1870-1965*. D. C. M. Platt and G. Di Tella. Oxford, Macmillan., p.32

⁸⁴ Ibid., p.32-3

Figure 1.1

A 'Persian Gulf' State? - Australian Exports by Value



Source: See Statistical Appendix, Table 1.1

A major criticism of the Argentine-Australian comparison made on the basis of factor endowments is that Australia was born 'the lucky country'.⁸⁵ In this misguided vein Díaz-Alejandro alleges that 'Australia was born rich' with vast mineral resources and a low population, making it a 'Persian Gulf' state of the latter nineteenth century.⁸⁶ He suggests that Australian development was relatively easy, waiting to be plucked, whereas Argentina's was more difficult. This not only misunderstands Australian economic history, but also the nature of development. If factor endowments (e.g. mineral resources) were all that is required for development, Nigeria and the Congo would be some of the world's most developed regions. The natural resource curse upon development is now better understood.⁸⁷ Minerals require institutions that direct investment towards their development, and which are capable of reasonably and credibly dividing their spoils in order to sustain political stability. In fact minerals failed

⁸⁵ The original phrase, from where the expression was coined, is by Donald Horne: 'Australia is a lucky country, run by second-rate people who share its luck.' See (2005). *The Lucky Country*, Australian Government Department of Communications, Information Technology and the Arts.; <http://www.acn.net.au/articles/luckycountry/>

⁸⁶ Díaz Alejandro, C. F. and A. Velasco (1988). *Trade, development, and the world economy : selected essays of Carlos F. Díaz-Alejandro*. Oxford, UK ; New York, NY, USA, B. Blackwell., p.232

⁸⁷ See Mehlum, H., K. Moene, et al. (2006). "Institutions and the Resource Curse." *The Economic Journal* 116(508): 1-20.

to play a reliable economic role in Australia until the 1970s, well after Argentina diverged. Australian factor endowments were not evidently greater than in Argentina. On the contrary, Australia's limited options for development can be seen in Figure 1.1 above, where wool rarely accounts for less than a third, and often closer to half, of export revenues until the late 1960s. Considering agricultural exports as a whole (wool plus agricultural and pastoral exports), Australian dependence upon commodity exports for export revenue is stark. Agricultural exports typically accounted for 70-90% of total export earnings until the late 1960s.⁸⁸ Prior to the 1970s, gold and mining were only of importance in the 1850-60s and at the turn of the twentieth century. This does not equate to 'Persian Gulf' status. The development of Australian mining in the 1960s and 1970s was different from the previous erratic gold booms in that it depended on a high level of foreign investment and technical knowledge.⁸⁹ Australian development required institutions capable of developing limited factor endowments from the world's poorest and driest soils, located at the ends of the earth.⁹⁰ In contrast Argentina's slow postwar development can hardly be blamed on rich factor endowments (not even the resource curse applies, as their development waned). Cavallo, Domenech, and Mundlak confirm the validity of the Argentine-Australian comparison in terms of factor endowments. They strongly argue that Argentina could have continued convergence with Australia from 1930 onwards if development of factor endowments had continued.⁹¹ Factor endowments were not the problem, and were evidently insufficient for development on their own.

Land tenure

Inequitable land tenure has long been a popular explanation for Argentine divergence.⁹² Carter Goodrich notes the inability of land tenure to explain Argentina's problematic

⁸⁸ The accounts are not disaggregated prior to 1900, but the trend appears to be roughly similar asides from the brief gold boom at the turn of the twentieth century in Western Australia.

⁸⁹ Pinkstone, B., D. Meredith, et al. (1992). Global connections : a history of exports and the Australian economy. Canberra, AGPS Press., p.212

⁹⁰ Tim Flannery details Australia's geographical isolation, which has left it undisturbed by volcanoes, mountain building or ice ages for hundreds of millions of years. As a result Australian soils are old, leached, exhausted, and largely sand. Flannery, T. F. (1995). The future eaters : an ecological history of the Australasian lands and people. New York, G. Braziller.

⁹¹ Cavallo, D., R. Domenech, et al. (1989). Agriculture and economic growth in Argentina, 1913-84. Washington, D.C., USA, International Food Policy Research Institute., pp.9, 121

⁹² A classic version of this argument is: Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven., Yale University Press., p.157-9 A more recent example is:

development in an early comparison with Australia.⁹³ He observes that land tenure in New Zealand (until the end of the nineteenth century) and in Australia was that of a “big-man’s frontier”, dominated by the great pastoralist or squatter. Economic geography dictated such a situation, as Australia’s location and relative lack of rainfall meant sheep raising in large land holdings had great advantages over agriculture.⁹⁴ The economic geography of Argentina and Uruguay closely resembled Australia’s, as they also had comparative advantages in stock raising over agriculture that favoured large land holdings. Argentina’s land was not distributed on the basis of equity or small farms, asides from some provincial government schemes. It was predominantly distributed to large pastoralists. Australia’s land was also predominantly distributed on an inequitable basis to large pastoralists. The production function of Argentine and Australian staple exports, especially pastoral staples, encouraged extensive land tenure. Land was the only relatively abundant factor of production in both countries. So its distribution should have been important for development, but the inequity does not appear to have impeded productive development. Indeed Olson observes that a small group of landed families will have individual interests that coincide well with those of a developing primary exporting economy, as their individual factors of production largely coincide with those of the society’s economy.⁹⁵ This suggests that landed capitalists will not necessarily encourage rent seeking and economically inefficient policies, at least if they have access to political power. In light of the comparison with Australia, it is unlikely that Argentine divergence in the latter half of the twentieth century can be explained by the inequitable land tenure of the nineteenth century.

The pattern of land tenure in Argentina and Australia was roughly similar in that large properties were predominant. Argentina initially attempted to distribute land equitably and retain state ownership of the land through the law of emphyteusis (i.e. leasing the land), but this largely resulted in the land remaining unexploited.⁹⁶ In 1840 the state resorted to giving the land away in order to bring it into production and incorporate it

Engerman, S. L. and K. L. Sokoloff (2002). "Factor Endowments, Inequality, and Paths of Development among New World Economies." *National Bureau of Economic Research Working Paper 9259*, p.15.

⁹³ Goodrich, C. (1964). "Argentina as a New Country." *Comparative Studies in Society and History* 7(1): 70-88., p.76

⁹⁴ Ibid., p.76-7

⁹⁵ Olson, M. (1982). *The rise and decline of nations: economic growth, stagflation, and social rigidities*. New Haven, Yale University Press., p.171-2

⁹⁶ Burgin, M. (1946). *The economic aspects of Argentine federalism, 1820-1852*. Cambridge, Mass., Harvard University Press., p.252-5

into the economy. Australian properties were often very large, being up to 400,000 hectares with sheep flocks of up to two hundred thousand.⁹⁷ In the mid nineteenth century a mere 42 squatters held almost a fifth of the total occupied land in the Australian colony of New South Wales (NSW). The concentration of land was little changed by the 1880s when 500 holdings represented about half the alienated land in NSW, and a mere ten families owned 0.8 million hectares in the colony of Victoria.⁹⁸ Originally Britain attempted to limit settlement in Australia to the coastal area near Sydney, but this proved unenforceable. Squatters went well beyond this limit, occupying large areas of crown land, improving their properties and eventually obtaining legal backing via crown leaseholds at low annual rents. These leaseholds were the rough equivalent of title, as the difference between leasehold and freehold was largely a matter of legal form.⁹⁹ Australian pastoral leaseholders effectively had full property rights even when their lands were leased from the crown, as their leases were long, fairly automatic, and not open to competitive tendering.

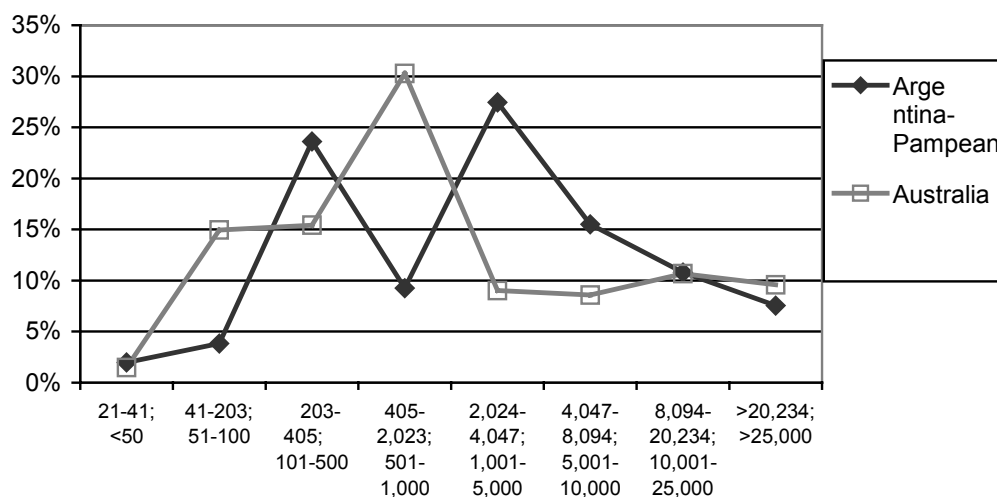
⁹⁷ Schedvin, C. B. (1990). "Staples and Regions of Pax Britannica." *The Economic History Review* 43(4): 533-59., p.542-3

⁹⁸ The Figure of 0.8 million hectares was calculated from 2 million acres. Buckley, K. D. and E. L. Wheelwright (1988). *No paradise for workers : capitalism and the common people in Australia, 1788-1914*. Melbourne ; New York, Oxford University Press., pp.3, 9

⁹⁹ Schedvin, C. B. (1990). "Staples and Regions of Pax Britannica." *The Economic History Review* 43(4): 533-59., p.537-8

Figure 1.2

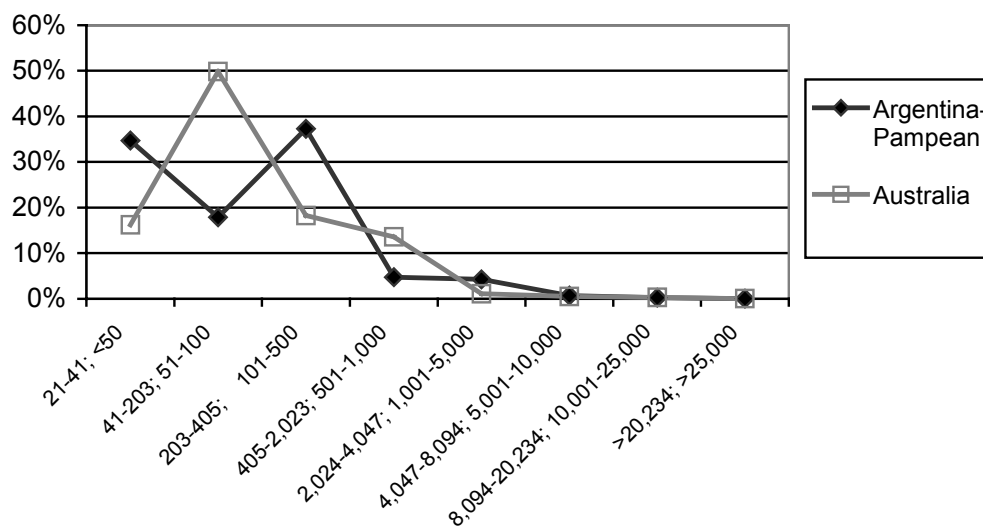
Proportion of Total Land Area according to Holding Size, 1910-11 Australia, 1914 Argentina-Pampa



Sources: See Statistical Appendix, Table 1.2

Figure 1.3

Proportion of Total Land Holdings according to Holding Size, 1910-11 for Australia, 1914 for Argentina



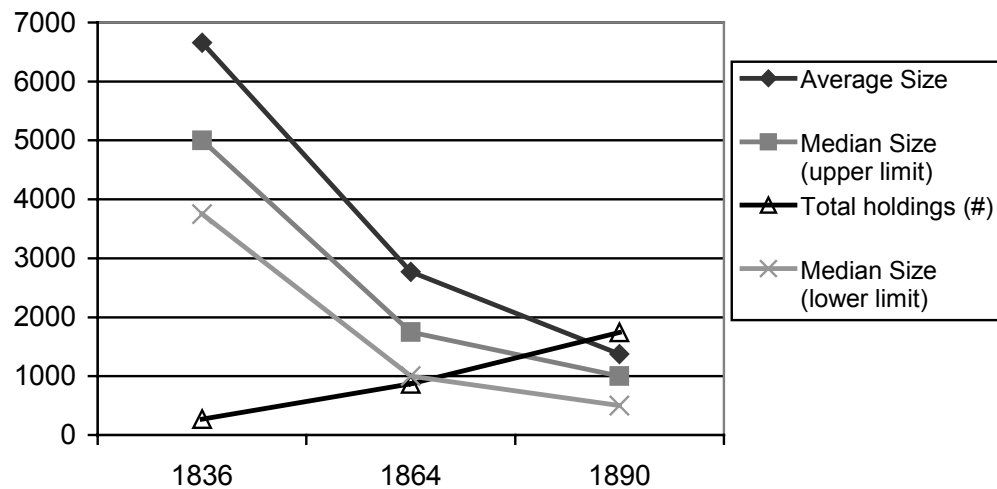
Sources: See Statistical Appendix, Table 1.3

The concentration of landownership in Argentina (1914) and Australia (1910-11) was roughly similar on the grounds of both the proportion of land area and the number of

land titles relative to holding size. The overall trajectories are very similar, but there are some problems of comparison. One problem is that the figures for Australia are based on the area of land actually in use, whereas the figures for Argentina are based on the total area of land. In an attempt to balance for this the Argentine figures reflect only the Pampas (the most valuable and intensively used lands), as the vast majority of these lands would likely have been in use. Another problem is that the size of holdings are not directly comparable, making the comparison of the trajectories only an approximate of general trends. Nonetheless the trajectories are quite similar, and reveal that both countries had highly concentrated land tenure in the early twentieth century.

Figure 1.4

Concentration of Land Ownership in Buenos Aires Province, hectares



Source: See Statistical Appendix, Table 1.4

Another problem with blaming the later failure of Argentine development on concentrated land tenure is that land tenure became increasingly dynamic and less

concentrated over the nineteenth century, as can be seen in Figure 1.4 above. Such de-concentration of land ownership would be expected with the emergence of a land market and an increase in land values. This likely reflected an increasing allocation of land to more productive agents as land use became more complex. An implicit assumption of the argument that inequitable land tenure was to blame for later divergence is that land tenure was static. The opposite appears true. The initial seeds of inequity sown in the first half of the nineteenth century were significantly weeded out over the second half of the nineteenth century. The de-concentration of land tenure continued in the first half of the twentieth century, when there was a large shift to smaller land holdings between 1914 and 1960.¹⁰⁰ Increasing equity in land tenure over the latter half of the nineteenth century and first half of the twentieth century stands in contradiction to the argument that inequitable land tenure was to blame for divergence in the latter half of the twentieth century.

It has been argued that the potentially negative impact of Australia's inequitable land distribution on long-term development was limited by the relative inability of Australia's large landowners to translate land tenure into political power, whereas Argentina's large landowners were able to do so.¹⁰¹ In fact the opposite appears to be true. Not only did Australian large landowners have considerable political power, but large Argentine landowners had great difficulties accessing political power.¹⁰² Hora persuasively discredits the popular and largely unexamined belief that large Argentine landowners dominated political power during the long oligarchy of the Partido Autonomista Nacional (PAN) in the late nineteenth and early twentieth centuries. Later attempts by the landowners to form an electable Conservative party (the rough equivalent to Australia's successful Country Party) were also a complete failure.¹⁰³ A more convincing explanation for the differing impact of inequitable land tenure on Argentine and Australian development paths was the ability of institutions to politically incorporate large landowners. Such incorporation was important for the state to find

¹⁰⁰ Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven,, Yale University Press., p.184.

¹⁰¹ Díaz Alejandro, C. F. and A. Velasco (1988). Trade, development, and the world economy : selected essays of Carlos F. Diaz-Alejandro. Oxford, UK ; New York, NY, USA, B. Blackwell., p.236

¹⁰² Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press.

¹⁰³ Bergquist, C. W. (1998). Labor in Latin America : comparative essays on Chile, Argentina, Venezuela, and Colombia. Stanford, Calif., Stanford University Press.

cooperative means of encouraging the fullest use of land, the major original factor endowment in each country. Inequality of incomes should increase the state's ability to provide public goods, as long as those who receive greater distributions are politically incorporated.¹⁰⁴ The incorporation of large landowners into the state should thus enable a greater provision of public goods. Argentine political institutions generally did not incorporate large landowners, and the friction between society and landowners notably increased from 1912 onwards.¹⁰⁵ The inability of Argentine institutions to accommodate conflict between landowners and society led to later development problems, not inequitable land tenure per se. Australian institutions in contrast found means to appease both the democratic masses and large landowners. In the twentieth century Australian institutions managed the feat of maintaining a high level of primary exports while also funding an expensive and inefficient experiment in import substitution.¹⁰⁶ The ability of underlying political institutions to incorporate landowners determined the level of social harmony and consequent development.

¹⁰⁴ As those with lower distributions are able to exploit those with greater distributions. Olson, M. (1971). The logic of collective action: public goods and the theory of groups. Cambridge, Mass., Harvard University Press., p.33-35

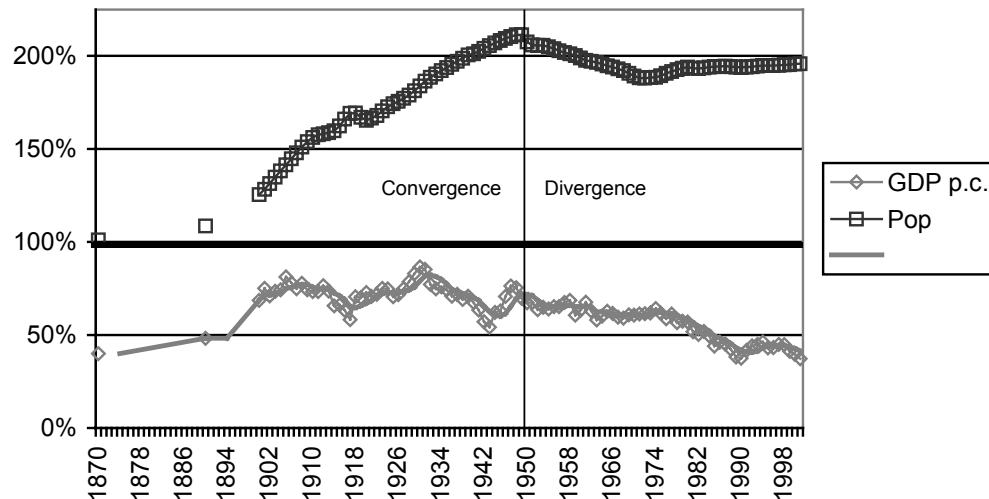
¹⁰⁵ Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press., p.133

¹⁰⁶ The peculiarity of the 'Australian compact' or 'compromise' is examined in Lloyd, C. (2003). Economic policy and Australian state building: from labourist-protectionism to globalisation. Nation, state, and the economy in history. A. Teichova and H. Matis. Cambridge ; New York, Cambridge University Press: xvi, 450 p. & Lloyd, C. (2002). "Regime Change in Australian Capitalism: Towards a Historical Political Economy of Regulation." Australian Economic History Review 42(3): 238-266.

III Overview of Divergence and Convergence

Figure 1.5

Argentine GDP per capita and Population relative to Australia, 1870-2001



Note: The trend line for GDP per capita above is a five-year moving average.

Source: See Statistical Appendix, Table 1.5

As Figure 1.5 demonstrates, Argentina clearly confirmed an ability to achieve a high level of development, evidenced by sustained growth in GDP per capita, in the late nineteenth and early twentieth centuries. This was a period of unprecedented and prolonged development in Argentina. Argentina never fully converged with Australia by this measure, but came very close. The relative achievement was outstanding when consideration is made for the parallel and far higher growth in Argentine population relative to Australia. This hides the extent of convergence visible in a per capita measure, as Argentina's population grew almost twice as quickly as Australia's. Australia was one of the wealthiest countries in the world in terms of GDP per capita in the early twentieth century, and the wealthiest in the late nineteenth century. Yet Argentine GDP per capita managed to converge from about 40% of Australia's in 1870 to 87% in 1930. Over the same period both countries began with almost equal populations, but Argentina's population was almost double Australia's in 1930 (187%).¹⁰⁷ Australia faced economic difficulties from the late nineteenth century, falling

¹⁰⁷ All these figures are from Maddison, A. (2003). *The World Economy: Historical Statistics*. Paris, OECD Development Centre. 2005.

into a long, hard depression from 1891.¹⁰⁸ It was not until after World War II that Australia recovered the economic buoyancy of the 1851-91 period.¹⁰⁹ Nonetheless Australia remained one of the world's wealthiest countries throughout 1870-2001 in per capita terms. Argentine GDP per capita also includes the relatively undeveloped northwest region, which had no parallel in Australia. Australia had a significant head start over Argentina, as the Australian colonies began to strongly develop from the 1820s with the expansion of the pastoral industry.¹¹⁰ In Argentina the 1820s marked the beginning of three decades of warfare that long delayed development. Nonetheless Argentina established itself as a member of the developed country club by 1930.

The more rapid Argentine population growth during convergence, shown in Figure 1.5, was fuelled by much higher net immigration.¹¹¹ This was an early goal of the Argentine state, which believed that a steady flow of cheap labour was necessary for development.¹¹² As the founder of Argentina's constitution, Juan Bautista Alberdi, proclaimed in 1852: 'Gobernar es poblar' - to govern is to populate.¹¹³ Accordingly Argentina instituted liberal immigration policies from the 1850s, and in 1876 legislation opened Argentina to all but the most obvious undesirables. In 1914, 29.9% of Argentina's total population had been born abroad, rising to 49.4% in the city of Buenos Aires. Argentina then had the highest proportion of immigrants to total population in the world.¹¹⁴ This adds further detail to how successful the period of convergence was. The Australian stance on immigration contrasted starkly with Argentina, and was based on the exclusionary, openly racist White Australia Policy of 1901. Actual policy may not have had much impact though, as immigrants probably found Australia less attractive

¹⁰⁸ McLean argues that the 1890s depression was even worse than the 1930s. McLean, I. W. (1996). "Recovery from the Depression: Australia in an Argentine Mirror." Unpublished., p.3-4

¹⁰⁹ Blainey, G. (1980). A Land Half Won. Adelaide, Macmillan., p.318

¹¹⁰ Fogarty, J. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. Argentina and Australia, Essays in comparative economic development. A. E. Dingle and D. T. Merrett, Economic History Society of Australia and New Zealand, Monash University. **Occasional Papers No. 1.**, p.22

¹¹¹ See immigration figures in: Scobie, J. R. (1967). Revolution on the Pampas; a social history of Argentine wheat, 1860-1910. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press.; Díaz Alejandro, C. F. and A. Velasco (1988). Trade, development, and the world economy : selected essays of Carlos F. Díaz-Alejandro. Oxford, UK ; New York, NY, USA, B. Blackwell.; and Statistics, A. B. o. (2005).

¹¹² Solberg, C. E. (1970). Immigration and nationalism, Argentina and Chile, 1890-1914. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press., p.7-8

¹¹³ Alberdi, J. B. and F. Cruz (1915). Bases y puntos de partida para la organización política de la República argentina. Buenos Aires,, La Cultura argentina.

¹¹⁴ Solberg, C. E. (1970). Immigration and nationalism, Argentina and Chile, 1890-1914. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press., p.33-6

than Argentina, where opportunities for social and economic mobility were probably better.¹¹⁵ Australia may have had a higher GDP per capita but the economy was stagnant compared to the dynamism of Argentina, implying that there were greater opportunities for immigrants in Argentina.

Dating Divergence

When did Argentina and Australia begin to diverge? For many historians the when equates with the why. Based on GDP per capita alone, several dates for divergence are possible. Figure 1.5 dates divergence from the beginning of the postwar period, but dates before and after this point are conceivable. The year 1950 is chosen above as divergence then emerges as a distinct trend, but the date could be pushed back as early as the peak of convergence in 1930. To do so would disregard the prior period of 1900-30 when similar oscillations occurred. The five-year moving average oscillates around 70% from about 1900 until the early 1950s, when a distinct break begins. Global trends must also be considered. The interwar period was highly unusual and variable, and placing too much emphasis upon this period would be precarious. The post World War II order was much more stable and persistent.

The NIE perspective suggests that the when does not closely correlate with the why. Path dependency allows the when and the why to be distinct. A shift in institutional environments would likely precede divergence. Argentina clearly converged with Australia until 1930, which has often been identified as a turning point in the literature.¹¹⁶ Yet Argentine divergence with Australia remained unclear until the early 1950s. By dating the peak of convergence as 1930, and evident divergence from 1950, the implication is that the shift in institutional environments occurred during the 1930-50 period. The roots of divergence thus lie within the 'década infame' dictatorship of the 1930s and the following Peronist administration of 1946-55. During this period a shift in institutional environments occurred that was soon followed by divergence. From the mid 1970s divergence greatly accelerated, coinciding with the second Peronist

¹¹⁵ Moran, T. H. (1970). "The "Development" of Argentina and Australia: The Radical Party of Argentina and the Labor Party of Australia in the Process of Economic and Political Development." *Comparative Politics* 3(1): 71-92., p.84-5

¹¹⁶ See: Díaz Alejandro, C. F. (1970). *Essays on the economic history of the Argentine Republic*. New Haven., Yale University Press. & Cavallo, D., R. Domenech, et al. (1989). *Agriculture and economic growth in Argentina, 1913-84*. Washington, D.C., USA, International Food Policy Research Institute.

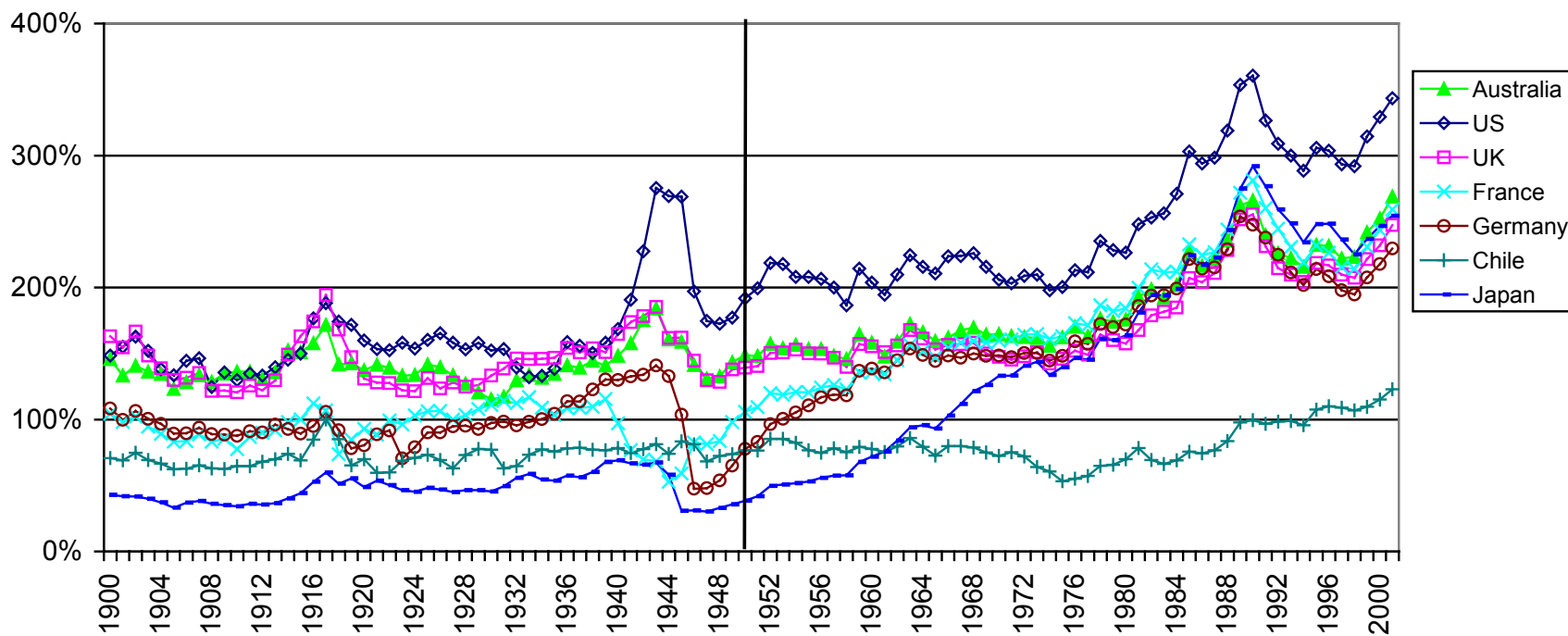
administration of 1973-76 and the ensuing military dictatorship of 1976-83. The periods of 1930 to the early 1950s and the 1970s to the early 1980s were exceptional for their high levels of conflict and lack of consensus in Argentine society, which included the slaughter of up to 30,000 people during the 1976-83 military dictatorship.¹¹⁷

¹¹⁷ This Figure is an approximate from Amnesty International, which finds a suitable approximation to be 15 to 30 thousand people. See Arriaga, A. D. o. G. R., Amnesty International USA (2003). The Fight Against Impunity in Argentina; Congressional Human Rights Caucus Briefing. Internet, Amnesty International USA.

A Half Century Membership of the Developed Club

Figure 1.6

Argentine GDP per capita (100% line) in 1990\$US relative to other countries, 1900-2001

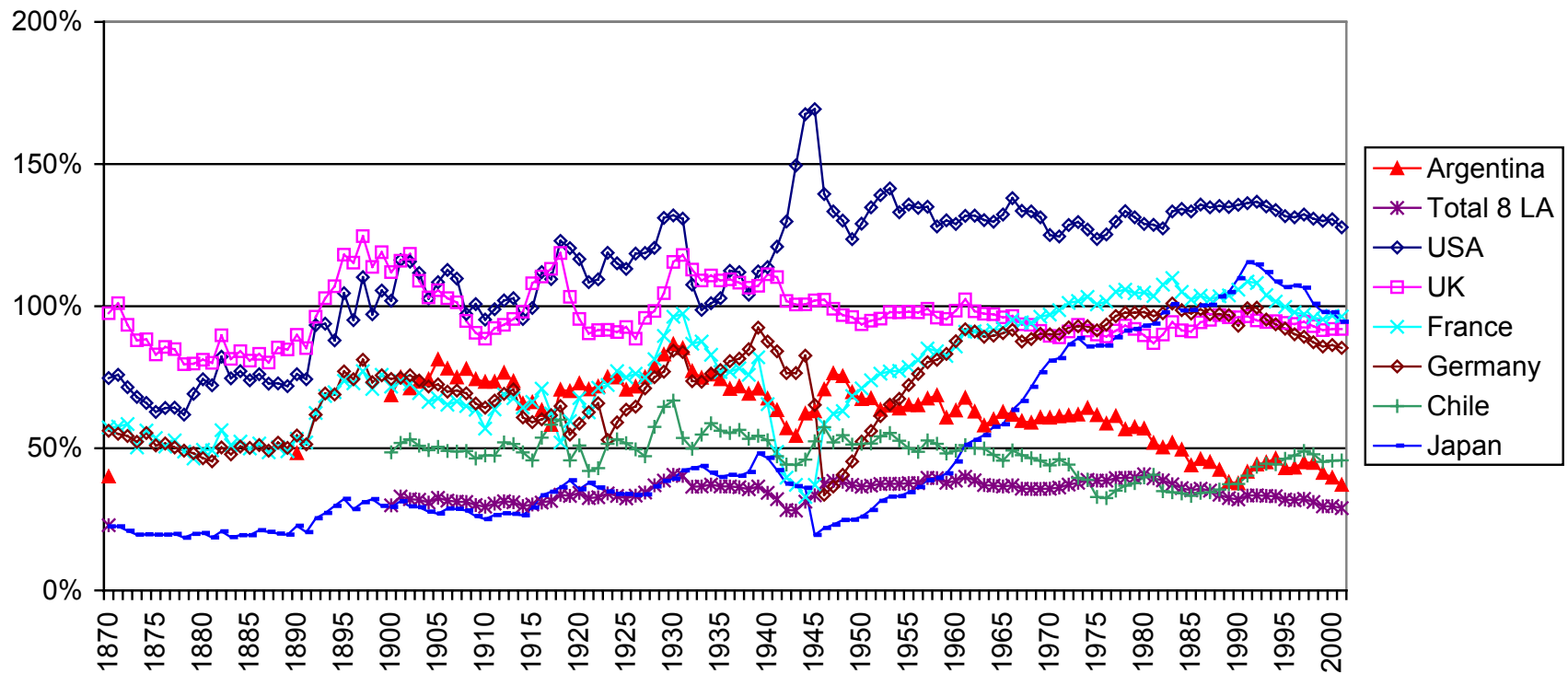


Derived from: (Maddison 2003)

A More Permanent Member?

Figure 1.7

Australian GDP per capita (100% line) in 1990\$US relative to selected countries, 1870-2001



Derived from: (Maddison 2003)

How do Argentine and Australian economic performance measure relative to the rest of the world? Figures 1.6 and 1.7 above begin an answer to this question. It is important to broaden the comparison beyond Argentina and Australia to see if the convergence and divergence story holds. Did Australia and/or Argentina take an unusual path? The Figures above place Argentine and Australian GDP per capita within a much wider perspective, and include the world's leading economies and relevant comparators.

Figure 1.6 compares Argentina's performance relative to both developed and developing countries from 1900-2001. In sum it shows a Latin Americanisation of Argentine GDP per capita and development over the twentieth century, moving from a developed country in the early twentieth century to trailing behind the Latin American leader of Chile by the end of the twentieth century.¹¹⁸ By the early twentieth century Argentina had clearly converged with many of the world's most developed countries, exceeding France and Germany for much of the period, and converging strongly with the UK during the 1920s. The beginning of divergence is less clear in a comparison with so many countries. Nonetheless 1950 appears again as a reasonable beginning of divergence, one that accelerates in the 1970s. The comparison with Japan considerably reinforces 1950 as a turning point. By the late 1980s Argentina had considerably converged with the large Latin American countries, and during the 1990s Argentina was replaced by Chile as the Latin American leader in development.¹¹⁹ In sum the timing of Argentine convergence and divergence is very similar to that found in comparison with Australia alone. Convergence peaked during the first half of the twentieth century and was followed by divergence in the postwar period.

Figure 1.7 looks at the relative performance of Australian GDP per capita from 1870-2001. It shows that Australia lost the position of world's wealthiest country, richer than the UK and the US in the late nineteenth century, but retained the status of a developed, wealthy country through the end of the twentieth century. Australia lost considerable relative ground to the US in the mid twentieth century, a distance that remains

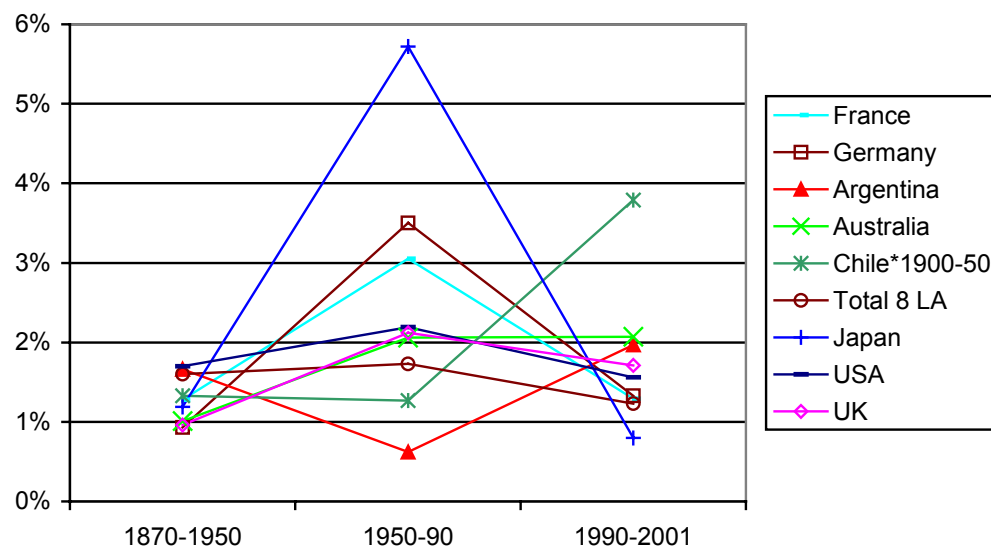
¹¹⁸ Chile had the highest GDP per capita in Latin America in 2001, asides from the clear exceptions of Puerto Rico (part of the US) and Trinidad and Tobago (oil rich Caribbean islands).

¹¹⁹ Argentina lost the lead in GDP per capita to Venezuela at an earlier date, but Venezuela's oil rich nature and extreme income inequality hardly commend the use of GDP per capita as a comparable indicator of development.

remarkably constant throughout the post World War II period. By the early 1970s Australian GDP per capita was most comparable to France, Germany, the UK, and Japan, and was somewhat distant to the US. What is clear from Australia's relative GDP per capita from 1870 to 2001 is that Australia was always a member of the developed world club, but was not the leading performer. Argentina also appears as a member of the developed club in the first half of the twentieth century, but then moved to join Latin America in the latter half of the twentieth century. The only pause in this movement was the period of Convertibility (1990-2001), when the hands of seigniorage (but not externally funded public debt) were briefly tied. The Argentine-Australian comparison is reasonable, as Australian GDP per capita performed below that of the US and was closer to that of Europe, but with much less volatility.

Figure 1.8

Growth in GDP per capita, compound interest rates



Derived from: (Maddison 2003)

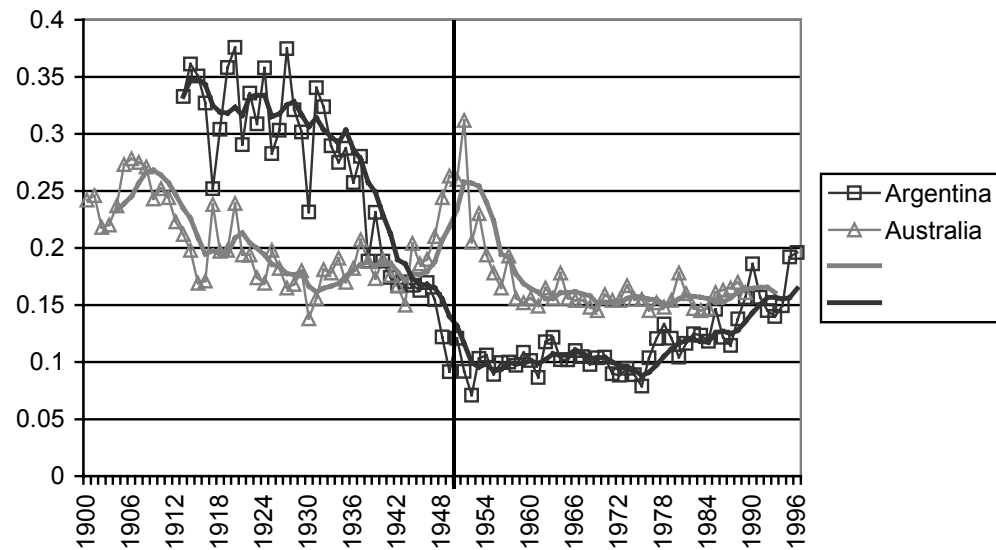
Figure 1.8 above allows a more simplistic sketch of relative GDP per capita. The key periods identified are: 1) successful development and convergence from 1870 to 1950; 2) divergence in the postwar period (1950-90); and 3) brief resurgence during the Convertibility period (1990-2001). Using these periods as a guide, Argentine divergence in terms of GDP per capita growth in the 1950-90 period is especially clear.

The 1950-90 era shows how exceptionally low growth in Argentine GDP per capita was in the postwar period.

Exports and timing of Divergence

Figure 1.9

Exports/GDP, 1900-96

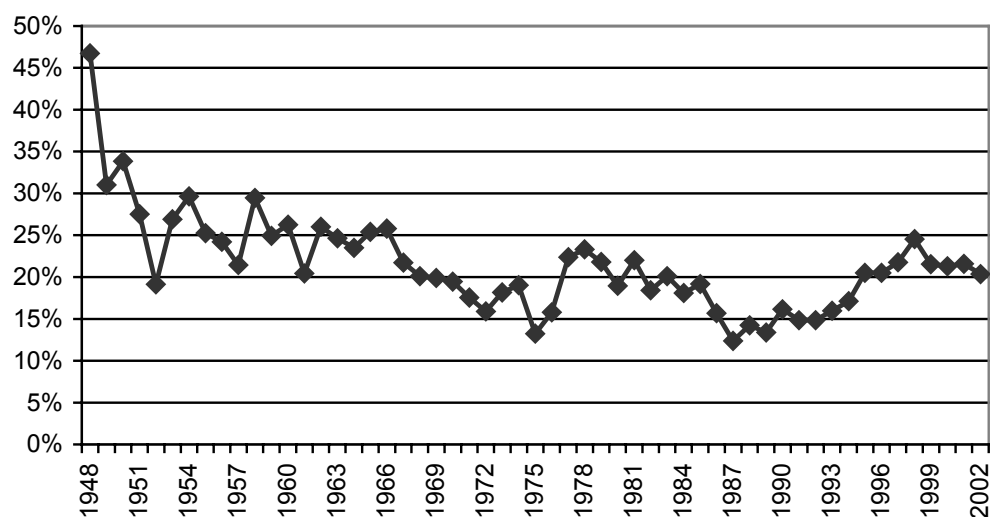


Note: The trendlines above are both five-year moving averages.

Sources: See Statistical Appendix, Table 1.9

Figure 1.10

Argentine Exports relative to Australian Exports per capita in US\$, 1948-2002



Source: See Statistical Appendix, Table 1.10

Exports are a means for further investigating the timing of divergence. The different development paths of the postwar period were a combination of Australian resurgence in a period of dramatic world growth and Argentine stagnation in spite of it. The key proximate reason for this divergence was Argentina's shift away from export production. Argentina and Australia were both settler economies whose development was largely based upon primary exports. Figures 1.9 and 1.10 show a major postwar divergence in Argentina's ability to export relative to Australia. Argentina's high export to GDP ratio dramatically declined in the late 1930s due to the external circumstances of the Great Depression and WWII. Contrary to the Australian experience, this considerably accelerated in the late 1940s and was sustained until the late 1970s. The primary reason for the decline in Argentine exports in the postwar period was stagnation in rural production. From 1940-72 Argentine agricultural production grew at a meagre 1.4% per annum.¹²⁰ Previously it regularly achieved 4% per annum.¹²¹ Argentine exports only returned to Australian proportions in terms of GDP by 1989, but on the

¹²⁰ Cavallo, D. and Y. Mundlak (1982). Agriculture and economic growth in an open economy--the case of Argentina. Washington, D.C., International Food Policy Research Institute., p.13

¹²¹ Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven,, Yale University Press., p.142-3

basis of a much smaller relative economy. Figure 1.10 shows that this recovery was illusory. Australian postwar export performance was actually quite poor by international standards, and Australian exports failed to grow as quickly as world trade. From 1953-73 Australian exports quadrupled in value, while world exports grew by sevenfold.¹²² In fact Australia is unique amongst countries of similar population and living standards in having such a low proportion of exports to GDP.¹²³ Argentine postwar export failure is thus relative to a poor export performer. The poor performance of Argentine exports in the postwar period is most stark when exports are compared in US\$ per capita. By 1989 the value of Argentine exports per capita was only 13% of that in Australia. Unfortunately the IMF data does not stretch before 1948, but in conjunction with exports/GDP, it can be assumed that the value of Argentine exports per capita used to be at least equal to, if not greater than, in Australia. The decline in the ability to export is an important proximate reason for divergence.

A major consequence of Argentina's decline in exports was the constraint it placed upon the potential for economic growth via the balance of payments. From 1930 onwards the Argentine economy was constrained by a lack of foreign exchange due to the decline in agricultural exports.¹²⁴ This decline was initially due to the restrictive international trade policies of the Great Depression. Through the 1930s Argentina succeeded somewhat in maintaining previous achievements in traditional exports as measured by their historical shares of international trade.¹²⁵ The 1940s was a different story, as Argentine agricultural exports declined due to difficulties of domestic supply, not lack of foreign demand.¹²⁶ Australia also experienced a decline in rural exports in the immediate postwar period, when a more aggressive attempt to construct an internally driven economy was made. This was reversed in 1952 when the rural export sector resumed a high priority status with the boom in commodity prices. Australia began to once again believe that exports of low value-added primary products could be relied upon for development.¹²⁷ This shift in attitude led to rapid results, and within a

¹²² Pinkstone, B., D. Meredith, et al. (1992). Global connections : a history of exports and the Australian economy. Canberra, AGPS Press., p.167

¹²³ Ibid., p.323

¹²⁴ Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven., Yale University Press., p.78-85

¹²⁵ Ibid., p.99-100

¹²⁶ Ibid., p.201-2

¹²⁷ Pinkstone, B., D. Meredith, et al. (1992). Global connections : a history of exports and the Australian economy. Canberra, AGPS Press., p.150

decade the quantity of Australian rural production increased by 50%.¹²⁸ Argentina similarly tried to reverse the decline of the rural export sector in the early 1950s, but was much less successful. This was partly because the decline had been far more dramatic. By 1960-64 the quantity of Argentine exports was still below that achieved in 1925-29.¹²⁹ In the 1950s and early 1960s both Argentina and Australia regularly found themselves in balance of payments crises, but Australia removed itself from this situation by increasing the productivity of rural export industries.¹³⁰ This allowed Australia to pay the costs of import substitution industrialisation. Over the twentieth century the contribution of the rural sector to GDP declined in both countries, but both continued to rely heavily on the rural sector for foreign exchange, especially Argentina. In 1978 Argentina depended upon the rural sector for 73% of export income, whereas the rural sector accounted for 47% of Australian export income.¹³¹ The dramatic postwar decrease in Argentina's ability to export damaged the ability to earn foreign exchange and thereby constrained the potential for economic growth.

The drop in export production has often been cited as the key reason for Argentina's relative economic decline, but it is a proximate not a fundamental reason for divergence. Díaz Alejandro finds that if more favourable policies had been followed towards Argentina's export sector in the postwar period, GDP in 1960-64 would have been at least 29% higher.¹³² Similarly Cavallo et al find that if Argentina had followed more desirable economic policies towards agriculture and elsewhere from 1930-85, levels of income, consumption, and investment would have been 63%, 70%, and 112% higher respectively.¹³³ The decline in Argentine agricultural exports was only a proximate cause of postwar divergence, as the opportunities and geographic contexts for development in Argentina and Australia were very similar. The more fundamental

¹²⁸ Duncan, T. and J. Fogarty (1984). Australia and Argentina : on parallel paths. Carlton Vic, Melbourne University Press., p.52-3

¹²⁹ Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven,, Yale University Press., p.198

¹³⁰ Duncan, T. and J. Fogarty (1984). Australia and Argentina : on parallel paths. Carlton Vic, Melbourne University Press., pp.64-5

¹³¹ Fogarty, J. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. Argentina and Australia. Essays in comparative economic development. A. E. Dingle and D. T. Merrett, Economic History Society of Australia and New Zealand, Monash University. **Occasional Papers No. 1.**, p.27

¹³² Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven,, Yale University Press., p.140

¹³³ Cavallo, D., R. Domenech, et al. (1989). Agriculture and economic growth in Argentina, 1913-84. Washington, D.C., USA, International Food Policy Research Institute., p.121

reason for divergence was the decline in Argentine state credibility that occurred as social conflict broadened, and one result of this was a large decrease in exports.

IV Fiscal Institutions

Differing experiences of state credibility were responsible for divergence in Argentine and Australian development. An important result of state credibility is fiscal institutions, which can be compared and contrasted over long periods of time. A primary focus of the research is thus a comparison of fiscal institutions. Della Paolera and Taylor observe that a key macroeconomic challenge for a small open economy is the construction of institutions and commitments that support stable fiscal and monetary policies.¹³⁴ Long-run price stability and the resulting benefits of financial markets are only possible if a country is successful in constructing such supporting institutions. If a small open economy is unsuccessful it risks volatile inflation, leading to increased financial instability, and banking and currency crises. Yet how does a society construct the institutions and commitments necessary for stable fiscal and monetary policies? Fiscal institutions are the basis upon which all macroeconomic institutions are built. Monetary institutions require solid fiscal institutions to be sustainable.¹³⁵ Otherwise the primary role of a country's currency will likely be as a source of seigniorage (i.e. inflation taxation), which will undermine the development of monetary and financial institutions. Fiscal institutions are the immediate and investigable result of state credibility. They are also a proximate cause of further macroeconomic institutional development. As such they are an ideal focus for the comparative investigation of state credibility. State credibility and ensuing fiscal institutions are the foundation upon which efficient institutions that engender development are built.

The idea of investigating fiscal institutions is suggested in some classic works. Newton and Llerena were Argentines commissioned by the Buenos Aires government in the late nineteenth century to explore England, the US, and Australia for insights into the causes

¹³⁴ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., p.10

¹³⁵ A point illustrated in Cortés Conde, R. and G. T. McCandless (2001). Argentina: From Colony to Nation - Fiscal and Monetary Experience of the Eighteenth and Nineteenth Centuries. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p.

of development. They realised the importance of fiscal institutions as long ago as 1882. Australian fiscal institutions particularly impressed them. They note that:

‘The fiscal revenues of all the [Australian] colonies is much greater than that of the Empire of Brazil, whose income doesn’t reach 100 million patacones, in spite of its more extensive, fertile and watered lands, and a population four times greater. Is the difference due to character or institutions?’ (Newton and Llerena 1882), Vol. 6, p.350

They identify three elements often noted in discussions of what determines development: factor endowments, character or culture, and institutions. A defining mark of success in development, even in 1882, was the achievement of lucrative fiscal institutions.

Another classic work that suggests the importance of fiscal institutions is by Díaz Alejandro, who proposes that Argentina failed to make the transition to a ‘sophisticated’ fiscal policy in the 1930s and 1940s.¹³⁶ Such a sophisticated fiscal policy would have better reconciled long run economic efficiency with popular income distribution. He identifies the later emergence of a ‘sharp conflict’ between economic efficiency and a fair income distribution in 1955-66, alongside the manifestation of a ‘latent civil war’.¹³⁷ Fiscal institutions began to weaken just as the need for them to reconcile the goals of efficiency and income distribution became more intense. Díaz Alejandro thus identifies fiscal institutions (he uses the term ‘fiscal system’) as a crucial element in what became an increasingly problematic political economy in mid twentieth century Argentina. In contrast Australia appears to have achieved such a ‘sophisticated’ fiscal policy early in the twentieth century, which was able to reconcile efficiency and popular income distribution. This was the Australian ‘compromise’ or ‘settlement’, which became the nation building ideology in the early twentieth century.¹³⁸

¹³⁶ Díaz Alejandro, C. F. (1970). *Essays on the economic history of the Argentine Republic*. New Haven,, Yale University Press., p.65

¹³⁷ Ibid., p.129-132

¹³⁸ Lloyd describes the compromise as ‘labourist-protectionism’. Organised labour and certain capital sections became highly influential and integrated with the state in the early twentieth century. This greatly benefited trade union members, manufacturing firms, state enterprises, certain professions, and the resulting bureaucracies. It became more inclusive over time. Lloyd, C. (2003). Economic policy and Australian state building: from labourist-protectionism to globalisation. *Nation, state, and the economy in history*. A. Teichova and H. Matis. Cambridge ; New York, Cambridge University Press: xvi, 450 p., p.405-7

Cavallo, Domenech, and Mundlak, in their comparison of Argentina with Australia and elsewhere, also suggest the importance of fiscal institutions in divergence. They find that the normal roles assigned to prices and fiscal policy were reversed in Argentina from Perón onwards.¹³⁹ Prices were distorted to redistribute income rather than signal efficient resource allocation, while fiscal policy was used to influence resource allocation rather than be an instrument of redistribution. Díaz-Alejandro also finds that Perón's first government used prices to redistribute income rather than allocate resources.¹⁴⁰ Fiscal institutions are again identified as a crucial element in the deterioration of Argentine political economy. Cavallo, Domenech, and Mundlak find that the Argentine state began to follow disadvantageous economic policies from the 1930s and 1940s, but they fail to provide explanations for why these policies were followed. Their counterfactual finds that factor endowments did not prevent Argentina from continuing along a development path similar to Australia.¹⁴¹ Rather, the institutions required for Argentina to follow a more successful development path were lacking.¹⁴² Yet they neglect to investigate this observation further. They demonstrate why the policies actually followed in Argentina were inferior to geographically viable alternatives, but not why Argentine institutions were unsuccessful in adopting better policies. A comparison of fiscal institutions should answer some of the "Whys?" left dangling by these classic works.

Argentine and Australian fiscal and monetary institutions were similar in the late nineteenth and early twentieth centuries. They both relied on indirect taxes on trade for the bulk of their fiscal revenue. Their monetary institutions were both founded upon the gold standard. Australian fiscal institutions became evidently more capable from World War I (WWI) onwards with the successful introduction of federal income taxation. Argentine fiscal institutions remained less developed until 1932 when federal income taxation was successfully introduced. An Argentine central bank was created in 1935 to reform both monetary and banking institutions. Yet these reforms occurred during the 'década infame', a period of illegitimate government that followed the 1930 military

¹³⁹ Cavallo, D., R. Domenech, et al. (1989). Agriculture and economic growth in Argentina, 1913-84. Washington, D.C., USA, International Food Policy Research Institute., p.110, 121

¹⁴⁰ Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven., Yale University Press., p.128

¹⁴¹ Cavallo, D., R. Domenech, et al. (1989). Agriculture and economic growth in Argentina, 1913-84. Washington, D.C., USA, International Food Policy Research Institute., pp. 9, 120-1

¹⁴² Ibid., p.110

coup. This may have robbed the reforms of a greater legitimacy they would have had under a more democratic setting, one that reflected greater social consensus. Greater political legitimacy returned with the democratic election of Perón in 1945, but he also represented a widening radicalisation of Argentine political economy (along with macroeconomic institutions). Fiscal institutions became entwined within the ‘latent civil war’ for power, resources and influence. As the state’s credibility declined in the postwar period, so did its fiscal institutions.¹⁴³ Political struggle and declining credibility were reflected in greater budget deficits, which were increasingly financed by seigniorage.¹⁴⁴ What society refused to fund the state extracted by reneging on money, however inefficient and damaging in the long-run. In contrast other developed countries, including Australia, experienced a dramatic expansion of their fiscal institutions in the postwar period, which was ultimately crucial to divergence.

Conclusion

It is now difficult to believe that Argentina and Australia were at similar levels of development as recently as the 1920s to 1940s. Perhaps Australian success in development in the postwar period has been as remarkable as Argentina’s difficulties. Yet Australia was not a postwar economic miracle. Rather Australia achieved a modest, continuous development over time. From the late nineteenth to the late twentieth centuries Australia lost its leading status in terms of GDP per capita, falling some way behind the United States and being converged upon by Europe. Perhaps Australian development could have been greater had more efficient means been found to more quickly reconcile popular but inefficient policies (such as an extensive inward orientated development strategy). Yet these economic compromises paid off in their ability to maintain social consensus. The potential costs of not maintaining social consensus might be measured by the extent of Argentina’s divergence. In light of Australia’s unspectacular postwar growth, Argentina’s divergence appears more spectacular. Argentine development moved from a level greater than many European countries for much of the first half of the twentieth century, to Latin American levels by the end of the twentieth century. Had Argentina continued its previous trend, it could well be more successful than Australia is today. The question of what role differing

¹⁴³ Later chapters delve into this in much more detail.

¹⁴⁴ Díaz Alejandro, C. F. (1970). *Essays on the economic history of the Argentine Republic*. New Haven,, Yale University Press., p.134

institutional environments played in divergence is a pertinent question in need of an answer. The comparison of Argentina and Australia has not been fully explored, and a lasting explanation for their divergence has yet to be told.

Chapter Two: Political Economies of Argentina & Australia

The following chapter reviews the political and economic histories of Argentina and Australia. The first part compares state formation, describing Australian and Argentine institutional legacies. In order to achieve substantial development, the basic public good of peaceful order had to be established. Argentine and Australian histories are quite different in this respect. Argentina was influenced by a Spanish institutional legacy, but this was thoroughly reshaped through the experience of at least half a century of disorder and warfare. Australia began as a very long distance British penal colony, an experience that also reshaped the British institutional legacy. The first part is concerned with the consequences of state formation for state credibility, particularly the quality of order and institutions. The second part compares the formation of factor markets in labour, capital and land in order to analyse the roles played by institutions and geography. This chapter provides an historical review of the roles played by geography and institutions in development, and the consequences these left for state credibility.

I Constitutional Trajectories – Quality of National Order and Development

The Argentine and Australian histories of nation-state building were little alike. The Argentine path to consolidating a national order was long and arduous, plagued by civil war. A nation-state did not automatically emerge in Argentina from a colonial state.¹⁴⁵ The process began in 1810 with a revolution for independence and lasted for much of the century, ending decisively in 1880 when the nation-state was consolidated. This left a legacy where the achievement of order itself was highly valued, but this meant there was less concern for the quality of order. Uncooperative elements were to be defeated, not negotiated. Democracy was an afterthought, an aspiration, not a proven political means. Australia in contrast consolidated a national order peacefully, quickly and easily. The six Australian colonies emerged over the nineteenth century as semi-independent polities under British guidance. Serious efforts to unite them into a single nation-state began in 1890, culminating in the peaceful adoption of a federal constitution in 1901. This was a considerable achievement, as each colony was previously independent and self-governing, territorially proud, and conscious of potential future wealth.¹⁴⁶ The Australian national state was not predestined, and the process of achieving it was

¹⁴⁵ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.39

¹⁴⁶ Blainey, G. (1980). A Land Half Won. Adelaide, Macmillan., p.195-6

cooperative and democratic. The only battles were electoral, as the federal constitution had to be approved by referenda in each and every colony. This cooperative legacy provided a promising basis for the construction of future national institutions. Argentine and Australian state credibilities were founded upon quite different legacies of state formation.

The achievement of national order did not mark the beginning of state credibility and development in Argentina and Australia, but was important to them nonetheless. In Argentina national state consolidation marked the beginning of a long period of more substantial development. In Australia the push towards national order may have been part of an effort to renew development, which stalled considerably from 1890. The ability to extract taxation increases as a state forms. If these greater resources are directed to public goods, especially order in the initial stages, the construction of the state will further consolidate and extractive powers further increase. Upon more substantial fiscal powers the state's powers to issue debt and money will also increase, which if used to provide wider public goods will advance the state's powers. War and ideology have often been crucial to the process of state formation. North & Thomas argue that nation-state formation in Western Europe was driven by fiscal needs created by warfare.¹⁴⁷ Yet the timing of war is potentially crucial. If war occurs too early the process of state formation can be greatly prolonged and/or destroyed by pushing the state into a desperate scramble for resources that undermines credibility. If war occurs once the state is more established, state construction and credibility can be accelerated via a unifying ideology. Early Argentine nation-state formation was destroyed by war in the 1820s, meaning the achievement of order per se became the most fundamental objective. The wars emanating from the Latin American revolution of independence led to states of 'blood and debt' rather than states of 'blood and iron'.¹⁴⁸ Similarly Newton and Llerena, two Argentines observers, remark in 1882 that: 'The majority of countries have debts whose capital was dissipated in the smoke of battle.'¹⁴⁹ In contrast the World Wars served as almost ideal opportunities for the new Australian nation-state to

¹⁴⁷ North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press., pp.95-97

¹⁴⁸ Centeno, M. A. (2002). Blood and debt : war and the nation-state in Latin America. University Park, Pa., Pennsylvania State University Press., pp.20-25

¹⁴⁹ Newton, R. and J. Llerena (1882). Viajes y Estudios de la Comisión Argentina sobre la Agricultura, Ganadería, Organización y Economía Rural en Inglaterra, Estados-Unidos y Australia., Comisionados por el Exmo. Gobierno de Buenos Aires., pp.112-115

consolidate and strengthen credibility. The wars were expensive in terms of expenditure and human lives, but they were opportune to unify a new nation ideologically. Around this time the Australian ‘compromise’ came into being.¹⁵⁰ Even in older nations such as Britain, the World Wars served as opportunities to generate a large degree of social and political harmony.¹⁵¹ The following section analyses the consequences of state formation for state credibility, the embedded institutional environments left by history.

Argentina

The first priority in the construction of Latin American nation-states was ‘order’.¹⁵² The focus was institutions that consolidated and legitimated central power (e.g. constitution, militias, opening and improvement of means of communication, and the development and regulation of judicial mechanisms). In Argentina this was reflected in the high degree of national expenditure upon the military once the genesis of a nation-state began to form, being almost always over half the total from 1864 to 1879.¹⁵³ ‘Order’ was the dominant question in establishing the Argentine national state, and included the exclusion of anything that might obstruct ‘progress’. Only if order were achieved would it be possible to obtain foreign confidence, which would bring the necessary capital and immigrants for progress. An expression of Alberdi, the author of the Argentine national constitution, was ‘to govern is to populate’.¹⁵⁴ Nothing can be done with idle lands without a workforce. Argentine society could not emerge from the traditional, mediocre level of material existence until labour and capital flowed to exploit the land, populate the cities, and construct the physical infrastructure that tied the stages of economic

¹⁵⁰ Lloyd, C. (2003). Economic policy and Australian state building: from labourist-protectionism to globalisation. Nation, state, and the economy in history. A. Teichova and H. Matis. Cambridge ; New York, Cambridge University Press: xvi, 450 p., pp.405-406

¹⁵¹ Milward, A. S. and Economic History Society. (1984). The economic effects of the two world wars on Britain. London, Macmillan., p.44

¹⁵² Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.27-8. See also Dunkerley, J., Ed. (2002). Studies in the formation of the nation-state in Latin America. London, Institute of Latin American Studies.; Smith, D. A., D. J. Solinger, et al. (1999). States and sovereignty in the global economy. London ; New York, Routledge.; & Rodriguez O, J. E. (1998). The independence of Spanish America. Cambridge, U.K. ; New York, Cambridge University Press.

¹⁵³ This excludes servicing the public debt, a large part of which was due to the military. Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.108-9. See also Figure 3.9

¹⁵⁴ Alberdi, J. B. and F. Cruz (1915). Bases y puntos de partida para la organización política de la República argentina. Buenos Aires,, La Cultura argentina., chapter 31

development.¹⁵⁵ ‘Progress’ and ‘order’ were thereby mutually self-reinforcing, and it was thought that ‘order’ preceded ‘progress’, and that both depended upon a certain level of state ‘presence’.¹⁵⁶ The Argentine national constitution of 1853 was the normative of this conception. The distance between the utopia of ‘progress’ and the reality of backwardness and chaos was seen as the distance between the formal constitution of the ‘nation’ and the effective existence of a national state.¹⁵⁷

The definitive construction of the nation-state in 1880 achieved an order that facilitated a fuller engagement with global economic opportunities. Argentina experienced rapid economic growth upon the credibility of the new national order, initiated by large imports of capital and labour. This period of increased growth and development lasted about half a century. How did this order support such a long period of productive economic organisation, but later falter in the ability to maintain stability and credibility? Half a century should have been ample opportunity to embed the nation-state with greater capacity and credibility. Why was the institutional order unable to avert the emergence of a ‘latent civil war’ from 1930-83? To answer such questions, it is necessary to examine the nature of the original order established.

Brief Historical Overview

War with Brazil in 1826-28 crucially disrupted early state formation, as the Buenos Aires export sector was not yet strong enough to sustain the young state’s fiscal institutions, which collapsed.¹⁵⁸ The revolution and aftermath of civil wars destroyed the foundations of property and social hierarchy, and divided society.¹⁵⁹ The institutions and credibility of the old regime were destroyed, but legitimate new institutions were

¹⁵⁵ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.137

¹⁵⁶ Ibid., p.29-30

¹⁵⁷ Ibid., pp.51-55

¹⁵⁸ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.104-110. See also Centeno, M. A. (2002). Blood and debt : war and the nation-state in Latin America. University Park, Pa., Pennsylvania State University Press. & Marichal, C. (1989). A century of debt crises in Latin America : from independence to the Great Depression, 1820-1930. Princeton, N.J., Princeton University Press.

¹⁵⁹ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.6

not created. The former public law regime was ruined, eventually leaving an unstable order held by the very imperfect rule of caudillos in its wake.¹⁶⁰

At least the first four decades of Argentine independence were a constant struggle between states' rights to economic self-defence and centralisation.¹⁶¹ From 1829-32 and from 1835-52, the key province of Buenos Aires was ruled by the caudillo Juan Manuel de Rosas.¹⁶² The order he established was highly unstable and based upon 'quasi-law', lacking a stable constitutional order.¹⁶³ It was only from the early 1860s that a legitimate national order began to be achieved.¹⁶⁴ Yet a major conflict remained, as Buenos Aires had yet to be federalised.¹⁶⁵ This meant the emerging nation-state was captive to the political forces of Buenos Aires, dependent upon it for institutions and finances. The period from 1862 to 1880 was one of a nation-state in the making.¹⁶⁶ A national monopoly of violence was not achieved until 1876. Until then the national Army had to coexist with provincial national guards and was not powerful enough to subjugate provincial autonomy.¹⁶⁷ The last contestation of the new constitutional order occurred in 1880 when a rebellious Buenos Aires was defeated. This is recognised as the final consolidation of the Argentine nation-state.¹⁶⁸ The city of Buenos Aires was then federalised as the nation's Capital, and the provinces were prohibited from holding any military force.¹⁶⁹ The conflict between Buenos Aires and the Interior provinces was finally internalised.¹⁷⁰ From 1880-1890 the new oligarchial 'conservative order', the

¹⁶⁰ Ibid., pp.106, 143

¹⁶¹ Burgin, M. (1946). The economic aspects of Argentine federalism, 1820-1852. Cambridge, Mass., Harvard University Press., p.17, 147-8

¹⁶² See Lynch, J. (2001). Argentine caudillo : Juan Manuel de Rosas. Wilmington, Del., SR Books.

¹⁶³ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.131-2

¹⁶⁴ Ibid., p.11

¹⁶⁵ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.83-5

¹⁶⁶ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.29-30

¹⁶⁷ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., pp.101-106

¹⁶⁸ See Ibid., p.106; Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.9-11; & Botana, N. R. and E. Gallo (1997). De la república posible a la república verdadera : 1880-1910. [Buenos Aires], Compañía Editora Espasa Calpe Argentina : Ariel.

¹⁶⁹ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.35

¹⁷⁰ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.169

PAN (Partido Autonomista Nacional), consolidated control over political succession.¹⁷¹ It was almost the exclusive political protagonist. From 1890 the Radical party emerged, which held a principle of legitimacy in contradiction to that founded in 1880. 1890 marked the start of the fight for democratisation and social reform, when the 'order' established in 1880 began to contradict the 'progress' it commenced.¹⁷² The rupture of 1890 was concerned with the quality of the order established, not the need for order alone. The Radical party finally gained control democratically in 1916.

Powerful President

The Argentine national order was founded upon the ideas of Juan Bautista Alberdi. His book Bases y puntos de partida para la organización política de la república Argentina includes a constitutional draft that was widely circulated among the framers of the constitution.¹⁷³ This constitution was the 'prescriptive formula' for the Argentine nation-state.¹⁷⁴ Alberdi brought together contemporary legal sentiment and shaped it into a workable formula for a state. The constitutional framers were remarkably unified in their approval of Alberdi's constitution, barely discussing the articles. Alberdi's constitution blended US, Chilean, and Swiss charters into one document, and was approved without serious amendment.

The Argentine constitution that resulted supported a powerful executive branch to maintain the stability of the union, and was suspicious of legislative assemblies.¹⁷⁵ The President enjoyed extensive powers to rule by decree in an emergency. For Alberdi the President should be both the rational control of the law and the symbol of dominance and sovereignty. He was to materialise the central power, but without holding an irresponsible control over society in despotism. Yet the President was not to derive legitimacy from the intrinsic quality of his government, but by the superiority of his

¹⁷¹ Ibid., p.215

¹⁷² Ibid., p.224-5. See also Alonso, P. (2000). Between revolution and the ballot box : the origins of the Argentine Radical Party in the 1890s. Cambridge, UK New York, NY, USA, Cambridge University Press. & Rock, D. (1975). Politics in Argentina, 1890-1930 : the rise and fall of radicalism. Cambridge, Eng., Cambridge University Press.

¹⁷³ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., pp.203-6

¹⁷⁴ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.43-5

¹⁷⁵ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.207

post.¹⁷⁶ The Presidency of Avellaneda (1874-80) marked an increase in executive power. He was the first President able to impose his successor, thereby consolidating a mechanism where the executive power could secure continuance.¹⁷⁷ The emerging order was thus one based on the dominance of the executive. From 1880-1916 the Presidency (including the Vice-President) was the highest stratum of the governing class, followed by a lower stratum of posts in the Governor, the Minister of National Executive Power, the National Senator, and the National Deputy.¹⁷⁸ The President's power was augmented by a charade of democracy.¹⁷⁹ The framers' first priority was an effective government that centralised the nation's electoral authority.¹⁸⁰ For Alberdi the challenge of unifying powers and concentrating national control was more important than limiting and democratising government. The charade of democracy did not augur well for constructing state credibility, as credibility requires negotiation and compromise between state and society.

The constitution's preoccupation with the need to establish order meant the judiciary was assigned a weak and servile role, incapable of checking executive power. The 1853 Constitution holds that the law should not be exposed to the judiciary's subjective and arbitrary whims.¹⁸¹ The constitutional framers had little time for checks and balances on state authority, preferring a nation-state that was free of discretion, and holding back little power from the executive. The judiciary's design to reflect the executive's will meant the Supreme Court rarely held the executive to be ultra vires, usually finding that provincial interventions and roughshod treatment of Congress were permissible by the Constitution. The judiciary's original design was evident when the Supreme Court supported the ultimately disastrous 1930 military coup.¹⁸² This support realised what the original constitutional framers had intended.

¹⁷⁶ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., pp.47-48

¹⁷⁷ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.132-3

¹⁷⁸ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.156-7

¹⁷⁹ See Sabato, H. (2001). The many and the few : political participation in republican Buenos Aires. Stanford, Calif., Stanford University Press.

¹⁸⁰ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.69

¹⁸¹ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., pp.201-207

¹⁸² Ibid., p.291-2

Oligarchy

The period of 1880 to 1916 was one of oligarchial domination in accordance with the centralised structure inherited from Alberdi's formula. Alberdi ruled out genuinely representative democracy as being too risky. The public could not be entirely trusted. The nation-state could not be burdened with obstacles to decisive action in case external or internal threats arose. Fear of the public resonates throughout his book.¹⁸³ Nonetheless universal male suffrage was long established in Argentina, from as early as 1821 in Buenos Aires, and was adopted by the 1853 constitution for the nation as a whole.¹⁸⁴ Unlike Australia, suffrage was not qualified by income, property, or literacy. So how was the contradiction of distrust for democracy and elections based on universal male suffrage resolved? The answer was that open elections had little real power. Presidents and Senators were indirectly elected via an Electoral College system, within which political liberty was strictly reserved for responsible citizens.¹⁸⁵ This also immunised the polity from potential Congressional disobedience.¹⁸⁶ It became the basis for the emergence of a conservative oligarchy that ruled Argentina from 1880 to 1916. The Electoral College had two purposes: 1) it gave a group of chosen citizens the right to elect the President; and 2) it maintained a delicate equilibrium between the nation and the provinces.¹⁸⁷ The oligarchy was able to control political succession by concentrating on the production of suffrage through fraud, firmly resisting the revolutionary challenges of the 1890s.¹⁸⁸ Electoral fraud was enabled by the ability to designate the members of the registry commission. In the early twentieth century the traditional methods of electoral fraud (intimidation, violence, and double counting) were replaced by the business of buying votes.¹⁸⁹ Political succession was exercised through: 1) excluding opposition considered dangerous to the maintenance of the regime; and 2) co-opting the moderate opposition. Succession was not a simple bureaucratic process

¹⁸³ Ibid., p.203

¹⁸⁴ Sabato, H. (2001). *The many and the few : political participation in republican Buenos Aires*. Stanford, Calif., Stanford University Press., p.4. See also Sabato, H. and A. R. Lettieri (2003). *La vida política en la Argentina del siglo XIX : armas, votos y voces*. México ; Estados Unidos de America ; Buenos Aires, Fondo de Cultura Economica.

¹⁸⁵ Botana, N. R. (1994). *El orden conservador : la política argentina entre 1880 y 1916*. Buenos Aires, Editorial Sudamericana., pp.51-52

¹⁸⁶ Adelman, J. (1999). *Republic of capital : Buenos Aires and the legal transformation of the Atlantic world*. Stanford, Calif., Stanford University Press., p.202-3

¹⁸⁷ Botana, N. R. (1994). *El orden conservador : la política argentina entre 1880 y 1916*. Buenos Aires, Editorial Sudamericana., p.86-7

¹⁸⁸ Ibid., p.15

¹⁸⁹ Ibid., pp.179-189

where the named successor was put in place without criticism and obeyed orders.¹⁹⁰ Alberdi's formula for the consolidation of a nation-state meant the responsibility for managing the fate of the people would be left in the hands of a small and privileged elite.¹⁹¹ "Governments of family" developed, in which control came to depend upon the relationships between certain families.¹⁹² Botana outlines a direct line of causation between Alberdi's centralisation of order and the emergence of an oligarchy.

Alberdi's formula called for divisions within and between the Electoral Committees that would contribute to nationalising the Presidential election, resulting in two or more candidates and sharing different currents of opinion. In practice though, at least from 1880 to 1910, a coalition of nine provinces formed to lend support to the victorious President, against which there was no effective opposition.¹⁹³ This coalition was sufficiently powerful to control unruly provinces and did not include the most powerful single province of Buenos Aires, which was also the province most persistently opposed to the coalition. The coalition did not achieve a majority (only 42% from the 1898 election onwards), but could rely on the indiscipline of the other provinces, resulting in majorities of no less than 69%.¹⁹⁴ The oligarchy was composed of many competing provincial interests, but displayed a stability guided by the internal logic of the coalition. The combination of a centralised nation-state controlled by a coalition of provinces may have been the informal institution that increased the quality of order established in 1880. The coalition did not survive the democratic reforms that led to the Radical Party's victory in 1916. The informal institutions that developed under the rule of the PAN, during which Argentina became a developed country, and allowed for compromise may not have survived the transition to democracy in 1916.

Centralisation

The Argentine federal system was quite centralised by the late nineteenth century.¹⁹⁵ The nation-state was to be a centralised federation guided by a powerful president in

¹⁹⁰ Ibid., p.78

¹⁹¹ Ibid., p.60

¹⁹² Ibid., p.156-7

¹⁹³ Ibid., p.93-4

¹⁹⁴ Ibid., p.94-8

¹⁹⁵ Bushnell, D. and N. Macaulay (1994). The emergence of Latin America in the nineteenth century. New York, Oxford University Press., p.223

order to maintain order, peace and instil respect for the rule of law. The Argentine framers thereby avoided putting extensive private rights into the Constitution.¹⁹⁶ Between the state's direct public powers and individual rights, only the individual freedoms to worship and to private property were conceded, being considered necessary for development.¹⁹⁷ The nation-state was entrusted to preserve harmony and domestic peace within the country as a whole. It was thereby given the power to 'intervene' in provincial affairs to defend 'republican principles' with little explanation of what these principles might mean.¹⁹⁸ The power to intervene was widely defined as to repel invasions and 'to guarantee the Republican form of Government', a sweeping concession to central power in practice.¹⁹⁹ The framers feared regional insurrection or outright secession, and the power came to be repeatedly used to dismantle uncooperative provincial governments.

Table 2.1

Use of the Federal Intervention Clause.²⁰⁰

Period	Number of Interventions	Interventions per year
1854-1880 (pre-PAN)	40	1.5
1880-1916 (PAN)	40	1.1
1916-1922 (Radicals)	20	3.3
1922-1930 (Radicals)	14	1.75

The intervention clause potentially allowed the will of the national executive to be imposed on the nation, allowing the Congress and the President, or the President alone, to remove the officers of a provincial government and hold elections for new provincial authorities. If applied ruthlessly and thoroughly, the clause could completely remake the political composition of the nation according to the federal executive will.²⁰¹

Intervention was thus a potentially powerful tool for centralisation. Intervention was

¹⁹⁶ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.222-3

¹⁹⁷ Ibid., p.204

¹⁹⁸ Ibid., p.206-7

¹⁹⁹ Ibid., p.216-7

²⁰⁰ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.127-8 and Potter, A. L. (1981). "The Failure of Democracy in Argentina 1916-1930: An Institutional Perspective." Journal of Latin American Studies **13**(1), p.101

²⁰¹ Potter, A. L. (1981). "The Failure of Democracy in Argentina 1916-1930: An Institutional Perspective." Journal of Latin American Studies **13**(1), p.100-1

both a repressive and an incorporative institution under the PAN.²⁰² It developed into an invaluable instrument of the oligarchy, destroying everything in the way of concentrating and centralising power. Intervention introduced changes or readjustments within the regimes of the provincial governing classes.²⁰³ Botana divides the use of intervention into two periods. From 1854-80 it put a legal cloak over the imposition of order, when there were 40 interventions in 26 years (35 by Presidential decree and 5 by the National Congress). From 1880-1916 it shifted from an instrument in the struggle for political unity to a means of conserving the regime, when there were 40 interventions in 36 years (15 by Presidential decree and 25 by the National Congress).²⁰⁴ Intervention was a means for controlling emerging oppositions inside and outside the regime. Almost all 14 provinces were intervened in at least once in the 1880-1916 period, with only one escaping any intervention (Salta). The most intervened group of provinces (4-6 times) included Buenos Aires.²⁰⁵ There is some correlation between the number of interventions and membership of the coalition of nine provinces that represented the oligarchy, as the four least intervened provinces were members of the coalition. From 1880-1916 intervention coupled a centralised nation-state with a periphery coalition. Argentina was thus a more federal and decentralised state from 1880-1916 than before or after.

Under the Partido Autonomista Nacional (PAN) from 1880-1916, intervention was used to introduce changes or readjustments in local groups within the party.²⁰⁶ It was not used to undermine their authority. The leaders of the PAN were careful to maintain a balance between the prerogatives of the Presidency, provincial governments' autonomy, and the representation of provincial interests in national decisions.²⁰⁷ The introduction of fuller democracy broke both the informal institutions of the coalition and the moderate use of intervention. Radical presidents applied the intervention clause much more ruthlessly, remaking the political composition of Argentina. As can be seen in the table above, the number of annual interventions tripled in Yrigoyen's first Presidency of

²⁰² Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., pp.125-8

²⁰³ Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p.155

²⁰⁴ Ibid., pp.127-128

²⁰⁵ Ibid., pp.129-131

²⁰⁶ Ibid., p.155

²⁰⁷ Gibson, E. L. (1996). Class and conservative parties : Argentina in comparative perspective. Baltimore, Johns Hopkins University Press., p.54

1916-22, compared to the previous period. To be fair, the Radicals could not afford to respect the former informal rules of the game as the provinces remained largely under PAN's control after Yrigoyen's election in 1916. This made it difficult for the Radicals to respect pre-existing norms of national-provincial relations, as these would have compelled Radical governments to accept PAN's veto power over decisions. President Yrigoyen therefore altered the national-provincial equilibrium by centralising authority in the Presidency through the intervention clause.²⁰⁸ This points to serious flaws in the institutional legacy that encouraged instability after 1916.

The Senate was meant to play a key role, part of a 'federative solution' to the insertion of the provinces into a national political system. Sovereignty was meant to be a pluralist fragmentation between a central power and a group of geographically local units.²⁰⁹ The Senate was an Executive Board equipped with powers over the judiciary, religious power, and the highest levels of the bureaucratic system.²¹⁰ As both the Senate and the President were elected indirectly, they were encouraged to form a conservative collegiate. From 1880-1916 almost half of the Senate was composed of ex-Presidents and Governors, at 46% of Senators.²¹¹ The Senate assisted the oligarchy and sheltered it with the guarantee of an extensive and renewable mandate. The Senate did not fulfil the intended federal role. Rather than being a force for federalism and a balance against excessive central power, it became a conservative institution of the oligarchy.

The Argentine political system created order, but did not incorporate political pluralism. The state could quash dissent, but could not deal with future opposition movements.²¹² Any class or sector that expressed dissent was immediately painted as a threat to the Republic itself. The Argentine oligarchy was a system of governmental hegemony without established rules to guarantee the right of an opposition to passively succeed those in government.²¹³ Eventually the oligarchy was worn out by an intransigent opposition, the Radicals, that refused to accept incorporation. By the 1930s the national

²⁰⁸ Ibid., p.54

²⁰⁹ Botana, N. R. (1994). *El orden conservador : la política argentina entre 1880 y 1916*. Buenos Aires, Editorial Sudamericana., p.117

²¹⁰ Ibid., pp.101-103

²¹¹ The split was 43% ex-Governors and 3% ex-Presidents. Ibid., pp.110-114

²¹² Adelman, J. (1999). *Republic of capital : Buenos Aires and the legal transformation of the Atlantic world*. Stanford, Calif., Stanford University Press., pp.289-291

²¹³ Botana, N. R. (1994). *El orden conservador : la política argentina entre 1880 y 1916*. Buenos Aires, Editorial Sudamericana., pp.74-75, 16

order was in a crisis of legitimacy, unable to respect its own internal formal controls or embrace the emerging popular demands for new rights.²¹⁴ The inability to incorporate political pluralism was the Achilles heel of the Argentine institutional legacy, hindering the state's ability to achieve compromise and negotiation, and overcome during the oligarchy of the PAN through the informal institutions of a coalition of provinces. The coalition moderated the overly centralised formal institutions embodied in Alberdi's constitution until 1916. In the transition to democracy the coalition did not survive, and Argentine political economy became prone to a winner take all mentality, with little space for compromise. This institutional legacy meant the first democracy of 1916-30 did not successfully check social conflict, and when democracy re-emerged again under Perón the populist and confrontational tone had increased. Large sections of society were deliberately excluded. Increasingly fractious politics made development ever more problematic, and the progressively more violent spiral of conflict ended in exhaustion in the early 1980s.

Australia

The construction of an Australian nation-state in 1901 consolidated and furthered a process that had been underway for almost a century. Taken as a whole, Australia was the world's wealthiest country from the early 1870s to the early 1890s in terms of GDP per capita, well before federation occurred.²¹⁵ Federation into a nation-state was not about establishing order per se, as high quality orders that could foster development had clearly already been achieved by the individual colonies. The continuation of such development became a concern in the 1890s, and future success appeared more difficult than in the past. The formal document of the Australian constitution does not easily belie the intentions of those who crafted it, the language of which is formal and perhaps deliberately obscure.²¹⁶ The driving forces behind federation were economic issues, emergent nationalism, British encouragement, and defence concerns. At the time the most commonly cited benefits were: the advantages of removing inter-colonial tariff barriers; the need for a united and strong defence; and the need to keep the country

²¹⁴ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.291-2

²¹⁵ See section three of Chapter One.

²¹⁶ Norris, R. (1975). The emergent Commonwealth : Australian federation, expectations and fulfilment 1889-1910. Carlton, Vic., Melbourne University Press., p.2

racially white by means of uniform immigration laws.²¹⁷ The Australian colonies desired to construct a nation-state that could tackle such wider collective action problems.

The greatest concern of the Australian electorate during the referenda for federation was likely economic growth and development. The 1890s depression may be the worst economic crisis Australia has ever experienced.²¹⁸ By May 1893 most banks had either run out of cash or closed their doors and there was widespread labour unrest.²¹⁹ Recovery in the mid 1890s faltered as severe drought set in from 1895 to 1903.²²⁰ Federation was partly the result of Australia's "humbling" in the face of this prolonged economic downturn. The parallel between federation's success and the Australian colonies' darkest economic decade suggests economic considerations played a key role. Academic debate over why Australia federated begins with Parker and Blainey.²²¹ Parker argues that Australian federation was largely due to economic reasons. Federation meant intercolonial union to the colonial electorates, who judged federation in terms of regional economic interest (not on a class nor a states' rights basis).²²² Blainey responds that much of the voting for federation was not determined by economics alone, particularly in a few significant electorates, but he does not successfully discard economics as an important variable. The border areas of each colony (except for the Riverina area) were frequently much less in favour of federation than regions with no obvious economic interests in federation.²²³ Yet Blainey does not consider the idea that these electorates might have feared federation for precisely economic reasons. They may have seen themselves as having the most to lose from federation, which ended their economic status as frontiers. The general trends of voting, at the level of each colony and between large divisions within a colony, closely

²¹⁷ Bennett, S. C. (1975). Federation. Melbourne, Cassell Australia., p.3

²¹⁸ McLean, I. W. (1996). "Recovery from the Depression: Australia in an Argentine Mirror." Unpublished, p.3

²¹⁹ Martin, G. (2001). Australia, New Zealand, and federation, 1883-1901. London, Menzies Centre for Australian Studies, King's College, London., pp.52-60

²²⁰ Blainey, G. (1980). A Land Half Won. Adelaide, Macmillan., pp.347,358

²²¹ This debate is often referred to in the literature. Parker's original paper and Blainey's response are in: Eastwood, J. J. and F. B. Smith (1967). Historical studies; selected articles, first series. [Carlton, Vic.] London, New York., Melbourne University Press; Cambridge University Press.

²²² Parker, R. S. (1967). Australian Federation: the Influence of Economic Interests and Political Pressures. Historical studies; selected articles, first series. J. J. Eastwood and F. B. Smith. [Carlton, Vic.] London, New York., Melbourne University Press; Cambridge University Press: vii, 225 p., p.164

²²³ Blainey, G. Ibid. The Role of Economic Interests in Australian Federation., p.192-3

corresponded to federation's expected economic effects.²²⁴ Thus New South Wales (NSW), where the economic benefits of federation were most open to debate, was the least pro-federal. Economic reasons were the most important single factor behind federation.

The most obvious and direct economic advantage of federation was the removal of customs barriers and the creation of a single national market. Intercolonial free trade was entrenched in the constitution via sections 88 and 92, and is considered federation's leading goal.²²⁵ Norris finds that the reaction to intercolonial free trade was the single largest variable in explaining the variation in referenda on federation.²²⁶ The latent desire for federation by the smaller colonies might be explained by their fear that NSW might one day become protectionist. Previous to federation the colonies had proven unable to coordinate tariff policies, and all attempts to agree on a uniform set of tariffs had broken down.²²⁷ There was an obvious need to end barriers to trade in light of the 1890s Depression. Debate over customs union revealed a fundamental difference between the larger and smaller colonies.²²⁸ NSW debated whether it could afford to federate considering the loss of control over revenue. The smaller colonies of South Australia, Tasmania, and later Queensland and Western Australia debated whether they could afford not to federate, as being locked out of customs union could have been economically disastrous.

The achievement of Australian federation should not be underestimated due to the lack of open conflict. The Australian colonies were self-contained entities, each with their own relationship with Great Britain, but without any formal relationships with each other.²²⁹ The need for common policies in response to issues that were common to all of the Australasian colonies had been increasingly required, and a system of intercolonial

²²⁴ Norris, R. (1975). The emergent Commonwealth : Australian federation, expectations and fulfilment 1889-1910. Carlton, Vic., Melbourne University Press., p.28-9

²²⁵ Ibid., p.40

²²⁶ Ibid., p.26-8

²²⁷ Manne, R. (1999). The Australian century : political struggle in the building of a nation. Melbourne, Text Publishing., p.13

²²⁸ Norris, R. (1975). The emergent Commonwealth : Australian federation, expectations and fulfilment 1889-1910. Carlton, Vic., Melbourne University Press., p.27-8

²²⁹ de Garis, B. (1999). Federation. The Australian century : political struggle in the building of a nation. R. Manne. Melbourne, Text Publishing: 333., p.11-12

conferences had somewhat successfully handled such matters prior to federation.²³⁰ It may not have been necessary to create a new nation-state. The formation of a nation-state was at least partly due to good luck and timing, as well as the persistence and hard work of key individuals.

Despite the fusion of written and unwritten constitutions in Australia, the national order established by the national constitution has proven remarkably successful in fostering stability and development. The whole has been greater than the parts, and the success of the Australian nation-state has likely generated greater development than would have otherwise been possible. For instance the new Australian nation-state enabled a unified national market and currency, with all their attendant benefits. By WWII the public good of security was very important considering the potential for Japanese invasion, and the Australian federal state played a fundamental role in coordinating successful collective action for defence. The Australian federal state also succeeded in transiting from more basic fiscal institutions of indirect taxation to more lucrative direct taxation. This underwrote the federal state's solvency, and hence the ability to overcome large national collective action problems. As demands for collective action increased over the twentieth century, the new nation-state was able to increase credibility accordingly, and without the emergence of latent civil wars or major disruptions to productive activity.

Brief Historical Overview

Early Australian states were founded upon a somewhat exclusive aristocratic vision, being supported by pastoral (wool) capitalists rather than an electorate. The original order established by Britain in Australia was autocratic. The state was founded upon overt military power and ruled by a Governor who had sole executive and legislative authority until the 1820s.²³¹ This began to change in 1823 with the British Parliamentary Act, establishing a Legislative Council and a Supreme Court with limited powers. The 1820s reforms rationalized, rather than liberalized, the colonial regime. They gave a limited public scrutiny to the Governor's legislative procedures and provided some checks on his authority. With the economic transformations of the 1830s

²³⁰ For instance an early version of the White Australia Policy as well as a defence pact were adopted in the 1890s through intercolonial conferences.

²³¹ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., pp.80-83

new social forces emerged to propose a broader, more liberal conception.²³² The original colony of NSW gained a larger Legislative Council in 1842, with two-thirds of members being elected. The colonies of NSW, Victoria, South Australia, and Tasmania drew up their own constitutions in 1852, which were approved by the British Parliament. Similar constitutions were approved for Queensland in 1859 and Western Australia in 1890. These constitutions provided for bicameral parliaments whose members were largely elected by a franchise based on varying property qualifications (higher for upper houses or councils, and lower for lower houses or assemblies). The executive power of each colony was held by a Premier and a Cabinet (or Council of Ministers) who were required to maintain the support of the lower house. Elections were held by secret ballot. The Australian colonies slowly developed democratic institutions over the nineteenth century based upon the British tradition, which would be the basis for the Australian nation-state.

Decentralised Foundations

The Australian nation-state began as a relatively decentralised federation in 1901, but evolved into a more centralised federation over the twentieth century. The written constitution was adopted in 1901, the result of over a decade of meetings, negotiations and conventions. This process represents an institutional legacy of compromise and negotiation. The new federal constitution attempted to establish an order where the inherited British Westminster system was joined to the federal model of the United States (whereby all undeclared powers were reserved to the individual colonies). The United States was seen as the best example of a working federation, enjoying a limited central government and a decentralized system preserving the theory of residual State sovereignty.²³³ This stands in direct and obvious contrast to the centralised goals of Argentina. A convention in 1891 established the foundations for Australia's written constitution, where it was agreed that it: should include a bicameral parliament with equal representation of the colonies in a Senate; the power to initiate money bills (i.e. to raise taxation and spend it) would reside in a popularly elected lower house; a judiciary would be Australia's final court of appeal; and the executive must possess the

²³² Ibid., pp.83-84

²³³ Norris, R. (1975). The emergent Commonwealth : Australian federation, expectations and fulfilment 1889-1910. Carlton, Vic., Melbourne University Press., p.200

confidence of the House of Representatives.²³⁴ It was also decided that the colonies' (now the States) powers would remain intact except where specifically modified by the federal constitution; that trade and interaction between the federated colonies would be absolutely free; and that authority over customs duties, military and naval defence would rest in the federal parliament. This clearly built upon the colonies' British institutional heritage, coupling it to a US style of federation.

The Australian constitutional framers generally favoured a maximum safeguard of the former colonies' privileges and a minimum surrender of their powers to the new nation-state.²³⁵ The range of powers delegated to the new federal state was severely constrained. The constitutional framers firmly rejected the Canadian model of delegating powers to the Provinces (the equivalent of the new Australian States), and leaving the remainder to the federal state. They did give the highly important powers of taxation and defence (sections 51 (ii) and (vi), 68, and 69 of the constitution) to the federal state, as it appeared dangerous to leave the federal state totally dependent upon a proportion of customs revenue alone, and the national power over defence was considered necessary in case of national emergency.²³⁶ These two powers soon proved to be the building blocks for a much stronger federal state from World War I onwards. For instance in the 1920s and 1930s the federal state slowly monopolised public credit, as well as usurping the individual States' fiscal powers.²³⁷ The Australian Loan Council was established in 1928 to coordinate the borrowing of all the States, but with the federal state undertaking the actual borrowing. Not only did the States become dependent upon the federal state for the majority of their revenues in the interwar period, but they also became unable to borrow on their own.²³⁸ Another strengthening of the federal state occurred in 1933 when the Commonwealth Grants Commission was created. This institution considered applications for special financial assistance from the States, but was ultimately responsible to the federal state. Fiscal and monetary institutions quickly became centralised under the federal state during the extraordinary

²³⁴ de Garis, B. (1999). Federation. The Australian century : political struggle in the building of a nation. R. Manne. Melbourne, Text Publishing: 333., pp.18-19

²³⁵ Norris, R. (1975). The emergent Commonwealth : Australian federation, expectations and fulfilment 1889-1910. Carlton, Vic., Melbourne University Press., pp.3, 14

²³⁶ Ibid., p.4-5

²³⁷ See Chapters Four and Five.

²³⁸ Walsh, C. (1988). Federalism Australian Style: Towards Some New Perspectives. Taxation and fiscal federalism : essays in honour of Russell Mathews. R. L. Mathews, G. Brennan, B. S. Grewal and P. D. Groenewegen. Sydney ; New York, Australian National University Press: xvii, 250 p., pp.224-225

experiences of the World Wars and the interwar period. The slow process of centralisation under the pressures of legitimate national needs probably endowed centralisation with greater legitimacy than in Argentina, where centralisation was imposed from the beginning.

The federal state's power was clearly restricted by the High Court and the Senate. The model taken for the High Court was the US Supreme Court, and included the doctrine of judicial review. The High Court was expected to function as an independent brake on federal power, preventing excesses.²³⁹ The Senate was intended to be a powerful body that acted in the interests of the States and be a house of review, but Senators aligned along political party lines instead, signalling the legitimacy of national power. The Senate provoked the sharpest debates amongst the framers, especially on the question of Senate power to veto proposed legislation, particularly money bills.²⁴⁰ The last major stumbling block faced by the constitutional framers was how to find a just and equitable distribution of the revenue. The solution agreed upon came to be known as the 'Braddon Blot', and limited the federal state's share of customs' revenue for the first ten years, obligating the federal state to return 75% of net customs revenue to the individual States.²⁴¹ The Australian framers went through complex and lengthy negotiations over how power would be shared in their new federal state. In contrast the Argentine constitutional framers lacked dispute over the few articles they even discussed.²⁴² A successful conclusion to a greater debate undoubtedly lent the Australian constitution greater credibility and wider acceptance, ensuring a higher quality of order.

Argentine and Australian Political History Compared

North, Summerhill, and Weingast propose that the quality of public order achieved by the state is related to the quality of economic development, especially in regards to the

²³⁹ Norris, R. (1975). The emergent Commonwealth : Australian federation, expectations and fulfilment 1889-1910. Carlton, Vic., Melbourne University Press., pp.11-15, 36, 199-205

²⁴⁰ Ibid., p.11-12

²⁴¹ Manne, R. (1999). The Australian century : political struggle in the building of a nation. Melbourne, Text Publishing., p.34

²⁴² Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.206

degree of centralisation.²⁴³ In a comparison of North and South America they find that Brazil and Chile's lack of success relative to the United States was due to their 'heavily centralized' states. A successful constitution is one that limits the political stakes. How does this hypothesis hold in the comparison of Argentina and Australia? The initial federal state in Australia was not heavily centralised and operated under extremely powerful constitutional constraints.²⁴⁴ It had less centralised control than the Argentine federal state.²⁴⁵ It would thus appear that the comparison of federal institutions between Argentina and Australia supports North, Summerhill, and Weingast's theory to some extent, as after 1916 the Argentine constitution failed to limit the political stakes. The following comparative studies of Argentine and Australian political environments in the early twentieth century add further support.

Moran argues that the different positions taken by the Australian Labor party and the Argentine Radical party between 1890 and 1930 on tariff protection and the support of national industry were crucial to the subsequent course of economic development and political integration.²⁴⁶ Protection gave the Australian Labor party a political centre around which old and new groups could be integrated. The ability for political integration was crucial to Australia's productive development path, an integration that Argentine institutions proved incapable of. Instead of integration Argentina found itself on a path of 'political revenge'.²⁴⁷ The lower stakes of Australian political institutions may have better enabled integration, whereas Argentina's higher stakes were less conducive. For instance the Argentine Radical party, once in power, completely excluded any political opposition, preventing the political integration of the landed classes. The Radicals excluded the two great antagonists of Argentina's future latent civil war, mass labour and landed wealth.²⁴⁸ In contrast the landed classes were successfully incorporated into Australian federal politics via the success of the Country

²⁴³ North, D. C., W. Summerhill, et al. (2000). *Order, Disorder and Economic Change: Latin America vs. North America. Governing for prosperity*. B. Bueno de Mesquita and H. L. Root. New Haven, Conn., Yale University Press: vi, 266 p.

²⁴⁴ Duncan, T. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. *Argentina and Australia, Essays in comparative economic development*. A. E. Dingle and D. T. Merrett. Melbourne, Monash University., pp.53-4

²⁴⁵ Díaz Alejandro, C. F. and A. Velasco (1988). *Trade, development, and the world economy : selected essays of Carlos F. Diaz-Alejandro*. Oxford, UK ; New York, NY, USA, B. Blackwell., p.231

²⁴⁶ Moran, T. H. (1970). "The "Development" of Argentina and Australia: The Radical Party of Argentina and the Labor Party of Australia in the Process of Economic and Political Development." *Comparative Politics* 3(1): 71-92., p.73

²⁴⁷ Ibid., p.79

²⁴⁸ Ibid., p.91

party in the 1920s, i.e. through a legitimate democratic process. Like their counterparts in Argentina, the main interest of the Australian landed class had always been free trade, but they compromised this interest for a share of political power by joining the business interests and the middle classes in the Nationalist party in 1923.²⁴⁹ The differing abilities of Argentine and Australian institutions to achieve negotiation and compromise were important effects of their institutional legacies.

Duncan & Fogarty also compare Argentine and Australian domestic political culture. They find that the lack of a traditional loyal opposition in Argentina is particularly important in explaining their different development paths.²⁵⁰ The weakness of Argentine mediating institutions and the lack of institutional checks are striking features of a comparison with Australia.²⁵¹ Argentine oppositions could not play a role as an alternative government due to the power of the Presidency to exclude them. Australia has no equivalent to the Argentine Presidency, as the Prime Minister is ultimately responsible to the Crown. This helped reduce Australian political stakes as State and federal legislatures could be dissolved according to procedural rather than political ends.²⁵² In contrast Argentina's 1853 constitution vested vast powers in the national executive, as oppositions and provinces had been historically prone to violence. For instance unsuccessful but significant attacks were made against Argentine governments in 1874, 1880, 1890, 1891, 1893, and 1894.²⁵³ Australia's less centralised, lower stakes' political system resulted in a far more successful party system.²⁵⁴ The Australian political system transited from factions to mass based parties in the late nineteenth century, lending institutional character to sectional boundaries of political identification. As a result an institutionalised, loyal opposition became embedded.²⁵⁵ Argentina's centralist federal structure bestowed an exclusive flavour to politics, whereas

²⁴⁹ Ibid., p.87

²⁵⁰ Duncan, T. and J. Fogarty (1984). Australia and Argentina : on parallel paths. Carlton Vic, Melbourne University Press., p.114-5

²⁵¹ Ibid., p.125

²⁵² Duncan, T. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. Argentina and Australia, Essays in comparative economic development. A. E. Dingle and D. T. Merrett. Melbourne, Monash University., p.53-4

²⁵³ Potter, A. L. (1981). "The Failure of Democracy in Argentina 1916-1930: An Institutional Perspective." Journal of Latin American Studies **13**(1)., p.86

²⁵⁴ Duncan, T. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. Argentina and Australia, Essays in comparative economic development. A. E. Dingle and D. T. Merrett. Melbourne, Monash University., p.51

²⁵⁵ Ibid., p.51-3

Australia's decentralized federal structure left an inclusive flavour.²⁵⁶ The relatively exclusive nature of Argentine politics ultimately fed into development, with Argentina experiencing long phases of success and frustration, while Australia experienced a steady, if at times mediocre continuity of growth.²⁵⁷

Gibson compares the Argentine experience of a political party system with other Latin American countries, reinforcing the Duncan and Fogarty point above. Strong party systems within Latin America historically led to stable democracy and incorporated the socially privileged strata of society, or conservative parties. The political integration of conservative parties increases their ability to influence political outcomes through the democratic process.²⁵⁸ The failure to evolve a strong party system in Argentina began with the transition to a regime of universal male suffrage in 1912, which was accompanied by a huge failure of conservative party organization.²⁵⁹ Regional divisions within Argentina's upper social strata obstructed the development of a national conservative party.²⁶⁰ From 1912 onwards, conservative parties could only aspire to political power via electoral fraud, coercion, and military government. The first conservative coup in 1930 began a long pattern of conflict and authoritarianism that lasted until 1983. The incorporation of Latin American conservative parties has usually resulted in more stable democracies. Those Latin American countries with viable and competitive national conservative parties in place at the start of democratic politics experienced far greater stability in the twentieth century than those that did not.²⁶¹ In Argentina the conservatives have never won a cleanly held presidential election since the loss to the Radicals in 1916.²⁶² The political regime built by the Generation of 1880 failed to build the institutional foundations of a national competitive political party system.²⁶³ Argentina's overly centralised federal institutions encouraged the lack of a

²⁵⁶ Ibid., p.55-6

²⁵⁷ Duncan, T. and J. Fogarty (1984). Australia and Argentina : on parallel paths. Carlton Vic, Melbourne University Press., p.121-2

²⁵⁸ Gibson, E. L. (1996). Class and conservative parties : Argentina in comparative perspective. Baltimore, Johns Hopkins University Press., p.23-4

²⁵⁹ Ibid., p.xiii-xiv

²⁶⁰ Ibid., p.27-8

²⁶¹ Latin American countries with strong conservative parties experienced an average ratio of nine times more years under democracy to authoritarianism than those without. Ibid., p.26

²⁶² The Partido Demócrata Progresista, the largest conservative party, won 16% of the vote in the presidential elections of 1916. This is the best conservative party result ever. Ibid., pp.38-9

²⁶³ Ibid., p.44

strong party system as executive decree appeared easier than negotiation, resulting in eventual instability.

Potter analyses the role of institutions and centralisation during the Radicals' rule of 1916-30. She also finds that Argentina's political history was notable for the lack of a viable opposition and conservative party. Oppositions require a 'political space' that offers some hope of attaining office if democracy is to be sustainable.²⁶⁴ Argentine institutions failed to satisfy such a political space by 1930, and all opposition parties feared for their existence, generating the conditions for the 1930 coup. This situation was made possible by the centralised institutional structure. By the 1930 coup the institutions of national governance were weak, ineffective, and in deadlock.²⁶⁵

The Radicals' solidarity and vast majority in the House of Deputies allowed them to legislate at will, without concern for minorities. Most minority members of Congress were actively involved in the coup. The Argentine vertical distribution of power appeared to be a decentralised federal system from 1912-30, as each province had significant resources and Congress was made up of elected representatives from each federal unit.²⁶⁶ Yet this federal structure was attenuated by the President's power of intervention. The Radicals' use of intervention destroyed any possibility for cooperation with the conservatives, who saw their provincial power bases attacked and destroyed. This led the conservatives to resort to extralegal and illegal forms of political struggle. The 1930 coup was thus the result of a legitimacy crisis created by an increase of the political stakes. By 1930 the Radicals controlled all but two provincial governments, and there was little prospect for change.²⁶⁷ Potter identifies the two key institutional features that allowed the Radicals to concentrate and centralise power as: 1) the separation of powers and the fixed presidential term; and 2) the federal system and the power of intervention.²⁶⁸ Taken together they allowed a situation where the President could deny all political space to opposing parties or movements.

²⁶⁴ Potter, A. L. (1981). "The Failure of Democracy in Argentina 1916-1930: An Institutional Perspective." *Journal of Latin American Studies* 13(1), p.100

²⁶⁵ Ibid., p.92-5, 100, 105

²⁶⁶ Ibid., p.100-1

²⁶⁷ Ibid., p.101-6

²⁶⁸ Ibid., p.108

Conclusion to Argentine and Australian Political History

Australia's decentralised federation and constrained executive stand in clear contrast to Argentina. This is not to argue that more decentralised federations always work better than more centralised federations.²⁶⁹ On the contrary, the impressive centralisation of the Australian federal nation-state over the twentieth century may have been necessary for Australia's continued success, and stands in the way of such a simplistic conclusion; as does the more than half century of Argentine success from 1880 onwards.

Undoubtedly this is a major reason why North, Summerhill, and Weingast prefer to focus on Brazil and Chile than Argentina. Nonetheless it may have been important to get the order of centralisation right, building state credibility and cooperation over time, i.e. moving cooperatively towards a centralised federation rather than imposing one from the start. A slower negotiated construction should endow the resulting structure with deeper long run credibility. Yet the initial need to establish order per se was so compelling in Argentina that such issues could not be afforded. Once order and basic development began to be achieved, it might have been possible to return to the issues of compromise and negotiation. In contrast Australia could afford to negotiate the construction of the nation-state, lending the initial structure more credibility and depth. This was heightened by each and every colony having to approve the new federal state by democratic referenda.

The Australian colonies were largely functioning democracies prior to federation. This was crucial to achieving the peaceful, successful transition to a credible nation-state. In Argentina federation was achieved after a long experience of war, with Buenos Aires's ultimately successful domination of the process. The primary concern in Argentina was to end half a century of war and disorder. Australia built a nation-state cooperatively upon formerly established and legitimate colonial orders, rather than through conflict and exhaustion. Argentina established a nation-state earlier, in 1880, but it was a nation-state that had yet to establish credibility through negotiation. The constructed nation-state later proved unable to transit to a more credible and democratic order in the early twentieth century, partly due to the heritage of the institutional structure. The Argentine constitution perceived flexibility and compromise as weaknesses that might lead to

²⁶⁹ This is essentially the argument of North, D. C., W. Summerhill, et al. (2000). *Order, Disorder and Economic Change: Latin America vs. North America. Governing for prosperity*. B. Bueno de Mesquita and H. L. Root. New Haven, Conn., Yale University Press: vi, 266 p.

breakdowns in order. Australia was not so burdened. The Australian nation-state was the culmination of a process of negotiation, compromise and democracy. The role that state credibility played in the establishment of nation-states was thus quite different. In Australia the process of establishing a nation-state was a matter of continuing to build credibility, represented in the previous success of the individual colonies. In Argentina establishing a nation-state was integral to achieving the public good of order so that development and the construction of state credibility could finally begin. Argentina established a highly centralised federation based on an all-powerful executive that paid only lip service to democracy. The Australian national order evolved from a long period of increasingly independent and democratic individual states, which established a decentralised federation with an executive balanced and checked by an effective legislature and judiciary. The pre-existence of credible individual colonial orders meant the focus for establishing a national order could be its quality, rather than its establishment. Argentine and Australian histories were not necessarily pre-determined by the quality of their original national orders, as their historical paths could have followed a number of different evolutions. Nonetheless the original quality of Australia's national order was higher, as evidenced by the ability to incorporate checks and balances to the executive and to further underlying democratic traditions. These were obstacles that remained to be overcome in the Argentine national order. Argentina's latent civil war of 1930-83 could be interpreted as a consequence of later attempts to overcome them.

Geography may have contributed to a more peaceful and decentralised federation in Australia, as no one province or colony monopolised international trade and customs revenue (then the basis of fiscal institutions) due to geographic luck. All Australian colonies developed their own international trade links alongside intra-colonial trade, as each had a seaport and hinterland. No one colony exercised a monopoly over fiscal resources. Argentina and Australia both had one dominant province or colony, Buenos Aires and New South Wales respectively, but a major factor in favour of a more decentralised Australian nation-state was that NSW had more even competition than Buenos Aires did. Buenos Aires monopolised taxation on trans-Atlantic trade and had

no incentive to forfeit this power.²⁷⁰ Buenos Aires could easily control access to the Rio de la Plata, whereas NSW could not easily hold the other colonies to ransom due to such geographic luck. New South Wales was crucial to the success of a future Australian nation-state, but had it chosen to opt out, a smaller nation-state may have been viable. Such an alternative may later have been attractive for NSW to join. This scenario was simply not possible in Argentina, as Buenos Aires controlled access to world markets and dominated customs revenue via geographic position. The Confederation's attempt to federate without Buenos Aires ended in frustration and bankruptcy. There was no viable Argentine nation-state without Buenos Aires, giving Buenos Aires a huge disincentive to compromise. New South Wales neither conquered the nation-state (as Buenos Aires did in the early 1860s), nor was conquered by it (as Buenos Aires was in 1880). On the other hand a national Australian market required deliberate construction in 1901, as Australia had several railway hubs radiating from different colonial capitals and ports on different gauges.²⁷¹ In contrast Buenos Aires' position as the primary railway hub and port made the formation of a national market relatively easy. The more even balance of power between the Australian colonies could also have impeded the formation of an Australian nation-state, as several nations were possible, and indeed New Zealand is a separate nation today. Geography contributed to more peaceful and decentralised federation, but could also have discouraged Australian federation from occurring as each colony had a viable and independent fiscal base. In contrast geography was more conducive to forcing Argentina together whether the provinces liked it or not. The geographic concentration of fiscal power in Buenos Aires made it more likely for power to be centralised there, whereas Australia could entertain more decentralised options. Nonetheless geography was only one factor and did not determine the results.

II Brief Economic History of Development

Institutions and geography played important roles in Argentine and Australian development in the nineteenth and twentieth centuries.²⁷² Similar pastoral and agricultural staple exports were the original basis for development in both. Argentina

²⁷⁰ Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press., p.221-2

²⁷¹ Schedvin, C. B. (1990). "Staples and Regions of Pax Britannica." The Economic History Review 43(4): 533-59., p.550

²⁷² See subsection two of Chapter One for a theoretical grounding of this section.

and Australia fulfilled the ‘settler economy’ model, as new European immigrant societies that were land rich and labour poor. Their lands were largely emptied of indigenous peoples to make way for projects of progress. Both developed niches in particular staples whose development was not a simple response to international demand, but also an entrepreneurial process partly shaped by local institutions. Development was not simply a matter of plugging into the international market, and required appropriate institutional environments backed by credible states. Argentina was better endowed than Australia in terms of the potential range and fertility of staple exports, which may partly explain why convergence was so rapid when it finally occurred. Yet it does not explain why convergence was so long delayed, or why divergence later occurred. The predominant role played by institutions can better explain both the delay in convergence and later divergence.

A comparison of sheep productivity shows the inability of geography alone to explain divergence. Argentina was much better endowed than Australia in sheep, despite wool being Australia’s leading staple. In Buenos Aires province the natural carrying capacity was about 1.6 sheep per acre, compared to only 0.15 in Australia (0.5 after fencing).²⁷³ Argentina’s higher carrying capacity also meant labour could be used more intensively. After the introduction of fencing, the ratio of sheep to one shepherd was about 1,000 in Australia and 2,000 in Argentina, twice as intensive.²⁷⁴ Partly as a result labour comprised about 60% of Argentine costs and 90% of Australian costs.²⁷⁵ The effect of endowments on profitability was thus substantial. Despite Australia’s absolute disadvantage in sheep relative to Argentina, Australia was almost singularly dependent upon wool as the primary staple export from the early nineteenth century until the mid twentieth century.²⁷⁶ This was largely because there were few other options. By the late 1940s rabbit plagues ravaged the Australian sheep industry, having continually

²⁷³ The Buenos Aires estimate is based on a representative area. See Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., pp.146-7. The Australian figures are from McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.129

²⁷⁴ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., pp.146-7

²⁷⁵ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.110

²⁷⁶ See Figure 1.1

decreased profitability since the late nineteenth century.²⁷⁷ In Argentina sheep was the primary staple industry for a much shorter period, from the mid to the late nineteenth century. Argentine factor endowments were so abundant that the sheep industry was merely a staple leader, enabling the rise of even more profitable staples in cattle and agriculture.²⁷⁸ Australia had less obvious endowments to turn to. As a result Australian institutions had to be more capable from an earlier date if development was to occur than Argentine institutions did. Institutions were also important in Argentina, especially in the need to establish public order, but more capable institutions would not become essential to continued development until the twentieth century.

At a basic level, the achievement of public order allowed staple development. The stability that flowed from public order facilitated investment and more intensive staple development. For instance the development of Argentina's high quality beef industry was not due to rich factor endowments alone. High quality beef production also required the rise of an entrepreneurial class to lead development. The role this class played can be illustrated by comparison with Uruguay, which had similar endowments but did not develop into a low cost, efficient producer of high quality beef as Argentina did.²⁷⁹ In 1913 Uruguay still processed almost three quarters of cattle into low quality hides, jerked beef, and extract, much as Argentina did in the early nineteenth century. The emergence of high quality beef required the emergence of a pastoral Argentine entrepreneurial class, much as Australia's emergence as a leader in high quality wool did in the early nineteenth century. The timing of the emergence of an Argentine entrepreneurial class occurred shortly after the emergence of a fully consolidated and stable institutional order in 1880. This suggests that it was only when a stable and credible institutional environment emerged that an entrepreneurial class could appear and intensively develop the most impressive factor endowments. From the 1920s the further development of the Argentine cattle industry became problematic, as entrepreneurs became increasingly aware of their vulnerable political position; which coupled with resentment against the frigoríficos (the meat packers) and a government

²⁷⁷ Collis, B. and CSIRO (Australia) (2002). Fields of discovery : Australia's CSIRO. Crows Nest, N.S.W., Allen & Unwin., p.1

²⁷⁸ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.34-38

²⁷⁹ Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." International Studies Quarterly 33(3): 281-301., p.293

seen as ineffectual.²⁸⁰ The institutional environment that prompted the rise of an entrepreneurial class behind cattle and agriculture proved increasingly unable to sustain development as the twentieth century progressed.

Another important staple in which Argentina had superior endowments was wheat. Wheat began to develop rapidly from the late nineteenth century, when Argentina became the world's third-largest exporter.²⁸¹ The fertility of land and availability of dependable water were far greater in Argentina than Australia, which was reflected in productivity. Argentina produced 12.7 bushels per acre in 1900, well above 8.6 bushels in Australia.²⁸² Only with scientific development, largely sponsored by the state, could Australia overcome lesser factor endowments and achieve surplus exportable production. As a result of such institutional support, Australia converged on Argentine wheat yields by 1910. The Australian state strongly sponsored agricultural development from the 1890s in the provision of land grants, finance, transportation, and scientific programs.²⁸³ In contrast the Argentine state had almost no effective interest or role in agricultural development. The Argentine state created a Department of Agriculture in 1872, but the budget was so miserly that little could be achieved. In 1879 the budget was about 9,000 pesos, which compared to a budget of 600,000 pesos for agriculture in the single Australian colony of Victoria.²⁸⁴ In 1891 the Argentine budget was still only 9,000 pesos, when the US state spent 2 million pesos on agriculture, Germany spent 3 million, Austria spent 4 million, and France spent 8 million. The great wealth produced by wheat was not seen as requiring or deserving official attention in Argentina, as the Department of Agriculture was one of the poorest ministries.²⁸⁵ The fact that Argentina was a leader in agriculture despite an almost complete lack of institutional support

²⁸⁰ Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford, New York, Clarendon Press Oxford University Press., p.172. See also Sabato, J. F. (1988). La clase dominante en la Argentina moderna : formación y características. Buenos Aires, Argentina, CISEA : Grupo Editor Latinoamericano.

²⁸¹ Scobie, J. R. (1967). Revolution on the Pampas; a social history of Argentine wheat, 1860-1910. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press., p.49. See also Platt, D. C. M. and G. Di Tella (1985). Argentina, Australia, and Canada : studies in comparative development, 1870-1965. London, Macmillan in association with St. Antony's College, Oxford.

²⁸² Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." International Studies Quarterly 33(3): 281-301., p.294

²⁸³ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.226-7

²⁸⁴ Scobie, J. R. (1967). Revolution on the Pampas; a social history of Argentine wheat, 1860-1910. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press., pp.131-137

²⁸⁵ Ibid., p.152

attested to how wealthy its endowments were, and initial agricultural development required little more than stability and basic public order.

Argentina diversified into a wide range of pastoral and agricultural staples from the late nineteenth century. Australia had a much lower rate of diversification, being more limited by endowments. More limited endowments meant more significant collective action was required for export led development in Australia. The Australian state became the leading investor in scientific research to overcome problems related to low soil fertility, persistent drought, and plagues. The federal state established the Council for Scientific and Industrial Research (later the CSIRO) in 1926, which led to a revolution in agricultural technology.²⁸⁶ This was preceded by significant state sponsored research in the individual colonies from the nineteenth century. In contrast Argentine public research and extension services were nonexistent until 1956, with the creation of the Instituto Nacional de Tecnologia Agropecuaria (INTA).²⁸⁷ As export led development fell into decline from WWI onwards, both countries sought alternative development paths via protectionism and import-substitution industrialisation. These required institutional capacity for collective action, and hence more capable institutions. When the international market re-emerged as an opportunity for growth after WWII, Argentina failed to reengage it. The export opportunity differed from that prior to WWI in requiring rapid growth in production and productivity, and thus much greater capacity for collective action. Factor endowments alone were less valuable after WWII. Global technological change in agriculture led to apparently declining terms of trade, resulting in a dramatic increase in the global supply of agricultural goods.²⁸⁸ Australia overcame the high postwar tariff barriers to agricultural exports by greatly increasing production.²⁸⁹ The emphasis in the 1950s was to grow more via state assistance in infrastructure, research, regulation, and subsidy.²⁹⁰ A similar process occurred in North America and Western Europe, where technological advances and improvements in rural

²⁸⁶ Fogarty, J. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. Argentina and Australia, Essays in comparative economic development. A. E. Dingle and D. T. Merrett, Economic History Society of Australia and New Zealand, Monash University. **Occasional Papers No. 1.**, p.31

²⁸⁷ Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven, Yale University Press., p.190-1

²⁸⁸ Cavallo, D., R. Domenech, et al. (1989). Agriculture and economic growth in Argentina, 1913-84. Washington, D.C., USA, International Food Policy Research Institute., p.121-2

²⁸⁹ Pinkstone, B., D. Meredith, et al. (1992). Global connections : a history of exports and the Australian economy. Canberra, AGPS Press., p.185

²⁹⁰ Ibid., p.192

inputs accounted for the majority of rural output increases from 1940-70.²⁹¹ Argentina's relative lack of postwar scientific research was symptomatic of the institutional environment. Despite a lack of state sponsored research, Argentina should have been able to free ride off many foreign technological advances, but the decreasing ability of the institutional environment to provide order also discouraged the necessary investment. Postwar opportunities for development generally required more capable institutions, in which Argentina had little experience and success. This section broadly compares Argentine and Australian economic histories to analyse the roles played by institutions and geography in the formation of markets.

National Market Construction

Engagement with the international market through staple exports encouraged the construction of national markets, a fundamental basis for national development. The process was reciprocal, as engagement demanded infrastructure that facilitated the construction of national markets, and their construction facilitated an expansion of that engagement. The sheep industry was the first significant engagement with the international market in both countries. In Argentina it led to capital accumulation, the creation of land and labour markets, the spread of the sheep estancia as a capitalist model, and the establishment of a capitalist-landlord class.²⁹² A similar process occurred earlier in Australia. Australia began to develop high quality wool from the 1810s, but Argentina did not until the 1850s.²⁹³ Wool only became Argentina's leading staple export from the 1860s, despite profitable opportunities for sheep rearing being evident since the 1820s.²⁹⁴ The poor quality of public order was the cause of delay. Prior to the sheep industry, Argentina pursued the more basic and little profitable staples of cattle hides and jerked beef for the Brazilian slave market. Earlier development of the sheep industry would have been a more profitable use of resources, but required more stable institutions to support the necessary imports and investments in capital and labour. Jerked beef and hides were low value, low investment staples that required little

²⁹¹ Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven,, Yale University Press., p.189

²⁹² Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., pp.2, 8-9

²⁹³ Ibid., p.155

²⁹⁴ Ibid., pp.23-25

entrepreneurialism, little labour, and garnered little return.²⁹⁵ The sheep industry required more complex organisation and more demanding use of capital and labour.²⁹⁶ Argentina's late ability to pursue the more complex and valuable staple exports of the sheep industry coincided with the introduction of a more stable institutional order. Development was long delayed in Argentina by the lack of the basic necessary institutional environment.

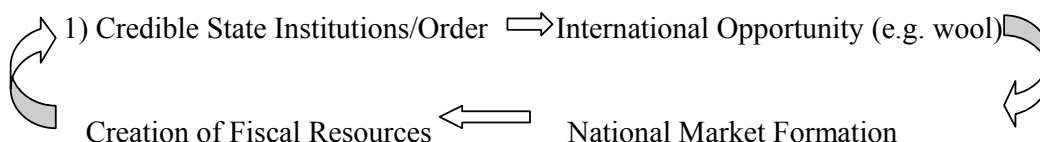
An important result of the development of national markets was the concurrent decrease in costs, facilitating further development. For instance the introduction of railways in Argentina in the late 1860s reduced transport costs to a twelfth of what they were under the former oxcart system.²⁹⁷ Valuable engagement with the international market and the formation of national markets were made possible by institutional development. State institutions provided the necessary stability for national market construction, and the development of national markets reinforced state institutions through an increase in fiscal resources. Only when credible state institutions had formed was it possible to fully take advantage of international opportunities and form national markets. In Australia the early colonial state directly encouraged the formation of a market economy by establishing a guaranteed market for agricultural goods.²⁹⁸ In Argentina the long struggle to erect credible state institutions postponed the ability to take advantage of opportunities for development and form national markets until the latter half of the nineteenth century. A brief illustration of the process, emanating from credible state institutions and ultimately reinforcing them, is drawn below:

²⁹⁵ The small returns required huge amounts of land. The most optimistic estimate of Argentine carrying capacity in the eighteenth and early nineteenth century was 900 cattle on 4500 acres, which could produce 90 hides annually. This was a very insignificant income. Adding in other factors such as the lack of transportation and the threat of hostile aborigines, it can be seen that only very large areas of land (i.e. hundreds and thousands of square miles) were economically viable. Scobie, J. R. (1967). Revolution on the Pampas: a social history of Argentine wheat, 1860-1910. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press., p.114-5. See also Amaral, S. (1998). The rise of capitalism on the pampas : the estancias of Buenos Aires, 1785-1870. Cambridge, UK ; New York, Cambridge University Press.

²⁹⁶ Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press., p.11

²⁹⁷ Scobie, J. R. (1967). Revolution on the Pampas: a social history of Argentine wheat, 1860-1910. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press., p.11

²⁹⁸ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.43-5



The following compares the formation of national markets in labour, capital, and land to show some of the roles that institutions and geography played in their development.

Labour market

The sheep industries in both countries suffered from tight labour markets, which were reflected in relatively high wages. This was due to a lack of local labour and the industry's labour-intensive nature prior to fencing and more intensive development. The industry adapted to high wages by using large flock to labour ratios, which saved on labour but could be detrimental to fleece quality. So a balance had to be found that was partly determined by underlying factor endowments (e.g. Argentina could have a larger flock to labour ratio due to the land's higher carrying capacity). As the labour supply increased via immigration, and local capital markets and more secure property rights developed, it became increasingly possible to alleviate the expense of labour through capital investment, especially fencing. Immigration was made possible by the establishment of institutions that could provide a peaceful order. The wool industry's demands for labour began the process of more extensive immigration into each country. These demands were later overwhelmed by more attractive lures such as gold in Australia and beef and agriculture in Argentina. Yet the sheep industry began the construction of labour markets.

Argentine Labour Market

A major complaint of Argentine sheep raisers in the 1870s and early 1880s was a shortage of labour.²⁹⁹ The formation of an Argentine labour market faced a significant hurdle in that a relatively high standard of living could still be obtained locally through

²⁹⁹ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.30. See also Gibson, H. (1893). The history and present state of the sheep-breeding industry in the Argentine Republic. Buenos Aires., Ravenscroft and Mills, Edinburgh. & Adelman, J. (1994). Frontier development : land, labour, and capital on the wheatlands of Argentina and Canada, 1890-1914. Oxford ; New York, Oxford University Press.

a largely subsistence lifestyle. The sheep industry had to compete with the attractions of an open and well stocked frontier. As a result the local labour supply was erratic and fairly unresponsive to demand.³⁰⁰ The previously predominant cattle industry (prior to 1850) had little need for a regular labour market due to the intensive use of land, relying on semi-wild cattle. Yet even this primitive cattle industry had resorted to coercion to obtain labour.³⁰¹ The state began using coercive legislation from 1815 to try and form a labour force, culminating in the Rural Code of 1865 that stipulated that any man without legal property and an established job, and without a passport or *papeleta*, could be arrested and sent to the army for a few years.³⁰² Such legislation was eliminated in the 1870s and 1880s. A labour market could not be formed through coercion alone, and would require the formation of incentives (such as high wages made possible by the prosperity of the wool industry) that would attract immigrants less accustomed to subsistence. This could only be achieved on the basis of sufficient public order.

As the sheep industry began to develop from the mid-nineteenth century, the demand for labour greatly increased, rising by a factor of ten in thirty years.³⁰³ Not only did the sheep industry need more workers (both permanent and seasonal), but it also needed workers with skills that were unknown locally. The sheep industry's labour demands could become desperate, as supply rarely met demand. The formation of a stable and predictable labour supply became a primary objective of the industry. Immigrants began to arrive in significant numbers in the mid-nineteenth century attracted by relatively high wages and were the main source of labour.³⁰⁴ Labourers initially achieved very favourable terms, such as becoming a business partner if they brought some capital. Such terms were available until the mid-1860s, and attracted many Irish, Scottish and Basque immigrants.³⁰⁵ Argentine rural wages were the highest in Latin America, eight to ten times more than in Chile.³⁰⁶ Such high wages meant a considerable proportion of the rural sector's prosperity must have filtered down to the labouring class. Constant wars and epidemics helped maintain high wages into the early 1880s by draining the

³⁰⁰ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., pp.81-84

³⁰¹ Ibid., p.70

³⁰² Ibid., p.87-9

³⁰³ Ibid., p.70-2

³⁰⁴ Ibid., pp.84-93

³⁰⁵ Ibid., pp.103-112

³⁰⁶ Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press., p.94

labour supply.³⁰⁷ In the late 1880s wages decreased significantly as labour scarcity was relieved by: a massive increase in immigration; technical innovations that reduced the sheep industry's demand for labour; the end of wars after national consolidation in 1880; and the enforcement of property rights as law and order were established. The labour market was constructed between the mid nineteenth century and the 1880s, and was made possible by a massive increase in immigration facilitated by the achievement of consolidating a national order.

Australian Labour Market

The Australian labour market was still undeveloped at the start of the nineteenth century. At this time Australia, or New South Wales in particular, was a British penal colony and the bulk of the labour supply was assigned convict labour outside the market. The British state increased Australia's convict labour supply after the Napoleonic wars by expanding convict transportation due to economic and social pressures in Britain.³⁰⁸ Originally the colonial state assigned each officer ten convicts, who were free farm labour maintained at state expense.³⁰⁹ Convicts were allowed to work overtime for wages, which was the first wage labour. In 1819 the colonial state determined that convict labour would be used to sponsor the pastoral industry. Convict labour was increasingly popular as a source of labour as the wool industry expanded in the 1830s, making up more than two thirds of the labour force.³¹⁰ Convicts received only subsistence for their labour, but convict labour was not slave labour as the state administered convict labour on behalf of the Crown, i.e. it was not privately regulated. A problem encountered with convict labour was that it could not be induced by higher wages as free labour could.³¹¹ Thus labour productivity was probably low. On the other hand, convict labour was cheap and reliable. This was especially valuable in isolated squatting districts that would have had great difficulty attracting free labour. As one prominent squatter (Wentworth) pointed out, the wages of convicts were only £14

³⁰⁷ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.104

³⁰⁸ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.72

³⁰⁹ Ibid., p.43

³¹⁰ Ibid., pp.72, 133, 154

³¹¹ Ibid., pp.148-153

annually per worker, slightly less than two thirds of a free labourer.³¹² The gains in productivity from free labour may not have offset this difference. The Australian labour market was originally facilitated by the state and motivated by the development of the wool industry, which was also dependent on the provision of order.

A more fully capitalist labour market began to emerge in the mid 1840s as a rural labour force of small farmers, landlords and tenants became established in settled and squatting areas.³¹³ There were many complaints by the wool industry, as in Argentina, of labour shortage. Labour was the main cost of wool production. Squatters had to offer increasingly high wages as the pastoral frontier expanded into more remote areas. They faced a constant problem of securing enough shepherds, and had to offer wages high enough to attract new settlers away from small farming.³¹⁴ Australian pastoralists also pursued immigration to resolve labour shortages. They offered high wages relative to England, and in the settled districts were also able to offer provisions for labourers to settle as tenants.³¹⁵ Pastoralists also tried to increase the labour supply via a bounty system, where immigrants were privately contracted and the state paid for their transport out of a land fund (from land sales). The state once again played a direct role. This began in the latter half of the 1830s and operated erratically until the 1850s, being most significant in 1840 and 1841 when 6,675 and 20,103 immigrants respectively were brought in.³¹⁶ The bounty system was justified upon the Wakefield principle that land should be priced in order to generate a labour force to serve the land, but was not of lasting significance. The widespread practice of squatting undermined the Wakefield principle as squatting did not involve the purchase of land.³¹⁷ Prior to the 1850s immigration was not able to resolve the labour shortage, but the state had displayed an active and direct role in forming a labour market, which was seen as a public good.

Convict transportation to the eastern colonies ended in 1853, shortly after the gold rush began. The closing of convict labour meant rural wages rose, being the highest on the isolated squatting frontier, and a fully free labour market finally came into being. Labour then became so expensive that the cost deterred further investment in the wool

³¹² Ibid., p.184

³¹³ Ibid., p.142-4

³¹⁴ Ibid., pp.129-131

³¹⁵ Ibid., p.157

³¹⁶ Ibid., p.185

³¹⁷ Ibid., p.90-1

industry.³¹⁸ In the short run the 1850s gold rush worsened the labour shortage as many potential shepherds flocked to the gold fields instead, but in the long run the gold rush increased labour supply by attracting a large surge of immigration. More intensive capital investment in fencing also greatly reduced labour costs.³¹⁹ Fencing was first introduced in Australia in the 1840s, greatly expanding in the 1850s. It resulted in a great increase in the quantity and quality of sheep, increasing the land's carrying capacity by as much as 50%, helping resolve the long-running labour shortage. As a result of fencing, the permanent labour force became more settled, resulting in greater rural social stability. Convict labour may have been analogous to a state subsidy of the Australian wool industry in the first half of the nineteenth century. As convict labour came to an end with the gold rush, the wool industry could resort to more intensive capital investment in fencing and an increasingly large labour supply from free immigration. The Australian labour market developed beyond an initially subsidized and coerced labour supply into a fully capitalistic one based on immigration. In Argentina the creation of a labour market was enabled by the increasing provision of public order that facilitated development. In Australia the British state went a step further by facilitating an initial labour market via convict labour and subsidised immigration. Institutions played a greater role in the establishment of a labour market in Australia than in Argentina, but the encouragement of large-scale immigration ultimately generated labour markets in both countries.

Capital Market Construction

The expansion of staple exports entailed a growing need for capital markets. Initially this was due to the potentially long lag between production, sale and remittance, which necessitated capital markets if staple exports were to expand beyond a few wealthy producers. Capital markets were further encouraged as staple export industries became more capital intensive. For instance when the sheep industry invested in fencing, which expanded the capital market via loans on pastoral production.³²⁰ Fencing began in the 1840s in Australia, but was not significant in Argentina until the 1880s.³²¹ Capital

³¹⁸ Ibid., p.190

³¹⁹ Ibid., p.218-9

³²⁰ Ibid., pp.216-219

³²¹ Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press., p.47-8

investment in more permanent brick housing on Argentine sheep estancias also increased in the late 1870s and early 1880s.³²² The move to more capital-intensive development awaited the development of capital markets, which required a more stable institutional environment. The delay in establishing order in Argentina likely explains the long lag between Australia and Argentina in developing capital markets. Capital markets emerged in response to the demands of staple export industries, especially the sheep industry, but as the nineteenth century continued important differences appeared between Argentina and Australia. The Australian capital market developed earlier, and was increasingly strong and diverse, founded upon well-respected property rights. Argentina did not develop a similarly strong capital market, which remained relatively immature in comparison with Australia.

Argentine Capital Market

The Argentine sheep industry did not initially demand much in the way of capital services that could not be obtained from old merchant networks. Merchants and Buenos Aires' import-export firms originally supplied credit to producers. The expansion of the industry in the 1840s and 1850s made increasing demands upon these primitive financial networks. This led to specialization as new agents dedicated to the wool trade emerged.³²³ Nonetheless a lingering problem for the industry was that capital could suddenly become scarce and expensive. For example speculation led to a great increase in interest rates in the mid-1860s, reaching 30% per annum.³²⁴ The initial development of the Argentine capital market was a response to the needs of the sheep industry.

Banks and other specialized credit agencies first appeared in the early 1850s, becoming more numerous after 1870. As a result of the state's inflationary financing, Buenos Aires lacked institutions of financial intermediation from 1836 (when Rosas abolished the sole existing bank) until 1867.³²⁵ The only bank prior to the 1850s was the Banco de

³²² Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.156

³²³ Ibid., p.231-2

³²⁴ Ibid., pp.18-28

³²⁵ Cortés Conde, R. and G. T. McCandless (2001). Argentina: From Colony to Nation - Fiscal and Monetary Experience of the Eighteenth and Nineteenth Centuries. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p., p.7

la Provincia de Buenos Aires.³²⁶ Originally banks were orientated towards providing short and occasionally medium term credit to pastoralists in the form of a line of credit, which was the first form of institutional credit. Lines of credit were popular with small pastoralists, providing an alternative to merchants and middlemen. Pastoralists obtained short-term lines of credit by discounting fictitious bills. Lines of credit became quasi long-term loans via successive renewals, but were not a secure form of long-term credit. They were dangerous in times of volatility as renewal was not guaranteed and interest rates could change. Nonetheless lines of credit were an important source of capital for the pastoral industry's development. The number of ninety-day lines of credit surged from 1864 to 1875, continued to expand until 1880, and levelled out in 1885.³²⁷ Long-term credit needs continued to be unmet, and was desirable to fund the industry's transition to more intensive capital development and expansion. The Banco de la Provincia de Buenos Aires eventually provided medium term credit, which greatly expanded after 1860, but declined by the end of that decade. The bank was ill prepared for the high demand. This led to the creation of the Banco Hipotecario de la Provincia de Buenos Aires in 1871 to supply mortgage credit.³²⁸ This Bank began to issue mortgages in 1872, which were largely medium-term until 1880. It issued cédulas or bonds to mortgagors in lieu of cash, which could then be sold in the market. The emergence of such longer-term credit soon ended spectacularly in the speculative bubble of the late 1880s that led to the Baring Crisis. Yet most pastoralists were unable to take advantage of cédulas' brief appearance.

In 1883 Argentina began an attempt at a mixed specie and fiduciary regime where the paper peso exchanged at par with the gold peso.³²⁹ This standard was unusual in being very decentralised, as there was no national monetary authority, and control over note convertibility was left to the five banks of issue. The state took a very laissez-faire approach. Convertibility only lasted seventeen months, when the banks of issue refused to exchange gold at par for notes.³³⁰ The system's need for good regulation was not met, and was worsened from 1887 with the poor regulation of the Law of National

³²⁶ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., pp.253-257

³²⁷ Ibid., pp.259-262

³²⁸ Ibid., pp.266-268

³²⁹ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., p.47

³³⁰ Ibid., p.47

Guaranteed Banks. This law led more or less directly to the Baring Crisis of 1890 by establishing an informal system where the Argentine state was the major beneficiary of bank lending, and thus had no incentive to limit lending.³³¹ The Law of National Guaranteed Banks was meant to create a national banking system such as had occurred in the US with the National Currency Act of 1867.³³² It failed because it diverged from the US bill in important and fundamental respects. At best the law created considerable new public debt to fund an ambitious financial development strategy, and at worst it created a highly leveraged state sponsored pyramid scheme.³³³ An inept institutional environment was an impediment to better capital markets and greater financial intermediation.

Cédulas were an important source of pastoral capital for some large pastoralists, and were quoted on the stock market. They bore interest rates of 6-8% and were redeemable at 1-2% per annum. The bank operated as a middleman, being a debtor to those who held the cédulas, and a creditor to those who mortgaged their property.³³⁴ Mortgagors sold cédulas on the open market to obtain the investment funds for fencing, improved pasturage, and new land. Cédulas were a means by which Argentine pastoralists could attempt to match the great increase in capital investment previously undertaken by Australian pastoralists.³³⁵ Ultimately cédulas shielded pastoralists from bankruptcy via foreign creditors, who were unwittingly exposed to a change in the exchange rate regime when Argentina suddenly abandoned the gold standard, as cédulas were contracted in paper pesos. The Banco Hipotecario initially took a cautious approach to cédulas from 1872-80, but then began a policy of expansion. Cédulas quickly became a major vehicle for speculation due to the gap between real and assessed property values. The bursting of the cédula bubble contributed greatly to the 1890 Baring crisis, by which time state owned Argentine banks had sold about £34 million of cédulas largely to British investors.³³⁶ The formation of this bubble was greatly assisted by the Law of

³³¹ Ibid., p.24-5, 72

³³² Ibid., p.58

³³³ Ibid., p.58

³³⁴ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.268. See also Ferns, H. S. (1960). Britain and Argentina in the nineteenth century. Oxford [Eng.], Clarendon Press.

³³⁵ Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." International Studies Quarterly 33(3): 281-301., p.288-9

³³⁶ Ibid., p.289. See also Ferns, H. S. (1992). "The Baring Crisis Revisited." Journal of Latin American Studies 24(2): 241-273.

Guaranteed Banks, which allowed banks to issue paper pesos backed by a gold reserve. This legislation was unmonitored and cédulas were issued without specie backing. The crisis was triggered by the state's failure to maintain the commitment to the gold standard, revealing a gross incompetence in the institutional environment. The state decided to default on external debt in 1889 by paying in paper rather than gold pesos, but then intervened in the foreign exchange market to guarantee the value of paper pesos.³³⁷ The Baring Crisis, along with the collapse of Argentine financial and monetary institutions it entailed, were a direct result of gross institutional mismanagement.³³⁸ The large pastoralists who had been able to access cédulas were shielded from bankruptcy, but at the potential cost of the capital market's long-run development.

Considering the damage cédula speculation caused to the credibility of Argentine credit, they were unlikely in the collective long-term interest. More meaningful long-term credit began to develop in the 1890s, but remained secondary to short and medium term credit.³³⁹ The Argentine credit market remained strongly biased towards short and medium-term credit, generally favouring larger producers and merchants. The Argentine credit market provided the necessary flow of capital for the pastoral industry, but a volatile one that likely failed to provide the stability required for long-term capital investment. An Argentine capital market emerged to a limited extent, but was not as full as it might have been, which may have limited production. For example, national and provincial banks did not consider extending loans to Argentine wheat farmers until 1910, helping entrench wheat farmers' vulnerable economic position. Instead agricultural development relied on the credit of the country storekeeper or local merchant.³⁴⁰ The creation of a stable and efficient capital market was a key developmental problem in Buenos Aires.³⁴¹ Low state credibility limited the development of a fuller capital market through the state's relatively constant use of seigniorage for financing through much of the nineteenth century.³⁴² Only from the

³³⁷ See Chapter Four for a comparison of Argentine and Australian public credit over time.

³³⁸ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., pp.90-94

³³⁹ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., pp.271-274

³⁴⁰ Scobie, J. R. (1967). Revolution on the Pampas; a social history of Argentine wheat, 1860-1910. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press., p.89

³⁴¹ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.18

³⁴² Ibid., p.246-7

1890s did Argentina begin to credibly commit to the gold standard and prevent seigniorage, but this only lasted until the 1930s.

The Baring Crisis was an opportunity to establish new, clear, and comprehensive banking regulations, but the state failed to achieve these.³⁴³ The Baring Crisis virtually eradicated domestic banks, which regrouped and expanded from the 1890s until 1914, joined by an expanding group of foreign banks.³⁴⁴ The major state bank in the late nineteenth and early twentieth centuries was the Banco de la Nacion, which was the fiscal agent of the federal government.³⁴⁵ It emerged as Argentina's most important commercial bank in the 1890s. From 1910 to 1930 the Banco de la Nacion's share of loans increased from 28 to 45 percent.³⁴⁶ In short the state bank increasingly dominated the capital market. After the Baring crisis, strict policies were instituted to restrain the Banco de la Nacion. These were abandoned in 1914 with the emergency rediscount law. The rediscount law authorised the Banco de la Nacion to act as a lender of last resort, and gave the Conversion Office (which guaranteed the gold standard) the power to finance such lending by printing inconvertible money. Only the Banco de la Nacion exercised the new powers.³⁴⁷ After 1914 the Banco de la Nacion changed from being a very conservative bank to being a prop of the private banking system.³⁴⁸ Between 1914 and 1927 the state bank accumulated many bad debts offloaded by the private banks. The Banco de la Nacion was weakly regulated, and eventually bailed out almost the entire financial system, destroying its balance sheet in the process. In turn the Banco de la Nacion was bailed out by the Conversion Office. Bad institutions drove out good institutions. The 1914 rediscount law provided private banks with highly subsidised, if not free, banking insurance. This policy choice reveals much about the machinations inside the Argentine corridors of power.³⁴⁹ Rich and powerful interests desperately needed cover from their risks, which included bad loans to themselves. The new central bank provided a major bailout of the banks in 1935 to prevent an insolvency crisis arising from decades of bad loans.³⁵⁰

³⁴³ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., p.79

³⁴⁴ Ibid., p.140

³⁴⁵ Ibid., p.33

³⁴⁶ Ibid., p.158-9

³⁴⁷ Ibid., pp.34-35

³⁴⁸ Ibid., pp.181-6

³⁴⁹ Ibid., p.174-6

³⁵⁰ Ibid., p.176

The state was effectively captured by a narrow set of interests who provided collective goods to themselves at massive expense to society. After the gold standard was suspended in 1929 the state depreciated the exchange rate, leading to large seigniorage profits.³⁵¹ Seigniorage profits amounted to 701 million paper pesos, but between 390 and 553 million of these, or between 4 to 5.5 percent of GDP, were used to bail out bad private bank lending.³⁵² This was a very large capture of state resources by a small already wealthy collective group, and considerably substantiates the popular contemporary lack of faith in the 1930s military regime, which was widely seen as corrupt. Unlike Australia, which refused to be swayed by the collective interests of debtors in the Baring Crisis, the Argentine state was captured by such collective interests and bailed out a select and wealthy few at incredible expense to society. This greatly damaged both state credibility and the development of the Argentine capital market. A better institutional environment could have resulted in a more efficient and productive capital market, which would have been more beneficial to development.

Australian Capital Market

The development of the Australian wool industry combined with the continent's exceptional physical distance from world markets to foster a strong demand for a local capital market. The initial delay between production and receipt of payment was about two years, of which one year was due to transportation.³⁵³ The wool industry originally emerged in the absence of a capital market, which meant only the wealthiest entrepreneurs could participate. As these pioneers proved wool was profitable, the high barrier to entry posed by the two-year delay between production and receipts became apparent. This began to be overcome in the 1830s as colonial merchants started to provide capital so producers could obtain payment when their wool reached Sydney, reducing the delay to one year and facilitating the entry of smaller producers.³⁵⁴ Credit quickly became pervasive in the Australian wool industry, and wool bills became a

³⁵¹ Ibid., p.187

³⁵² Ibid., p.231-2

³⁵³ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.108-9

³⁵⁴ Ibid., pp.102-105

common form of currency, especially in the interior.³⁵⁵ Merchants used these for foreign exchange and to settle accounts with English creditors. The emergence of a basic credit market increased production by encouraging economies of scale, as large pastoralists were better able to reduce marketing expenses (such as merchant commissions and interest) via larger scale production.³⁵⁶ In the 1840s economic crisis drew attention to the wool industry's dependency upon insecure forms of credit and the insufficiencies of the early capital market.³⁵⁷ The majority of producers were still unable to borrow directly from banks or access longer-term loans, which deterred fixed capital investment. Legislative efforts were made to establish more forms of credit, such as liens on wool and mortgages on livestock. Liens on wool formalized the practice between merchants and pastoral capital, providing legal security. Both liens and mortgages revived pastoral capital in the latter 1840s. The institutional environment thus supported the evolution of a better capital market. The Australian wool industry, much like in Argentina, originally developed without much of a capital market and similarly depended upon merchants for the original supply of capital, but the state played a more active role in fostering capital market development.

Banks developed early in Australia. The first bank was the Bank of New South Wales, founded in 1817 by government officials and private traders.³⁵⁸ Governor Macquarie originally attempted to construct a purely government bank, but this was not approved by Britain. He eventually engineered the formation of the Bank of New South Wales.³⁵⁹ The President of the Bank of NSW was also the Governor of NSW, but control was vested in a board appointed by the state. The state thus played a direct role in establishing a capital market. Banks multiplied after the formation of the Bank of New South Wales in the early nineteenth century. They raised capital in Britain and via local deposits, supplying pastoralists with capital indirectly by discounting merchants' bills of exchange. They avoided direct loans to pastoralists as the risks were seen as too high when pastoral capital was not secure.³⁶⁰ Banks lent to merchants at lower rates than

³⁵⁵ Ibid., p.110-11

³⁵⁶ Ibid., p.162

³⁵⁷ Ibid., p.115-6

³⁵⁸ Ibid., p.67-8

³⁵⁹ Butlin, S. J. (1953). Foundations of the Australian monetary system, 1788-1851. [Carlton], Melbourne University Press., pp.7-9; Butlin, S. J. (1986). The Australian monetary system, 1851 to 1914. [s.l], J.F. Butlin., p.71

³⁶⁰ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.108

merchants lent to pastoralists. As most bank directors were also merchants, this suggests merchant-bankers extracted some rent from pastoralists.³⁶¹ From the 1820s British capital entered Australia via the formation of land companies for wool production; directly through private investment agents, joint stock companies (mortgage and trading companies), and especially via the three imperial banks: Bank of Australasia (1834-1951), Union Bank (1837-1951), and Bank of South Australia (1835-92).³⁶² This competition provided some constraint upon the power and rent seeking of Australian merchant bankers. The great pastoral boom of the 1830s was largely financed by British capital, funding a massive increase in squatting.³⁶³ The 1830s boom led to a great increase in the number of banks and transformed the banking system. From a previous few, small and localised banks emerged a number of large banks. The Australian colonial banks greatly expanded and engaged in aggressive competition for deposits, greatly increasing deposit interest rates and establishing deposit banking as the standard practice.³⁶⁴

On the eve of the 1850s gold boom, there were eight trading banks in Australia.³⁶⁵ Of these, three were British corporations with London head offices whose local general managers had wide discretion due to communication distances. The British banks were established in the 1830s with British capital, holding their reserves in London.³⁶⁶ None of the five colonial banks had a London office, and the three British banks dominated foreign exchange business. The entry of British banks in the 1830s led to rapid growth in the Australian capital market, demonstrated by the increased quantity of loans and competition. The British banks were market leaders in deposit banking, compelling Australian banks to switch from shareholder capital to deposit banking by the mid 1830s.³⁶⁷ The extension of British capital into Australia also fostered colonial state formation, as colonial governments were able to borrow heavily from Britain to finance

³⁶¹ Ibid., p.162-3

³⁶² Ibid., pp.65-66, 106. See also Jones, G. (1993). British multinational banking, 1830-1990. Oxford, Oxford University Press., p.14

³⁶³ Butlin, S. J. (1953). Foundations of the Australian monetary system, 1788-1851. [Carlton], Melbourne University Press., p.9-10

³⁶⁴ Ibid., p.10

³⁶⁵ Butlin, S. J. (1986). The Australian monetary system, 1851 to 1914. [s.l], J.F. Butlin., p.7

³⁶⁶ Ibid., p.28

³⁶⁷ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., pp.105-108

the infrastructure required for commercial expansion.³⁶⁸ The interaction and competition between British and Australian capital markets fostered significant development in the capital market. The primary interest of the local banks was financing external trade (especially wool) and the urban commerce largely derived from the wool trade. The 1850s gold boom engendered another major change in the banking system, which greatly expanded. By the late 1850s Australia had 15 banks, and the number of branches had increased from 24 in 1850 to 197 in 1860.³⁶⁹ The spread of branches in South Australia, where there was no gold, showed that any developing centre would attract a bank branch as soon as local business could pay its costs.

Unconventional financial institutions greatly expanded in the 1860s. These included building societies for housing, and financing companies to service the pastoral industry, especially improvements such as fencing and the conversion of leasehold to freehold.³⁷⁰ These companies were only marginally competitive with the trading banks, but legal restrictions on bank lending on land meant bankers were reluctant to lend long-term. Most pastoralists could only offer leasehold land (not freehold) and liens on wool and sheep. Bankers thus preferred to lend indirectly to pastoralists through a merchant.

Savings banks grew rapidly with population growth from 1850 to 1870. By 1871 there were nine savings banks, at least one in each colony. They largely adopted the model of post office savings banks, and were usually under direct government control.³⁷¹ Concurrent to the growth of savings banks was an increase in government securities, which were their most important investment of the savings banks. The savings banks offered the colonial states a steady source of funds at moderate interest rates, less subject to parliamentary supervision than conventional borrowing.³⁷²

Mortgages on leasehold land emerged in 1847 with the final establishment of long-term squatting leases. This led to a slow shift from bill discounting to mortgage financing, encouraging longer-term investment. Yet squatters, as leaseholders, remained dependent on wool and stock collateral for the majority of their credit until the 1870s, when there

³⁶⁸ Ibid., p.236-7

³⁶⁹ Butlin, S. J. (1986). The Australian monetary system, 1851 to 1914. [s.l], J.F. Butlin., pp.7-8, 23

³⁷⁰ Ibid., pp.67-68

³⁷¹ Ibid., p.69

³⁷² Ibid., p.69

was a switch to long-term loans based on mortgages of freehold land.³⁷³ The land legislation of the 1860s pushed squatters into the capital market, as they sought to preserve their leased lands through purchase. This transition was financed by mortgages, which promoted a quantitative and qualitative expansion of the wool industry.³⁷⁴ The increase in capital supply enlarged the area of exploitable land, as the minimum necessary quality of land could be reduced through capital investment (e.g. by developing water resources). In effect the growth of the capital market in Australia, especially the ability to provide longer-term credit, helped overcome limited factor endowments. Capital investment also increased the wool industry's productivity through fencing, washing facilities and electric shearing equipment; resulting in almost a tripling of the number of sheep, from 40 million in 1871 to 106 million in 1891. The wool yield more than tripled in the same period, from 208 million pounds to 634 million pounds, suggesting an even greater growth in productivity.³⁷⁵ The expansion of capital caused by the development of long-term credit in mortgages was facilitated by the institutional environment, and allowed a dramatic increase in development.

The Australian capital market benefited from the influence of the British capital market and institutions. As Australia was a group of British colonies subject to British law, the London capital market held a clear hold over property rights within Australia. Property rights were not initially dependent upon the capabilities of local institutional environments, and could free ride off the long and highly credible achievements of the British state to protect property rights. The primacy of property rights within British institutions, especially in the financial sector, made it more likely this would be embedded in Australia.³⁷⁶ British heritage thus gave Australia an institutional advantage, as initial property rights were free (i.e. Australia did not have to construct a credible state first). Nonetheless later institutional environments were important for property rights to remain embedded. For instance the 1890s depression followed a period of heavy speculation in Australia in the 1880s, as occurred in Argentina.

³⁷³ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.195-6

³⁷⁴ Ibid., p.229-30

³⁷⁵ Ibid., p.230

³⁷⁶ As Cain & Hopkins have suggested, the British Empire 'could be seen as a transnational organisation that reduced transactions costs by extending abroad the property rights associated with the metropolitan economy'. Cain, P. J. and A. G. Hopkins (2001). British imperialism, 1688-2000. New York, Longman., p.4-5

Financial collapse took place in the early 1890s, provoked by a contraction of British capital.³⁷⁷ About £1.14 million returned from Australia to Britain between 1890 and 1892. Nonetheless the colonial states continued to uphold British property rights and adhere to sterling. Local debtors were not able to avert bankruptcy through an undue influence in the state. As a result British finance companies inherited numerous foreclosed properties from local landowners forced into bankruptcy.³⁷⁸ A similar upholding of property rights in the capital market did not occur in Argentina in the 1890s or in the 1930s. The growth of long-term credit in the Australian capital market led to a transformation in the structure of land ownership, and the number of pastoral leases held by individuals continually decreased in the latter half of the nineteenth century, with a corresponding increase in the number held by banks and companies.³⁷⁹ The Baring Crisis accelerated this process. The development of the capital market not only increased production and productivity, but also facilitated a transformation in land ownership that legitimately reduced the economic power of a small elite, reducing the potential for later conflict. Australian landowners were defeated by their creditors.³⁸⁰ In contrast Argentine institutions sheltered landowners from bankruptcy during the Baring Crisis, preserving their relative economic power, and depriving Argentina from the benefits of a fuller capital market. Australian institutions fostered a fuller capital market than Argentine institutions.

Land Market Construction

Land markets emerged in Argentina and Australia over the nineteenth century, alongside the development of valuable staple exports that used large amounts of land. The success of staple exports gave the land a much greater market value than previously by dramatically increasing its ability to create wealth. Large landholdings prevailed in Argentina and Australia as a result of the original extensive production functions of their staple exports. Such extensive production took advantage of initially free or cheap

³⁷⁷ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.231-2

³⁷⁸ Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." International Studies Quarterly 33(3): 281-301., p.290-1

³⁷⁹ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.230

³⁸⁰ Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." International Studies Quarterly 33(3): 281-301., p.282

land, using scale to reduce costs. Originally it made little sense for producers to intensify production via labour and capital investment, when both were expensive or unavailable. The Argentine state had little positive influence on the development of the land market, as it proved unable to rent land and had difficulty even selling land. Much Argentine public land was simply given away. The Australian state had a much larger influence on the development of the land market. It shaped the land market through legislation, which despite a prevalence of large landholdings, ultimately resulted in the landed class having to share economic power. The state retained ownership of the land while it was brought into production, enabling the state to realise a much higher price when the land was later sold. The British state enforced ownership over crown lands in Australia, whereas the Argentine state proved unable to.³⁸¹ The development of land markets once again shows the effects of differing institutional environments on development.

Argentine Land Market

The original foundations of the Argentine land market were laid by the state, with similar initial intentions as in Australia. The first law of enfiteusis was passed in 1824, which held that public lands could not be sold and would be leased by the state for twenty-year periods.³⁸² The main objective was to prevent public lands from being privatised, with the state monopolising the supply of land in the public interest. It was also meant to be a basis for the construction of state credibility, as land was meant to serve as collateral for loans that would be serviced by lease revenue. Unfortunately enfiteusis did not provide a fiscal base as quickly as required, partly due to the eruption of war with Brazil in the 1820s. Had enfiteusis been successful, the Argentine national state might have realised a similar result as Australia, where the Australian colonial states shared in a greater realisation of land's potential value.

The immediate fiscal demands of war with Brazil in the 1820s combined with the following rule of Rosas to undermine public ownership in land. Rosas sought to

³⁸¹ Ibid., p.288

³⁸² Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.42. See also Carcano, M. A. (1972). Evolución histórica del régimen de la tierra pública, 1810-1916. [Buenos Aires], Editorial Universitaria de Buenos Aires.

encourage the expansion of the primitive cattle industry which needed large landholdings. Under him the state opted for the immediate fiscal revenues from selling land.³⁸³ Nonetheless the supply of land to be privatised was such that it was well beyond the immediate local demand and/or ability to pay. As a result land prices were very low, and the state even accepted payment in cattle. It was likely that such a policy was continued less for fiscal reasons and more as a means to garner Rosas personal political patronage. His personal use of land policy to garner political support can be seen in the large number of boletos de premio (rights to land) that were given out, amounting to about 8,500 boletos representing almost 2.5 million hectares.³⁸⁴ These were a form of political currency, and many remained unused or were sold to established estancieros or speculators. By the end of Rosas' regime in 1852, only 0.57 of the 2.5 million hectares (less than a quarter) had actually been registered. So the damage done by Rosas was potentially quite limited. In 1858 all the land grants made by Rosas between December 1829 and February 1852 were annulled, except those that had received their lands due to participation in the wars against indigenous tribes (amounting to another 0.4 million hectares).³⁸⁵ Ultimately the direct legacy of Rosas on the privatisation of land tenure was about a million hectares. Considering Argentina's arable production area of almost 33 million hectares, this direct effect was small, about 3% of arable land.³⁸⁶ The key province of Buenos Aires was still thinly populated with many hectares of public land in the late 1840s.³⁸⁷ Enfiteusis remained an important part of land tenure in the 1850s, and the number of leaseholders in 1854 still exceeded landowners.³⁸⁸ The Argentine state was still not necessarily bound by history in the 1850s to a policy of land privatisation, but continued this policy nonetheless. War with Brazil and Rosas set a precedent for land privatisation, but the majority of land was privatised in the third quarter of the nineteenth century.

The premature privatisation of land continued under successive governments. Many important and influential politicians in the post-Rosas period (such as Avellaneda,

³⁸³ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.42-3

³⁸⁴ Ibid., p.43

³⁸⁵ Ibid., p.43.

³⁸⁶ The total arable production area is from Censos, I. N. d. E. y. INDEC. Buenos Aires, Republic of Argentina. **2005**.

³⁸⁷ Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press., p.48

³⁸⁸ Ibid., p.152

Sarmiento, Varela and Casares) strongly believed in the need for a large public role in land.³⁸⁹ Yet land policy continued to be dictated by immediate fiscal needs, leading to poorly prepared and hurried land sales. The state proved incapable of managing land as a long-term fiscal resource. It also proved inept at properly valuing the land available to sell, valuing the land only on the basis of two variables: if it was within or beyond the frontier, and the distance from Buenos Aires.³⁹⁰ Undoubtedly these variables were chosen for administrative simplicity, as they only required a map. They did partly reflect the land's value, but no attempt was made to account for soil quality or water resources. The state had little idea of the land it was actually selling. The state was thus inept at ascertaining the full value of its assets, as well as usually being a distressed seller. When a consolidated institutional order finally emerged after 1880, most of the public lands were gone. Competent, capable and credible state institutions were required for enfiteusis to be a viable policy that realised a fuller amount of the land's value. As it turned out, the best the Argentine state could manage was to sell or give land away. At least the land could then be brought into production, from which fiscal resources could indirectly be realised through customs. The land policy first established by Rosas of giving public land away became the norm, as it was the least complex to manage.

The expansion of the sheep industry from the 1850s caused a steady increase in land values.³⁹¹ This led to the emergence of a land market, evidenced by the amount of land transference that occurred. In sixteen counties of Buenos Aires province, less than a fifth of the land held in 1836 was still held by the same family in 1864. From 1864 to 1890 almost half the land in this area was transferred again. This suggests the emergence of a relatively open land market.³⁹² The emergence of a land market can also be seen in the increase in land's relative value, e.g. as a proportion of the start up costs of a typical sheep operation. In 1850 land represented only about a quarter of start up capital requirements, but by 1880 accounted for almost three quarters.³⁹³ It is important to recall that Argentine land was always employed capitalistically.³⁹⁴ This meant that as a land market emerged there should have been an eventual correction of any initial over-

³⁸⁹ Ibid., p.49-50

³⁹⁰ Ibid., p.52-3

³⁹¹ Ibid., p.54

³⁹² Ibid., p.59-61

³⁹³ Ibid., p.110

³⁹⁴ Amaral, S. (1998). The rise of capitalism on the pampas : the estancias of Buenos Aires, 1785-1870. Cambridge, UK ; New York, Cambridge University Press., pp.16-17

concentration or misallocation of land ownership.³⁹⁵ More productive agents should have eventually bought out the initially lucky and less capable. The evidence suggests this occurred, as the original distribution of land holdings was diluted over time. This may have been counterbalanced to some extent by land's role as one of the few secure, long-term investments available.³⁹⁶ This was largely due to low state credibility, expressed in a penchant for seigniorage and resulting chronic inflation. To whatever extent this was the case, the non-dilution of land ownership was a result of a poor institutional environment. Argentina credibly committed to the gold standard from the 1890s to the early 1930s, which meant this should not have been the case at least during this period.

The Argentine land policy of selling land at very low prices and/or giving it away had repercussions on the development of the Argentine capital market. As Argentine landowners largely avoided the need to pay the future potential value of land, they also avoided the need for borrowing and the greater possibility of bankruptcy, as occurred in Australia in the 1890s.³⁹⁷ Australian landowners were forced by legislation to buy their lands at relatively high prices in the 1860s, after much of the land's value had been realised. They were only able to buy their lands at the high prices then on offer through extensive borrowing on the capital market, which was able to provide long-term mortgages. Argentine landowners had less need to borrow besides from more intensive development, and the little long-term debt some large landowners held was in *cédulas* rather than in mortgages.³⁹⁸ These bonds were greatly devalued by the Argentine state in 1890 when the gold standard was abandoned. As Argentine landowners were either little indebted, or had their debts greatly reduced by the state, the land market was not forced by the capital market to redistribute land to potentially more productive agents. The Argentine institutional environment thus helped undermine how well the land market allocated land to most efficient and productive uses.

³⁹⁵ See subsection two of Chapter One.

³⁹⁶ Hora, R. (2001). *The landowners of the Argentine Pampas : a social and political history, 1860-1945*. Oxford, New York, Clarendon Press Oxford University Press., p.76

³⁹⁷ Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." *International Studies Quarterly* 33(3): 281-301., p.288

³⁹⁸ *Ibid.*, p.288

Australian Land Market

The foundations of the Australian land market were laid by the British state, in particular the Colonial Office. The British state began by legally stripping the land from the native Aborigines by claiming sovereignty over it. Initially the penal colony pursued a goal of economic self-sufficiency, and land grants were seen as a way of promoting this. Land was distributed according to class, and amounts were granted accordingly. The ranking of those granted land descended from the few free settlers, to officers, to soldiers and finally to convict-emancipists. Land policy shifted in the mid 1820s from the goal of trying to settle an emancipist small-farming population to supporting large pastoral landholdings.³⁹⁹ The shift in policy arose from the high demand for fresh pastures. Land was granted to a maximum of 1036 hectares, with an option to buy or rent adjacent public land. Land grants in the 1822-28 period were quadruple those of 1788-1821, and were primarily large sheep runs that expanded the wool-growing frontier.⁴⁰⁰ The British state originally encouraged a land market based on class and self-sufficiency, and shifted to large pastoral landholdings from the 1820s.

In 1831 the Colonial Office moved from land grants to selling land at fixed and increasing prices with the Ripon Regulations.⁴⁰¹ These regulations attempted to price land high enough to promote a local labour supply by preventing labourers from becoming landowners too quickly. Land sales would also provide fiscal revenue and concentrate settlement. Over time land prices were progressively increased, from 5s (shillings) per acre to 12s in 1838, and to £1 in 1842, indicating the state's legal control over the land. Some of the revenue from land sales was to be used to assist free immigration in order to increase the labour supply, somewhat offsetting the end of transportation.⁴⁰² As has been seen, this policy was only briefly successful in the early 1840s. The state also tried to incorporate the squatting runs, over which it originally lacked control. The demand by the Australian wool industry for ever-larger amounts of land led to the emergence of squatting. Squatting was the movement of pastoralists beyond the official legal boundaries and 'squatting' on crown lands. The 'squatting age'

³⁹⁹ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.70-3

⁴⁰⁰ Ibid., p.73-4

⁴⁰¹ Ibid., p.84-5

⁴⁰² Ibid., p.98

began in 1829 and continued until the 1840s. Squatters initially paid nothing for the use of land, but it is important to point out that it was not illegal, as grazing was not prohibited outside the counties.⁴⁰³ The state simply refused to sell crown land there. The squatters greatly increased the value of land, the colonial states' primary potential resource. The squatting expansion transformed crown lands into valuable assets, which ultimately remained under the control of the state. In the 1830s a Crown land Commission was established to regulate squatting via a licensing system. In 1847 the state attempted to incorporate squatting lands by transforming them into freehold, with an order in council that allowed squatters to pre-emptively purchase their land at £1 per acre.⁴⁰⁴ The squatters eventually had to be dealt with, which ultimately meant the privatisation of land and the construction of a land market.

Land Acts were introduced in the 1860s to try and correct the concentration of land ownership. Their intention was to open public lands to small farmers by creating land markets in areas dominated by the squatters.⁴⁰⁵ The Acts were a political result of the 1850s gold rush, as a surplus of unemployed miners agitated for land reform after the gold rush. The Acts allowed leased land to be purchased, and it was expected that the unemployed would establish family farms reducing urban unemployment. Instead squatters used the Land Acts to gain more secure title over the lands they had been leasing. The squatters also prevented reforms of the Land Acts to make them more favourable to smallholders through their domination of the colonial legislatures' upper houses.⁴⁰⁶ The Land Acts failed to encourage the development of small farming as they ignored the practical means of realizing their aim (such as credit, viable markets and transportation). The squatters used the Acts to occupy the best lands through their better access to capital.⁴⁰⁷ Nonetheless the Acts forced the squatters to pay significant borrowed sums for their land, greatly expanding the land and capital markets. The Land Acts did not fulfil their original aims, serving to consolidate pastoralism and the land monopoly, with the possible exception of South Australia. Land policy to create land

⁴⁰³ Buckley, K. D. and E. L. Wheelwright (1988). No paradise for workers : capitalism and the common people in Australia, 1788-1914. Melbourne ; New York, Oxford University Press., p.80

⁴⁰⁴ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.216

⁴⁰⁵ Ibid., p.220-1

⁴⁰⁶ Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." International Studies Quarterly **33**(3): 281-301., p.285

⁴⁰⁷ McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., pp.220-222

markets was thus not a complete success story in Australia, but this was at least partly due to economic realities. Australia was ill suited to becoming a large agricultural producer until the twentieth century, lacking both factor endowments and large local markets. Had the Land Acts succeeded in transferring the land from large pastoralists to small farmers, it is by no means clear this would have been in the collective economic interest. The Land Acts were successful in that they created land markets, whose unintended long-term side-effect was to initially consolidate the original concentration of land tenure. The creation of land markets was nonetheless important for the development of the capital market and an ultimately more efficient long-term allocation of resources. These long-term benefits were a result of the institutional environments within which the Land Acts were enacted.

The creation of land markets transformed the rural economy by making land into a commodity. Squatters purchased land defensively through credit, some of which was also used for investment in water conservation and fencing.⁴⁰⁸ The squatters' land purchases on credit made them dependent on the capital market, as their land was collateral. Squatters purchased about 10 million hectares in the 1870s with £55 million of borrowed funds secured by mortgages.⁴⁰⁹ The significant fiscal revenue from land sales was used to service foreign debts that built the railways and other public goods. The creation of land markets was also the creation of a significant fiscal resource for much of the latter half of the nineteenth century. This was especially true in the key colony of New South Wales where land revenue was the primary fiscal resource. Victoria, the second most important colony, had to supplement land revenue with tariffs on manufactured imports.⁴¹⁰ The development of railways fed the process by enlarging the potential land area for grazing, opening more land for sale and raising the value of adjacent lands. Obviously this could not go on forever. For a time the Land Acts formed something of a virtuous cycle by forcing pastoralists to buy land from the state; the revenue from which serviced debt incurred to build railroads; and these railroads opened

⁴⁰⁸ Ibid., p.245-6

⁴⁰⁹ I have converted this from 25 million acres. See Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." *International Studies Quarterly* 33(3): 281-301., p.285-6

⁴¹⁰ McMichael, P. (1984). *Settlers and the agrarian question : foundations of capitalism in colonial Australia*. Cambridge [Cambridgeshire] ; New York, Cambridge University Press., p.234-5

up new lands, whose sale was used to borrow more money to continue the cycle.⁴¹¹ The foundation of this cycle was the price of wool, which fell in the 1880s. Debt servicing then increased as a proportion of pastoralists' costs, from 20% of production value in 1881 to 40% in 1887. Banks and land finance firms were increasingly forced to foreclose, and Australian pastoralism was transformed from an individual to a corporate operation.⁴¹² The ability of the colonial states to exact high prices for their land (and thus for property rights) shows they had developed a high level of credibility. Otherwise neither the squatters would have been willing to buy the land, nor the banks willing to lend upon land as collateral. Both squatters and creditors had to believe in land and the property rights behind it, which was ultimately determined by state credibility. Australian institutions were especially important to fostering deeper land and capital markets and thus greater development.

Conclusion to Economic History

The institutional environment can clearly be seen in the impact on the development of markets for factors of production, especially capital and land markets. Australian institutions eventually guided the development of markets in land and capital to desired ends, enhancing state credibility and protecting property rights. This resulted in a slow and peaceful evolution from potentially socially divisive land concentration, to more efficient land use and a deeper capital market. A result of a deeper capital market is more entrepreneurialism can occur, as a deeper capital market reduces the need for those best able to produce wealth to have the luck of inheriting it. In Argentina a shallower capital market emerged, one less capable of redistributing land to those best able to produce. The Argentine institutional environment proved less competent at promoting deeper land and capital markets, and this should have led to less production than otherwise possible. On two occasions, the 1890s Baring Crisis and the Great Depression of the early 1930s, the Argentine state appears to have been somewhat captured by a narrow economic elite, decreasing state credibility and hindering the capital market. Argentine institutions ultimately proved incapable of maintaining their initial primary function of establishing and maintaining order, largely because they failed to continue the means of maintaining that order, i.e. fostering state credibility and

⁴¹¹ Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." *International Studies Quarterly* 33(3): 281-301., p.286

⁴¹² Ibid., p.286-7

delivering development. Australian institutions could afford to be less concerned about order and make development their primary goal.

Argentina and Australia differed significantly in the economic histories of their development due to a divergence in geography and institutional environments. Factor endowments were a relatively given item of geography that had to be worked with, or around. Argentine factor endowments were (and are) impressively wealthy. In general Argentine lands are rich, fertile, and well-watered (or with access to water). Argentine geography is also well suited to a relatively easy expansion of railways and roads. Australia in contrast is the world's driest populated continent with some of the world's poorest and oldest soils. Yet in institutions, Australia had an easier setting from which to construct credible institutions more conducive to development. Australian institutions evolved peacefully within the shelter of strong and credible British institutions. These evolved into very similar institutions across the Australian colonies, whose remarkable success is confirmed by the high early GDP per capita.⁴¹³ By the late nineteenth century Australian GDP per capita was even higher than the mother colony of Britain. The Australian institutional environment proved instrumental in fostering the collective action necessary for development and in overcoming relatively poor endowments. The evolution of the Argentine institutional environment stands in stark contrast, being born into a vacuum of disorder resulting from sudden independence from Spain in the early nineteenth century. An institutional environment capable of providing order emerged over half a century of civil wars and disorder. The primary focus of this environment was the re-establishment of order, with development as a secondary goal. The establishment of order combined with Argentina's outstanding factor endowments to carry Argentina through about half a century of rapid development, a window in which more capable institutions could have been constructed. Argentine factor endowments were so rich, and the resulting development so apparently simple, that it was not easy to see the need for this. An overall comparison of Argentine and Australian economic histories shows the preponderant influence of institutions in their long-term development.

⁴¹³ See Chapter One.

Chapter Three: A Broad Comparative Fiscal History

‘In Australia, the state is not as simple as that of the Metropolis, and the Colonial State assumes many functions that the English State lacks. *The advantages of Victoria* [now a State of Australia, but then a British colony] *all emanate from the most legitimate sources of taxation. ... All the Australian colonies can flaunt a beautiful list of remunerative public works* ... The colony [of Victoria] could pay the entire public debt in one payment if it sold its remunerative public works. How many public debts could offer the same guarantee? *The majority of countries have debts whose capital was dissipated in the smoke of battle.* The living are condemned to pay the debts of the dead! Death is not a redemption!’ (Newton and Llerena 1882), Volume VIII, pp.112-115

‘The budget is a law in form, ... But in fact *the budget is not a law. It is a programme of government.*’ (Jèze 1923), p.52

One of the certain causes of the deficit in Argentina is *the insufficiency of the taxation system*; not the only, but one of the principal causes. *The national fiscal system in Argentina is bad*; all Argentines recognise this. It lacks all the essential conditions of a good system of taxation. (Jèze 1923), pp.80-81

‘*In the most advanced nations the budget constitutes the most serious act of political and economic life* ... However in Argentina ... there is increasing indifference to its study’ (Avellaneda 1928), pp.19-20

Mr King O’Malley - ‘The people of Australia are shareholders in the Commonwealth, and are entitled to know how the enterprise is being operated.’ (Hansard), 1/5/1914, V.73, p.514

[Italics and translations in quotations above are mine.]

This chapter begins a comparison of Argentine and Australian fiscal institutions upon the theoretical foundations outlined previously. A broad picture of fiscal institutions is painted over about a century, circa 1880 to 1980. The task is to reveal the political economy expressed so directly by fiscal institutions, i.e. who paid and who received. The answers to these questions reveal a frank and comparable expression of political economy over time, as fiscal institutions express actual long-term distribution policies. What types of public goods were achieved, and for whom? Who captured the state's fiscal revenues? After a theoretical preamble the chapter is divided into four sections: a general historical overview of fiscal institutions; a broad comparison of state capture and penetration; a comparison of indirect and direct taxation; and finally an overview of who paid and who received. Fiscal comparison over a long period of time allows the identification of similarities, differences, and salient features to be investigated further.

Preamble on the Importance of Public Goods to Development

State credibility is a determining factor in a society's ability to develop; at least to the extent that development depends on collective action. This is a logical deduction if state credibility is necessary to enable lucrative fiscal institutions, the resources from which are necessary for collective action, and collective action is necessary for development. Little economic growth occurred before state formation, and what did occur was likely due to the success of groups to act collectively and achieve sufficient public order. As Hobbes observes: 'during the time men live without a common power to keep them all in awe, they are in that condition which is called war; ... In such condition there is no place for industry, because the fruit thereof is uncertain.'⁴¹⁴ State credibility is largely derived from a state's will and ability to provide public goods. Public goods should enhance positive externalities (e.g. security) and minimise negative externalities (e.g. pollution). They are widely defined as goods and services provided via the state that address collective action problems, often being entwined with issues of natural monopoly. Some concrete examples are railways, roads, education, and utilities, but less tangible examples are order, property rights, free markets, and a stable national currency. Public goods are typically fundamental to development. The state can provide

⁴¹⁴ Hobbes, T. (2004). Leviathan : or, The matter, forme, & power of a common-wealth ecclesiasticall and civill. New York, Barnes & Noble Books., p.91

such goods and services directly, but developed states increasingly provide them through (likely more efficient) regulation of the market. Whether provided directly or indirectly, states require credibility to provide public goods efficiently. States without credibility will be little able to prevent the natural monopolies of many public goods from being captured by small rent-seeking groups who can potentially reduce their benefits to less than nothing.

One way of depicting the links between the state, fiscal institutions, credibility, and public goods is to view the state as a firm. In this view the state provides society (its taxpayers/shareholders/citizens) with public goods in return for taxation. This was a view taken by a number of Australian politicians in the early twentieth century, well illustrated by Mr King O'Malley's statement above that Australians are 'shareholders in the Commonwealth.'⁴¹⁵ The state usually monopolises the broadest potential field for collective action, holding a unique capability to overcome the problem of collective action as many public goods are natural monopolies. Yet the state as a firm view is limited by who controls the state. Olson illustrates this succinctly: the Hobessian anarchy of 'roving bandits' destroys all incentives to invest and produce; 'stationary bandits' or dictators are an improvement as they begin to provide public goods, particularly peaceful order; and democracy best engenders development by increasing the incentives to invest and produce via greater public goods provision.⁴¹⁶ In a similar vein Grossman observes: 'If for the state to act as if it were an agent of its citizens is necessary and sufficient for the incumbent ruling elite to have a high survival probability, then characterizing the state as an agent of its citizens provides a useful "as if" framework for positive analysis of economic policy.'⁴¹⁷ This ceases to be true if the ruling elite's survival probability is unavoidably low, or high and largely independent of the state's policies. In either extreme the state maximizes the ruling elite's wealth. Thus

⁴¹⁵ Similar examples are: Mr. Scullin – 'there is no difference between the management of a nation and the management of a business. It is only a question of degree.' Hansard Australian Parliamentary Debates, Parliament of Australia., 14/6/1928, p.6137, V.119; Mr. Gregory – 'definite promises have been made by both the Prime Minister and the Treasurer that full and authentic balance-sheets would be submitted to Parliament each year. I submit that we are in exactly the same position as that of the shareholders of a company;' Hansard Australian Parliamentary Debates, Parliament of Australia., 20/7/1921, p.10322, V.96

⁴¹⁶ Olson, M. (1993). "Dictatorship, Democracy, and Development." The American Political Science Review 87(3): 567-576.

⁴¹⁷ Grossman, H. I. (2001). The State in Economic History. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p., p.459-60

for the state as a firm view to be useful, there is an implicit assumption that control of the state significantly depends upon the support of substantial segments of society. The state as a firm view means the state must provide society with a return on taxation if fiscal institutions are to become or remain a substantial resource. If the state provides a high level of desired public goods, it can achieve something of a virtuous cycle as many public goods foster the development ultimately necessary to expand both the tax base and state credibility. Taxpayers are likely to recognise the return on taxation implied by development through greater cooperation.

What determines a state's credibility? There is a strong interrelation between a state's credibility, the strength of its fiscal institutions, and the ability to provide public goods. At first glance the reasoning is rather circular. If the state is never given the credibility and financing that flows from it, public goods will remain outside the state's capabilities. As the provision of public goods ultimately underlies the state's credibility, a possibly permanent vicious cycle of a lack of credibility and a lack of public goods could be entered. The existence of many developed and credible states that provide a high level of public goods shows that such a vicious cycle can either be escaped and/or avoided. Yet it may explain why, once a vicious cycle is entered into, it is difficult for a state to escape and gain sufficient credibility to enter a positive cycle of high credibility and high public goods provision. Such cycles are akin to path dependencies but are open to change (for better and for worse) via historical opportunities.

In one sense the state always provides goods for somebody. It would have no reason to exist otherwise. The question is: What type of goods and for whom? A distinction can be made between public and collective goods. Collective goods are provided for powerful groups within society, whereas public goods are provided for society in general. The same good can be a collective good in one society and a public good in another. For instance property rights might be accessible only to members of powerful groups in one society, making them a collective good. Where property rights are widely accessible, they are public goods. De Soto observes from numerous investigations of the developing world that extralegality is normal outside the developed world, and legality

‘is marginal’.⁴¹⁸ Property rights are often a collective good in the developing world. Collective goods provided on behalf of powerful groups do not usually coincide with society’s wider interests, as they are more often rent seeking than productive. All states typically provide a mix of public and collective goods. States lacking credibility typically provide little if any public goods, whereas credible states provide a significant level of public goods. Path dependency may explain the somewhat self-sustaining nature of the balances achieved.

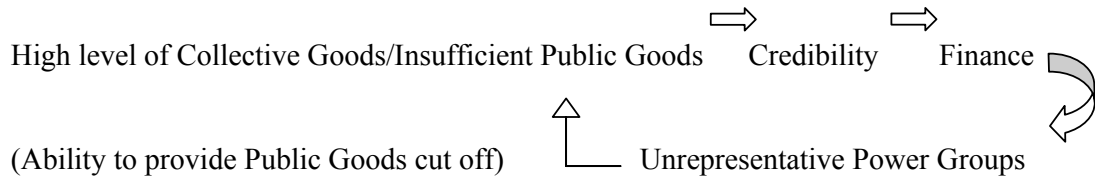
Fiscal institutions in themselves do not determine whether a significant and sufficient level of public goods will be achieved, but they do determine the state’s solvency and potential to deliver public goods. They are highly valuable and potent sources of distributive power. As a result powerful groups seek to capture and control them. The long-term policies followed by fiscal institutions, and the resulting level of public goods, are a measurement of the underlying will of a society’s powerful groups. Societal distribution is not an accidental process, at least over the long term. Groups determine distribution via political power and influence over institutions.⁴¹⁹ An historical problem may be that the powerful groups involved did not clearly outline their distributive goals. Indeed there is usually an incentive to conceal and distort such intentions. The self-declared historical record of distribution may be misleading, but actions speak louder than words. The long-term distributions that resulted must have been to some degree intentional, or at least they became so as the groups they benefited gained power. The long-term distributive results of fiscal institutions have historical meaning. Chaos theory may also help explain why long periods of stability can be followed by periods of sudden and dramatic change, i.e. path dependencies are not necessarily permanent.⁴²⁰ Of course history can never be a complete break with the past. It appears logical that the equilibrium of a low and insufficient level of public goods, and a relatively high level of collective goods, is more likely than the opposite, as it encounters a much smaller collective action problem. It is worth recalling that the modern developed state, with its high level of public goods and credibility, is a recent

⁴¹⁸ Soto, H. d. (2000). The mystery of capital : why capitalism triumphs in the West and fails everywhere else. New York, Basic Books., pp.26-7

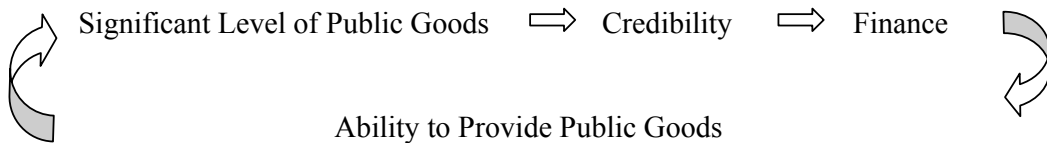
⁴¹⁹ Acemoglu, D. and J. A. Robinson (2003). Political Origins of Dictatorship and Democracy (unpublished)., p.8

⁴²⁰ Chaos theory is similar to path dependency in that behaviour is stable and change is infrequent, but when change does occur it is sudden and quickly resumes another stable path. See Ormerod, P. (1999). Butterfly economics : a new general theory of social and economic behavior. New York, Pantheon Books.

and possibly fragile invention. It is not the historical norm. A state's credibility determines both fiscal institutions and the ability to provide public goods. In a state captured by powerful groups pursuing collective goods at society's expense, the flow from financing the state will be pilfered, and the state's credibility will either remain low or decline. This negative more probable path dependency is illustrated below:



If on the other hand society has faith in the state's will and ability to provide public goods, resulting in a more significant level of public goods, state credibility and society's willingness to finance the state will increase, and the state will become increasingly able to provide public goods (further increasing or maintaining credibility). This positive path dependency is illustrated below:



How do Argentina and Australia compare in light of the theoretical links between state credibility, fiscal institutions, and public goods provision? What were their path dependencies? This chapter begins such a comparison.

I Brief Historical Overview of Fiscal Institutions

The phenomenon of a large state providing extensive public goods is quite a recent phenomenon, mainly due to an historical paucity of fiscal institutions. In the Europe of 1815 only Britain had emerged as a 'fiscal' state, i.e. a state that had developed fiscal institutions to the point where it could borrow credibly.⁴²¹ Fiscal institutional history, to

⁴²¹ Daunton defines a fiscal state as one that is able to combine the flow of tax revenues with large-scale borrowing. Daunton, M. J. (2001). Trusting Leviathan : the politics of taxation in Britain, 1799-1914. Cambridge, UK ; New York, NY, Cambridge University Press., p.4-5 See also: North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press.; O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review 41(1): 1-32.

an important extent, is recent history. In much of the developed world today, states simply did not have the fiscal institutions necessary to provide significant levels of public goods before the nineteenth and twentieth centuries.

A starting point for comparing Argentine and Australian fiscal history emerges from the mid nineteenth century. In the case of Australia, Britain surrendered virtually all fiscal authority in 1855 with the transfer of title in Crown lands to the colonial governments. By this time the transportation of convicts had ended and British subsidies had largely been withdrawn.⁴²² The Australian colonies had little to gain fiscally from Britain as the gold rush gained momentum in the 1850s, and Australian fiscal institutions became increasingly independent. Argentina in contrast gained clear independence from Spain in the early nineteenth century, but then struggled to form a coherent state capable of providing order for another half century. It was not until the 1860s that a clear set of national economic institutions began to emerge, consolidating in 1880.⁴²³ Until the 1860s Argentine state structures were weak at all levels; a good bureaucracy was secondary to a good army; and fiscal policy amounted to little more than inflation taxation.⁴²⁴ It was only from the 1860s that Argentine fiscal institutions could begin to switch from constant civil war to nation building. A relevant comparison of Australian and Argentine fiscal institutions can thus begin from the 1860s, and more certainly from 1880.

The suggested end point of the comparison is within the latter half of the twentieth century. As will be seen, Argentine and Australian fiscal institutions began a clear process of divergence from World War Two (WWII) onwards. This matches their

⁴²² Obviously this ignores the minor case of Western Australia, which changed from a free to a penal colony in 1850, and ended convict transportation by 1868. Butlin, N. G. (1985). What a way to run an empire, fiscally. Working papers in economic history ; no.55. Canberra, Australian National University: 68., p.19, 25

⁴²³ Both Botana and Oszlak identify 1880 as the crucial date: Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana., p. 9-11; Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.106

⁴²⁴ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., p.12-15. See also: Irigoin, M. A. (2003). Macroeconomic aspects of Spanish American Independence: The effects of fiscal and currency fragmentation, 1800s-1850s. The 63rd Annual Meeting of Economic History Association, Nashville, Tennessee.; Irigoin, M. A. (2000). "Finance, Politics and Economics in Buenos Aires, 1820s-1860s: The Political Economy of Currency Stabilisation."; & Amaral, S. (1998). The rise of capitalism on the pampas : the estancias of Buenos Aires, 1785-1870. Cambridge, UK ; New York, Cambridge University Press.

timing of divergence in development. A potential problem for comparison emerges from the 1960/70s when Australia began to develop substantial mineral resources. This does not change the basic argument because it is an example of better institutions leading to enhanced factor endowments, as Argentina's relative lack of a mining sector is not likely due to a lack of mineral resources.⁴²⁵ Rather it has been a missed opportunity. For instance only 3% of Argentine territory (whose Andean cordillera lies parallel to Chile's) has been explored in any depth, whereas about 80% of Chilean territory has been explored.⁴²⁶ As a result Chile side of the Andes has large proven mineral resources and the Argentine side does not. Nonetheless the last quarter of the twentieth century emerges as a rough ending point, as Argentine and Australian fiscal institutions and development no longer had much in common.

Argentina

The early foundation of Argentine fiscal institutions, especially outside Buenos Aires, was the *alcabala*. In practice this was a tax on the entry and exit of merchandise. It resulted in very high prices, contraband, and multiple protests and conflicts. Initially the *alcabala* was likely an efficient tax, prior to the development of agriculture and while the ranching industry was difficult to evaluate and tax.⁴²⁷ In time the *alcabala* came to restrict the formation of a national market and national development by significantly increasing the costs of trade.

A major difficulty of Argentine national political consolidation was the relative fiscal weight of Buenos Aires. Buenos Aires' fiscal resources greatly outweighed those of the other provinces due to the luck of geographic circumstance, as the physical location of Buenos Aires gave easy control over the main ports and their duties. This meant the total of all other provinces' fiscal revenues did not match that of Buenos Aires. The

⁴²⁵ There is also the resource-curse argument to consider, as resource booms are only beneficial to development in states with reasonably good institutions. See: Mehlum, H., K. Moene, et al. (2006). "Institutions and the Resource Curse." *The Economic Journal* **116**(508): 1-20. See also discussion in Chapter One.

⁴²⁶ These figures are from an interview in January 2005 with Carlos Saravia Frías, the Argentine Undersecretary of Mining in Fernando de la Rúa's government from 1999-2001.

⁴²⁷ Cortés Conde, R. and G. T. McCandless (2001). *Argentina: From Colony to Nation - Fiscal and Monetary Experience of the Eighteenth and Nineteenth Centuries. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century*. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p., pp.380-387

Constitution of 1853 and the Pact of San Nicolás (1853-61) introduced fundamental reforms in the nation's finances, and were essential in making the Argentine nation-state a viable project.⁴²⁸ The Pact converted the Buenos Aires customs house into national property and abolished the alcabalas. These reforms were delayed until 1862 by the rebellion of Buenos Aires.⁴²⁹ Experience quickly proved that only the revenue of the Buenos Aires' Customs House was capable of providing a solid enough base for financing national government.

Table 3.1

War Expenditure of the first three national Argentine administrations:

Presidency	% of Income	% of Expenditure
Mitre, 1860-68	70	58
Sarmiento, 1869-74	55	38
Avellaneda, 1875-80	53	42

(Cortés Conde and McCandless 2001), p.397

Nonetheless consolidation was an ongoing process, one that was not complete until 1880. The lack of final consolidation in the institutional environment by the early 1860s can be seen in heavy ongoing war expenditures. War continued to be the dominant expenditure of the new federal state, and it was not until the post 1880 period that these could be brought down to a more reasonable level.⁴³⁰ The first national administrations were constrained by the sheer expense of attempting to establish order, along with settling debt from previous wars. As Newton and Llerena observe in 1882: 'The majority of countries have debts whose capital was dissipated in the smoke of battle. The living are condemned to pay the debts of the dead! Death is not a redemption!'⁴³¹ Newton and Llerena were Argentines who were amazed by the ability of the Australian colonies to use public credit for the provision of public goods, as in their Argentine experience public credit had only been a tool for waging war. The difficulties of

⁴²⁸ Ibid., pp.392-397; Oszlak, O., A. Fontana, et al. (1982). *La formación del estado argentino*. Buenos Aires, Republica Argentina, Editorial de Belgrano., pp.71-84. See also Halperín Donghi, T. (1982). *Guerra y finanzas en los orígenes del estado argentino (1791-1850)*. Buenos Aires, República Argentina, Editorial de Belgrano.

⁴²⁹ See Chapter Two for greater detail.

⁴³⁰ For further detail see Section IV under 'Who Received?'

⁴³¹ Newton, R. and J. Llerena (1882). *Viajes y Estudios de la Comisión Argentina sobre la Agricultura, Ganadería, Organización y Economía Rural en Inglaterra, Estados-Unidos y Australia*, Comisionados por el Exmo. Gobierno de Buenos Aires., Vol. VIII, pp.112-5

achieving national consolidation and order made it hard to build the new nation-state's credibility and fiscal institutions. Only when the initial public good of peaceful order was achieved could the state afford to provide greater public goods and begin to build credibility.⁴³²

An early and unfortunate feature of Argentine fiscal institutions was a persistent recourse to seigniorage as a fiscal resource, or inflation taxation, which often undermined Argentine state credibility. It emerged as early as 1826 as the primary means for financing fiscal deficits in Buenos Aires.⁴³³ Inflation taxation was both cause and effect of a lack of state credibility from the early nineteenth century, and was not fully extinguished as a fiscal resource until the early 1890s, in the aftermath of the Baring Crisis. The Baring Crisis was sparked by a sudden change in the Argentine fiscal regime in 1889, when the state effectively defaulted on its debt by paying part of the gold denominated debt with paper pesos. Paolera and Taylor find it difficult to find any economic rationale for this decision, and that the state acted irrationally.⁴³⁴ The Baring Crisis was a watershed for Argentine fiscal institutions, and over the following half century Argentina maintained orthodox fiscal policies of budget balance as part of an adherence to the gold standard.⁴³⁵ This period inspired the title of Della Paolera & Taylor's book Straining at the Anchor, to describe the end of seigniorage as a fiscal resource. This was also the period when Argentina converged upon the then developed world. Seigniorage re-emerged as a fiscal resource in the 1940s, enabled by the end of the gold standard and institutional changes in the 1930s.

Argentine fiscal institutions remained relatively undeveloped in the early twentieth century, despite the end of seigniorage as a fiscal institution and a long period of considerable economic development. They were little developed for the level of progress that Argentina had achieved economically, as Jèze observes in 1923 near the

⁴³² The difficulties of establishing a peaceful national order can be seen in the ongoing post-Iraq war situation. The US, with seemingly unlimited resources, may still not succeed in establishing a peaceful national order there after many years of effort and vast expenditure.

⁴³³ Irigoin, M. A. (2003). Macroeconomic aspects of Spanish American Independence: The effects of fiscal and currency fragmentation, 1800s-1850s. The 63rd Annual Meeting of Economic History Association, Nashville, Tennessee., p.25-6 See also Amaral, S. (1988). "El descubrimiento de la financiación inflacionaria. Buenos Aires, 1790-1830." Investigaciones y Ensayos 37: 379-418.

⁴³⁴ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., p.90, 94

⁴³⁵ Ibid., pp.193-195

peak of convergence: 'the [Argentine] Republic does not have finances that reflect its national economy. There is a profound and radical opposition and contrast between Argentina's economic "prosperity" and the chaos of its public finances.'⁴³⁶ The Argentine state had yet to realise that 'the budget ... is a programme of government.'⁴³⁷ As a result Argentine fiscal institutions were feeble, which was the principal cause of persistent budget deficits. Jèze sums up: 'The national fiscal system in Argentina is bad ... It lacks all the essential conditions of a good system of taxation.'⁴³⁸ Avellaneda also observes in 1928 that 'In the most advanced nations the budget constitutes the most serious act of political and economic life ... However in Argentina ... there is increasing indifference to its study.'⁴³⁹ In the early twentieth century Argentine public finances marched 'to the randomness of events, without calculations or precautions for the future.'⁴⁴⁰ Fiscal revenues were largely secured from excise taxes that fell mainly on urban consumers.⁴⁴¹ Argentine fiscal institutions remained almost entirely dependent upon regressive indirect taxation until the early 1930s, when they began to develop a more sophisticated and lucrative base on the basis of income taxation (introduced in 1932).⁴⁴² There was then a rapid shift from a dependence upon regressive indirect taxation to more progressive direct taxation. Rock calls the period between 1930 and 1946 a 'fiscal revolution'.⁴⁴³ This revolution ultimately proved unsustainable and Argentine fiscal institutions moved in the opposite direction in the postwar period.

Australia

Contrary to what might be argued from a deterministic point of view, Australian fiscal history is not simply a continuation of seemingly "superior" British institutions. Its fiscal institutions are also a product of a unique history. British fiscal control was loose

⁴³⁶ Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., p.19

⁴³⁷ Ibid., p.52

⁴³⁸ Ibid., pp.80-1

⁴³⁹ Avellaneda, N. A. s. o. P. N. A., 1874-80) (1928). Discurso de Presentación por el Académico Doctor Pedro Olaechea y Alcorta. Conferencia de Nuevo Académico Doctor Nicolas A Avellaneda en el acto de su recepción, Buenos Aires, Academia Nacional de Ciencias Económicas., pp.19-20

⁴⁴⁰ Mexía, E. R. (1913). Un Plan de Obras Públicas y de Finanzas. Buenos Aires, Librería Nacional., p.170

⁴⁴¹ Rock, D. (1975). Politics in Argentina, 1890-1930 : the rise and fall of radicalism. Cambridge, Eng., Cambridge University Press., p.4

⁴⁴² See Chapter Five for greater detail.

⁴⁴³ Rock, D. (1987). Argentina, 1516-1987 : from Spanish colonization to Alfonsín. Berkeley, University of California Press., p.222

from the beginning. Britain never established firm fiscal control in Australia, and it is highly unlikely that the British Treasury or Parliament ever knew what the rate of return was for establishing the colony of NSW.⁴⁴⁴ Despite the establishment of the colony of NSW in 1788, it was not until 1819 that the British Parliament finally legalised taxation in NSW. This was almost twenty years after such taxes had actually been introduced.⁴⁴⁵ Nonetheless Australia did not face the obstacles that Argentina did in having to develop both state credibility and fiscal institutions largely from scratch in an atmosphere of civil war and disorder. British institutions played an important role in the examples they set (e.g. the establishment of income taxation over the first half of the nineteenth century), and were clear and obvious role models for Australian institutions. Yet it would be a mistake to see the success of Australian institutions as being determined simply by their British inheritance. Australian fiscal institutions developed within an environment quite different to Britain.

As a convict colony, Australia initially lacked a taxation base as the state appropriated all production, controlled all imports, and gave all needed supplies to soldiers and prisoners. Taxable wealth did not begin to appear until the end of the eighteenth century. The first tax was a Gaol Fund to finance a new prison, as the former one had burned down. When voluntary contributions proved insufficient the Governor resorted to an import tax (largely on alcohol).⁴⁴⁶ Shortly afterwards an Orphan Fund was introduced, also heavily reliant on taxing alcohol, to fund an orphanage for the colony's many abandoned children. These temporary taxes long outlasted their original purposes; the Gaol Fund was converted into the Police Fund and the Orphan Fund into a fund for education and relief.⁴⁴⁷ The first Australian taxes were indirect funds explicitly earmarked for the provision of specific goods but quickly evolved into taxes for more general public goods (i.e. from the construction of a prison to law and order, and from building an orphanage to education and relief). The first Australian taxes quickly became explicitly limited to the provision of basic public goods. Indirect taxation in customs and excises continued to expand and was the predominant source of taxation

⁴⁴⁴ Butlin, N. G. (1985). What a way to run an empire, fiscally. Working papers in economic history : no.55. Canberra, Australian National University: 68., pp. 3, 8, 39-41

⁴⁴⁵ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.2

⁴⁴⁶ Ibid., p.3

⁴⁴⁷ Ibid., see endnote on p.12

until at least World War I (WWI). Such taxation was largely regressive in nature, with much of the burden borne by the workers' pleasures of alcohol and tobacco.⁴⁴⁸

Australian fiscal institutions underwent a crucial period of change in the first half of the twentieth century, moving from indirect and regressive taxation to direct and progressive taxation, better capable of delivering greater revenue more equitably and elastically. Important innovations were made in Australian fiscal institutions in the 1930s, which moved the long run revenue base away from indirect taxation on trade to direct taxation of income.⁴⁴⁹ The change that occurred in Australian fiscal institutions during the interwar period can be seen in the different ways the two World Wars were financed. World War I was financed primarily through debt, which increased the tax burden indirectly. World War II (WWII) was much more dependent on taxation and an increase in federal taxation powers.⁴⁵⁰ The 1930s Depression led to a widespread recognition in Australia that market forces alone had failed to correct themselves, an attitude that was maintained into the postwar period.⁴⁵¹ Australian fiscal institutions also became increasingly centralised over the first half of the twentieth century. Federation in 1901 meant the individual colonies (now States) lost their powers of taxation over customs and excise, the most significant sources of revenue. This trend of fiscal centralisation continued when the states also lost their ability to raise income taxation from 1943.⁴⁵²

The shift from indirect to direct taxation succeeded and expanded via the ideology of nationalism and national emergency represented by the World Wars, and the traumatic experience of the Great Depression. These events were manipulated to justify the concurrent shift in fiscal institutions. Australia had both a traumatic experience of the Great Depression, as well as direct and large participations in the World Wars. The World Wars provided a particularly large ideological base of nationalism to overcome any remaining barriers to collective action via the state. They served to strengthen state

⁴⁴⁸ Ibid., p.5-6

⁴⁴⁹ Barnard, A. (1985). Australian Government Finances: A Statistical Overview, 1850-1982. Working Papers in Economic History; no.59. Canberra, Australian National University: 48., p.34-6

⁴⁵⁰ Ibid., p.2

⁴⁵¹ Groenewegen, P. D. and B. J. McFarlane (1990). A history of Australian economic thought. London ; New York, Routledge., p.130

⁴⁵² Barnard, A. (1985). Australian Government Finances: A Statistical Overview, 1850-1982. Working Papers in Economic History; no.59. Canberra, Australian National University: 48., p.32, 37

credibility and fiscal institutions, rather than weaken them. In this regard it was convenient that the World Wars were mostly located overseas. These experiences led to a considerable and widely accepted increase in the scale of Australian state economic involvement, as they did elsewhere. The experience of other developed countries was a similar dramatic increase in state extractive power on like ideological bases. These events combined with the increasing acceptance of Keynesian ideas, legitimating the state's much larger economic role. As Argentina did not participate in the World Wars, and its experience of the Great Depression was exceptionally mild, the opportunities to greatly increase the state's economic role might have been more limited. Nonetheless the Argentine state was successful in increasing the state's economic role in this period, and Peronism was a national ideological phenomenon that could have been used to transform fiscal institutions more positively. The Argentine state's economic role and extractive power began to increase in the 1930s, gaining considerable pace under Perón in the 1940s and 1950s. Argentina and Australia both experienced a shift in their fiscal institutions from indirect to direct taxation, but Argentina failed to sustain this shift, driving much of the postwar divergence in both fiscal institutions and development.

II Broad Brushstrokes – State Capture and Penetration of the Economy

An indicator of state credibility is the size of fiscal institutions relative to the economy. Weiss and Hobson find that an index for state strength (or capacity) is the ability to tax, not the ability to spend.⁴⁵³ They link state strength to development, defining state power as the possession of infrastructural power (the ability to penetrate and extract resources from society and allocate them to desired ends). State strength and capacity should correlate with state credibility, as a stronger more capable state is necessary, if not sufficient, for credibility. State strength and capacity does not sufficiently explain path dependency, as it misses the crucial nexus of collective action between state and society. The analysis of fiscal revenue alone lacks the depth of societal expectations captured by including expenditure discussed below. A strong state is also defined as the ability to extract high amounts of taxation relative to non-tax revenues.⁴⁵⁴ A key difference between strong (developed) and weak (developing) states is their 'extractive

⁴⁵³ Weiss, L. and J. M. Hobson (1995). States and economic development : a comparative historical analysis. Cambridge, MA, Polity Press., p.4-5

⁴⁵⁴ Hobson, J. M. (1997). The wealth of states : a comparative sociology of international economic and political change. Cambridge ; New York, Cambridge University Press., p.234

power', the proportion of society's resources they can extract.⁴⁵⁵ A first indicator of state capacity, and broadly of state credibility, should then be the proportion of revenue to GDP. An increase in this ratio should correlate with an increase in state capacity and credibility. It is important to qualify the historical value of fiscal revenue to GDP, as both the nature and the standard of state interaction in the economy have changed over time. For instance, in the late twentieth century strong/developed states increasingly chose to interact more indirectly with the economy via regulation. This is especially true since 1970, when a new period of state strength emerged where a strong state is one able to 'govern the market'.⁴⁵⁶ State power has become not only the ability to intervene, but also the ability to pick and choose when and how to engage.⁴⁵⁷ The utility of revenue to GDP as an indicator of state credibility declined in the late twentieth century, but as this is the tail end of the comparison it is of little concern. Of more concern is the transformation that occurred in the first half of the twentieth century, when the global (or developed world) standard for state economic interaction increased dramatically. As a result the standard proportion of revenue to GDP for developed countries also increased, which makes the ratio problematic as an indicator of credibility over time.

Snider outlines a potentially useful guideline for the proportion of state revenue to GDP to be expected by the 1980s. He finds that developed countries in the 1980s collected an average of about 30% of GNP in taxation, whereas developing countries collected about 13-14%.⁴⁵⁸ This correlates intriguingly with O'Brien's finding that the British state captured about 15% of national income in 1700, rising to around 30% by 1810.⁴⁵⁹ This was about the time that Britain became the first fiscal state in Europe, as noted previously. By at least the 1980s, and arguably since WWII when the standard for state economic involvement changed, the guidelines appear to be a minimum of 13-14% of revenue to GDP for weak states with low fiscal credibility, and around 30% for stronger

⁴⁵⁵ Snider, L. M. (1987). "Identifying the Elements of State Power - Where Do We Begin?" Comparative Political Studies 20(3): 314-356., p.325

⁴⁵⁶ Weiss, L. and J. M. Hobson (1995). States and economic development : a comparative historical analysis. Cambridge, MA, Polity Press., p.4-7

⁴⁵⁷ Snider, L. M. (1987). "Identifying the Elements of State Power - Where Do We Begin?" Comparative Political Studies 20(3): 314-356., p.321-2

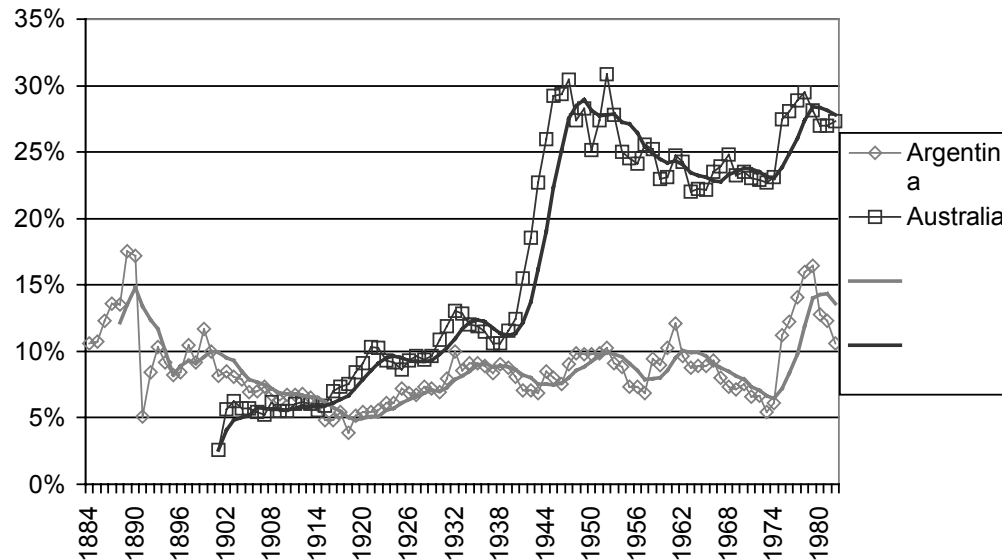
⁴⁵⁸ Ibid., p.325

⁴⁵⁹ O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review 41(1): 1-32., p.6

states with credible fiscal institutions.⁴⁶⁰ Prior to WWII it is less clear what the expectations should be.

Figure 3.1

Federal Revenue to GDP, 1884-1982



Note: The trend lines above are five-year moving averages.

Sources: See Statistical Appendix, Table 3.1a

Argentina and Australia were similar in terms of state credibility until the early 1930s, as measured by the proportion of federal revenue to GDP. World War I began a slow increase in Australian revenue to GDP, and a period of transition is clear from the early 1930s, but the commencement of WWII was when dramatic increase occurred. This trend was not followed by Argentina, which remained at historical levels. Which trend was unusual? The Australian increase in revenue to GDP during WWII was accompanied by a large change in the global standard for state economic involvement that began in the late 1930s with the rise of Keynesian ideas and the experience of the Great Depression. The global standard for state extractive power rose considerably in the mid twentieth century as macroeconomic policies became increasingly acknowledged as legitimate tools of state economic management in the public interest. The Australian increase thus reflects, at least partly, maintenance of the norm of developed states' extractive power. This change in standard also occurred in Argentina,

⁴⁶⁰ GNP and GDP are slightly different, but the statistics for comparing GNP are unavailable.

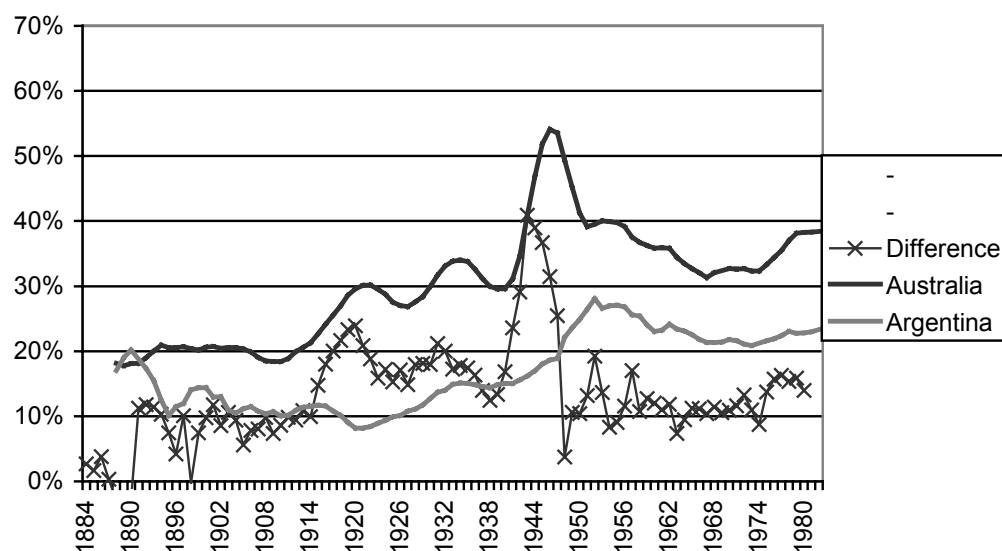
especially with the popularisation of Peronist ideas that promoted intensive state economic interaction from 1946 onwards. Yet this was not reflected in a dramatic increase in the extractive power of the Argentine state, despite a dramatic increase in state activity. This will be seen in the comparison of expenditure to GDP below. The inflexibility of Argentine extractive power in spite of a global increase in the standard for extractive power suggests a decline in state credibility at this time, rather than maintenance. Another substantial decline in Argentine extractive power occurs from the mid 1960s to mid 1970s, to levels unseen since WWI. This decrease in absolute extractive power indicates a further decline in state credibility.

In Australia the postwar period was one of consolidating dramatic gains in extractive power made in WWII. In Argentina the ratio of fiscal revenue to GDP did not break the 10% barrier and move into the 10-15% range until the military dictatorship of the 1970s, approximating Snider's 1987 standard for a weak state-developing country. This limited increase was difficult judged by the amount of volatility and was partly due to the introduction of an important regressive indirect tax, the value added tax (VAT) in 1973.⁴⁶¹ The change in the global standard of state economic participation in WWII muddies the interpretation, but the timing of divergence in fiscal institutions is clear. Argentina was widely considered one of the world's most developed countries prior to WWII, but by the 1980s (if not earlier) the Argentine state's 'extractive power' was similar to the average developing country. The postwar period was also one of divergence in development, when Argentina moved increasingly closer to a developing country standard of development. The contrast from WWII onwards suggests a clear point of divergence between Argentine and Australian fiscal institutions, when Argentine fiscal institutions began to fall behind the increasing global standard of state credibility, one that Australia followed and Argentina did not. For much of the twentieth century Argentine fiscal institutions actually struggled to maintain the level of extractive power achieved in the late nineteenth century, when the standard for state economic involvement was much lower.

⁴⁶¹ Eaton, K. (2001). "Decentralisation, Democratisation and Liberalisation: The History of Revenue Sharing in Argentina, 1934–1999." *Journal of Latin American Studies* 33(1): 1-28.

Figure 3.2

Total Government Expenditure to GDP, 1884-1982



Note: The Argentine and Australian lines above are five-year moving averages.

Sources: See Statistical Appendix, Table 3.2

A comparison of state expenditure to GDP portrays a different picture. The proportion of state expenditure to GDP is less strong as an indicator of state credibility than state revenue. Nonetheless it can be considered an indication of the expectations for state economic involvement and is thus important to state credibility. In this regard the divergence between Argentina and Australia is more episodic. The interwar period from WWI to WWII emerges as a crucial period, as judged by the level of difference between them (see Figure 3.2). The difference in expectations for state economic interaction before WWI and after WWII is fairly constant and similar, and both countries demand more state economic participation after WWII than before. The emergence of Peronism in Argentina leads to a sustained rise in state expenditure to GDP that decreases the difference to roughly what it was before WWI (~10%). Argentine state expenditure was remarkably stable throughout the postwar period at around 20-30% of GDP. Australia entered a similarly stable trend of 30-40%. This should be kept in mind when later comparisons show a strong divergence in fiscal institutions and public credit throughout the postwar period. The divergence in the power of fiscal institutions was not matched by a divergence in expectations of state expenditure. The dramatic rise in Australian revenue during WWII was made necessary by the previous increase in expenditure from

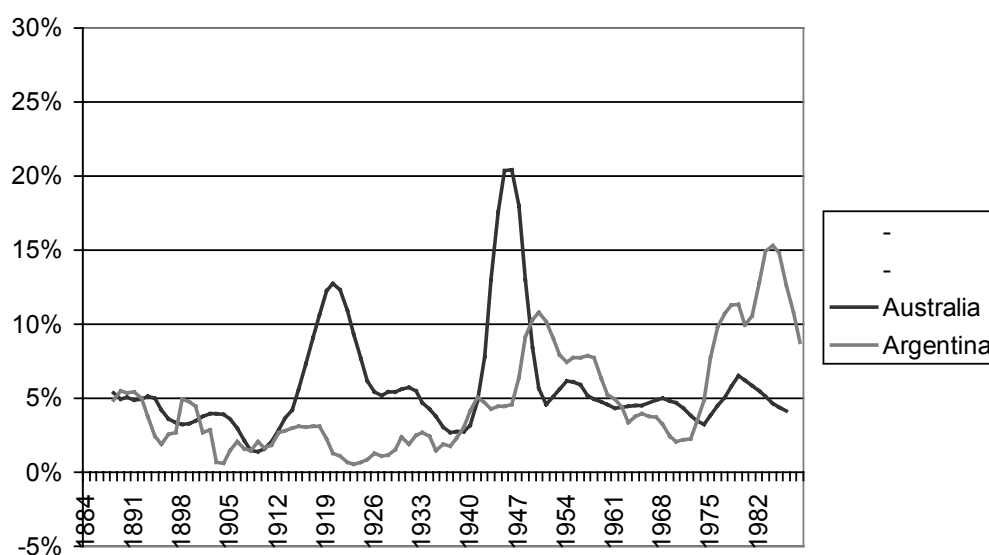
WWI. Argentine revenue in contrast did not adjust to postwar expenditure, maintaining a long period of high and persistent budget deficits instead. The stability of Argentine state expenditure is remarkable considering the lack of underlying extractive power, and is a strong suggestion of how extensively the Argentine state exploited seigniorage to finance the difference.⁴⁶² Australians experienced a much higher level of state expenditure than Argentines, but they were also more willing to pay for it. From the perspective of state expenditure the differences between Argentina and Australia do not appear very large, and there is no indication of the dramatic divergence in development that occurred from WWII onwards.

The proportion of the budget deficit to GDP neatly combines the ratios of revenue and expenditure to GDP analysed independently above. The size of the budget deficit to GDP provides a deeper insight into state credibility. The ratio indicates how much credibility a state lacks within society, and avoids some of the problems inherent in each measure outlined above. The ratio avoids the need for different standards of state economic participation over time, as seen in revenue to GDP. It also avoids the need to adjust for different societies' expectations of state economic participation. In terms of credibility, an increase or decrease in the standard of the state's economic involvement is less important than a society's willingness to pay for that involvement. The budget deficit to GDP ratio neatly contrasts society's demands upon the state (expenditure to GDP) with society's willingness to pay (revenue to GDP), indicating the quality of the contract between state and society.

⁴⁶² See Chapter Four.

Figure 3.3

Budget Deficits/GDP, 1884-1988



Note: The lines above are five-year moving averages.

Sources See Statistical Appendix, Table 3.3

Figure 3.3 begins to illustrate the postwar failure of Argentine state credibility, evidenced by long periods of a high and sustained budget deficit to GDP.⁴⁶³ Within the postwar period the Argentine budget deficit was brought down to reasonable levels only from 1959-72, and further investigation in Chapter Four reveals that this may be understated by a factor of two to three times during this period. Postwar divergence in budget deficits corresponds with the dramatic postwar divergence in Argentine and Australian development. Prior to WWI there is little difference between the budget deficits of Argentina and Australia, which could support an argument that state credibility in both was not significantly dissimilar. In fact from WWI until the mid 1930s, Argentine state credibility appears consistently better than in Australia, when Australia struggled with the expenditure and indebtedness of WWI. The Australian deficit to GDP ratio was remarkably stable throughout the postwar period, averaging just under 5% of GDP until 1975-79, when it jumped to about 6.5%, a period of minor fiscal crisis in Australia.⁴⁶⁴ Disregarding the period of 1959-72, the Argentine budget

⁴⁶³ See Chapter Four for a more detailed discussion of budget deficits as an indicator of divergent state credibility.

⁴⁶⁴ See Chapter Five for further discussion.

deficit averaged over 10% throughout the postwar period, and almost 8% for the entire postwar period. In other words the Argentine budget deficit averaged above the level that caused fiscal crisis in Australia in 1975-79 throughout the entire postwar period. The periods before and after 1959-72 emerge as particularly bad for state credibility, when the state spent well beyond the ability to tax. Juan Perón's presidency of 1946-55 appears as a breaking point with the past, and the beginning of a major failure of Argentine fiscal institutions.⁴⁶⁵ This marked the beginning of a negative path dependency in terms of state credibility. Even more disastrous was the period after 1972, which corresponds with the second Perón administration of 1973-76 and the military dictatorship of 1976-83. While Argentina moved to a negative path dependency of state credibility in the postwar period, Australia moved to a positive path dependency of sustained surplus and minor deficits. Judging by the budget deficit, Argentina and Australia diverged in the postwar period in terms of fiscal institutions and state credibility.

Export Taxation

The history of export taxation is useful to illustrate the experience of crises within Argentine fiscal institutions. This subsection discusses export taxation as a broad measure of state credibility, rather than as an indirect tax per se. During crises in public finance, Argentina has regularly resorted to taxing exports. Such taxation is highly detrimental to an open economy as it discourages export production and reduces foreign exchange earnings.⁴⁶⁶ Furthermore direct taxation of exports, in contrast to their indirect taxation via the imports they generate and allow, has proven more likely to generate poor public goods provision.⁴⁶⁷ As a result direct export taxation is likely a highly inefficient tax. Australia never explicitly resorted to taxing exports, despite its long period of protectionism in the twentieth century. In contrast Argentina has often

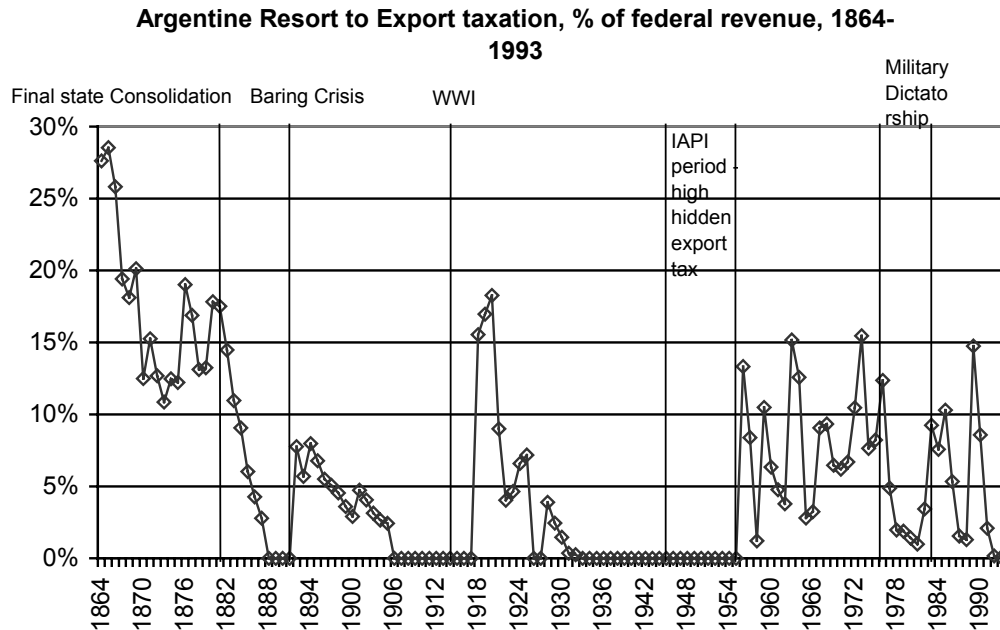
⁴⁶⁵ Reutz notes the remarkable increase in budget deficits during the first Perón administration. Reutz, T. (1991). "Ilusiones Fiscales, dimensión y método de financiamiento del déficit fiscal del gobierno, 1928-1972." Ciclos (año 1) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires 1(1), pp.117-118

⁴⁶⁶ This assumes that exporters are price takers (i.e. the exporting country does not have a very high proportion of world supply), which is a fair assumption for all important Argentine exports over time. As a result export taxation directly reduces export profits and thereby discourages their production.

⁴⁶⁷ Hirschman, A. O. (1992). Rival views of market society and other recent essays. Cambridge, Mass., Harvard University Press., pp.68-9

resorted to export taxation as a stopgap to relieve immediate fiscal emergencies. The history of Argentine export taxation is thus a history of Argentine state and fiscal crisis.

Figure 3.4



Sources: See Statistical Appendix, Table 3.4

A benefit of the Argentine and Australian fiscal comparison is the possibility for greater objectivity than is possible by looking at each alone. This is sometimes lacking in the literature. For instance Paolera and Taylor find Argentina's low and intermittent export taxation to be an implicit tax loophole for the export industry. They find the absence of export taxation to be an unnecessary narrowing of the tax base, a result of the export industry's politically favored treatment.⁴⁶⁸ This ignores not only the highly detrimental economic effects of export taxation in an economy that was then as open as Argentina's, but also misses the role that export taxation actually played. The resort to export taxation did not signal periods of fiscal fairness and compromise in more equal taxation, but rather a failure to find more sustainable and less distorting sources of revenue. A comparison between Argentina and Australia shows that Paolera & Taylor's analysis is misleading. Australia's consistent aversion to export taxation may have been a British

⁴⁶⁸ Della Paolera, G. and A. M. Taylor (2001). *Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935*. Chicago, University of Chicago Press., p.82

institutional legacy, as Britain ceased taxing exports from 1722 onwards.⁴⁶⁹ Yet it would be hard to argue that Australia's continuing lack of export taxation over the twentieth century was due to the export industry's domination of the political system, as the Australian Labor party regularly shared control of government from the early twentieth century. Instead of the Paolera-Taylor conspiracy, the periodic resort to export taxation in Argentina reflected not only the underlying political weakness of Argentine exporters, but also the weakness of Argentine fiscal institutions. Figure 3.4 also greatly understates effective Argentine export taxation from the mid 1940s to mid 1950s, when IAPI used multiple exchange rates and price controls to extract effectively heavy export taxation. Figure 3.4 shows the coincidence between export taxation and Argentine fiscal crises. Almost the entire postwar period emerges as a long fiscal crisis.

Exports were highly taxed at various times in Argentine history. The periods of export taxation were all periods of fiscal stress. Four crisis periods emerge in particular: 1) prior to full state consolidation in 1880; 2) the Baring Crisis in the early 1890s; 3) from 1917 to the mid 1920s (WWI and initial Radical rule); 4) from the mid-1940s until convertibility in 1990, with a brief respite during the military dictatorship of 1976-83. These periods were all periods of fiscal crisis and/or weak fiscal institutions. Prior to the state's full consolidation there was often a scramble for resources. The Baring Crisis introduced sudden demands for revenue as public credit suddenly became unavailable. World War I introduced a major fiscal challenge, as the backbone of Argentine fiscal institutions (customs duties on imports) suddenly and dramatically decreased as a consequence of declining trade. The resort to export taxation begun in 1918 was due to the immediate failure of the government to introduce income taxation.⁴⁷⁰ This was followed by fiscal infighting through the 1920s, when the government was unable to introduce income taxation or successfully pass a new budget from 1923 until 1930.⁴⁷¹ The first military coup in 1930, and the restoration of the ability to pass budgets, as well as the introduction of income taxation in 1932, quickly saw an end to export taxation. The fourth period begins in the mid 1940s with the heavy indirect export taxation via IAPI's monopoly buying board. This initially began as part of a deliberate import

⁴⁶⁹ O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review 41(1): 1-32., p.24

⁴⁷⁰ Montequin, A. (1995). "Sector publico y sistema tributario argentino, 1914-1932." Ciclos (año 5) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires 5(9)., pp.148-151

⁴⁷¹ See later chapters for further discussion.

substitution strategy whereby exporters were to fund the transition to greater autarchy. By the mid 1950s export taxation likely reflected wider fiscal crisis, as income taxation became increasingly less viable. The military dictatorship of 1976-83, which intended to increase export production, was nonetheless unable to completely remove the stumbling block of export taxation. It was not until the early 1990s when dramatic economic reforms were enacted that export taxation was finally removed, but this has proven a brief respite. Export taxation was re-introduced in 2002 in the wake of another fiscal crisis, when the state was cut off from external public credit. Export taxation has been an excellent indicator of Argentine fiscal stress and weakness. In 1891 export taxation was introduced as a “temporary” measure. The failure of Argentine fiscal institutions has become ever deeper in the interim. The “temporary” export tax introduced in 2002 was recently reported to represent the entire fiscal surplus.⁴⁷²

III Indirect and Direct Taxation

Indirect taxation is relatively easy to collect and enforce, and does not require a high level of state competence nor credibility. Customs (or taxation on trade) is one of the most basic revenue sources that a state can access. The ideal conditions for a high level of customs taxation are a high level of foreign trade and a limited number of waterborne ports, as this means transaction costs of collection are low.⁴⁷³ Both Argentina and Australia in the nineteenth and early twentieth centuries had such ideal conditions. Yet indirect taxation is ultimately limited as a source of revenue and is potentially problematic, as it tends to be both socially regressive and positively correlated with the business cycle. Indirect taxation tends to be regressive as the majority of the burden usually falls upon necessities. The ability of indirect taxation to raise revenue is most effective on goods with low price elasticities of demand (i.e. necessities) and high-income elasticities (i.e. goods consumed by the poor).⁴⁷⁴ Indirect taxation typically falls most heavily upon the less fortunate. In both Argentina and Australia this regressive tendency was further exaggerated by the extensive exceptions granted to relatively

⁴⁷² Seifert, R. (2005). Sugieren medidas para el campo - Las opiniones de la UCR, ARI, y Recrear. La Nación. Buenos Aires: 1, 16.

⁴⁷³ North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press., p.99

⁴⁷⁴ Capie, F. (2001). The Origins and Development of Stable Fiscal and Monetary institutions in England. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p., p.29-30

wealthy primary producers for imported goods related to production. O'Brien argues that indirect taxation is not necessarily regressive.⁴⁷⁵ The incidence and effects of indirect taxation depend upon its design. Unfortunately a non-socially regressive design of indirect taxation is more difficult to administer, requiring a higher level of state credibility and competence. For instance the Australian federal state attempted to increase the progressive nature of Australian indirect taxation in 1940 by introducing a three-tier system of sales taxation that exempted essential items such as food, and taxed luxuries more heavily.⁴⁷⁶ In practice this meant sales taxation became incredibly complex and difficult to administer within a very short period of time. This attempt at more progressive indirect taxation was eventually abandoned. The idea that indirect taxation can be a progressive fiscal tool appears more theoretical than practical. Direct taxation is an easier vehicle for progressive taxation, and became the main focus of fiscal reform in the early twentieth century.

Another problem of indirect taxation is the potentially strong correlation with the business cycle. In a boom indirect taxation is typically high, as the expenditures on which indirect taxation is levied are also high. This encourages an increase in state expenditure that typically reinforces the boom, at a time when state expenditure is likely to crowd out private expenditure. In a recession the opposite occurs, and states are typically deprived of resources when their expenditure is most required. Once again this depends upon the design of indirect taxation, as the exact relationship with the business cycle is determined by the administrative details.⁴⁷⁷ Yet the difficulty experienced by even the most credible states of saving in the present for future expenditure suggests that de-linking the effects of indirect taxation from the correlation with the business cycle may also be more theoretical than practical. The correlation between indirect taxation and the business cycle generally hinders a state's ability to positively interact in the economy, especially if the state is largely dependent upon it.

The primary advantages of direct taxation are that it largely avoids the two main problems of indirect taxation outlined above: 1) it has greater potential to be socially

⁴⁷⁵ O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review 41(1): 1-32., p.12

⁴⁷⁶ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.69

⁴⁷⁷ Daunton, M. J. (2001). Trusting Leviathan : the politics of taxation in Britain, 1799-1914. Cambridge, UK ; New York, NY, Cambridge University Press., p. 13

progressive, i.e. fairer; and 2) it is less directly linked to the business cycle, better enabling the state to positively interact in the economy. The primary example of direct taxation is income taxation, which is typically designed to be socially progressive so that taxpayers pay an increasing proportion of their income in tax as their income increases. If effective, the wealthy pay a larger proportion of their incomes in taxation. As the wealthy gain from state collective action that fosters development, and their marginal value of wealth is the lowest, such progressive taxation appeals to equity and economic efficiency. The better ability of progressive taxation to tax wealth of low marginal value contrasts with regressive indirect taxation, which often taxes wealth of high marginal value. The greater constancy of direct taxation also enables the state to better plan revenues and expenditures. The primary disadvantages of direct taxation are that it is much more dependent: 1) upon the cooperative will of the population to pay, and thus upon state credibility; and 2) upon the administrative capabilities of the state to assess and collect direct taxation and punish nonpayers. These disadvantages are largely overcome as state credibility increases. Direct taxation is more difficult for a state to achieve, but once achieved direct taxation helps states more positively interact in the economy, further increasing their credibility.

And Democracy ...

The two problems of indirect taxation become increasingly difficult to bear as democracy increases. The first problem is the regressive tendency. As institutions become more democratic, the power over fiscal institutions increasingly passes to the poorer masses. They will likely favour a redistribution of the fiscal burden away from themselves and onto the wealthy minority, which they should be able to achieve through greater democracy. The clearest way of passing their high fiscal burden in indirect taxation is via direct taxation of that wealthy minority. As long as the affluent classes continue to respect democracy, perhaps via a reasonable stake in it, this should increase the amount of social consensus and further development through a more lucrative state. The second problem of indirect taxation is the strong correlation with the business cycle. As democracy increases, the masses tend to demand that the state moderate the business cycle in order to provide fuller employment. Democracy may lead to popular calls for greater state economic interaction, and thus greater expenditure. In the first half of the twentieth century this was paralleled by the rise of Keynesianism. If the state is to

manage the economy and moderate the business cycle so as to provide maximum employment and ameliorate recessions (typically highly desired public goods), it requires more reliable sources of revenue than indirect taxation. The state's fiscal institutions cannot remain dependent upon the whims of indirect taxation, which usually reduce the state's ability to act during a recession. Increasing democracy should thus lead away from indirect to direct taxation. Democracy itself should reinforce the process as it is usually positively associated with state credibility, as more democratic institutions are more likely to adjust revenue and expenditure to society's desires.

The ideas that indirect taxation is regressive and incompatible with democracy, and that taxation should be just are not new. An example below is from Gaston Jèze, a well-respected political economist of the early 1920s, who observes the undemocratic, unjust and regressive nature of Argentine fiscal institutions that were based upon indirect taxation. He presciently predicts that a continued reliance upon indirect taxation could ultimately undermine Argentine state credibility:

‘Not only does the Argentine fiscal system lack elasticity, but it is also in contradiction with the ideal of “justice” that prevails in democratic states. As a whole and in detail, it is “antidemocratic”. Consumption taxes [i.e. indirect taxation] fall heavily on the poorest classes of the nation. ... [The Argentine fiscal system] favours the rich and wears out the least fortunate. ... If the ideal of social democratic justice is not observed, the Argentine Republic will experience political shakeups; at the current time it is not possible to deny the ideals of democratic justice without provoking socially grave disturbances.’ (Jèze 1923), pp.80-83

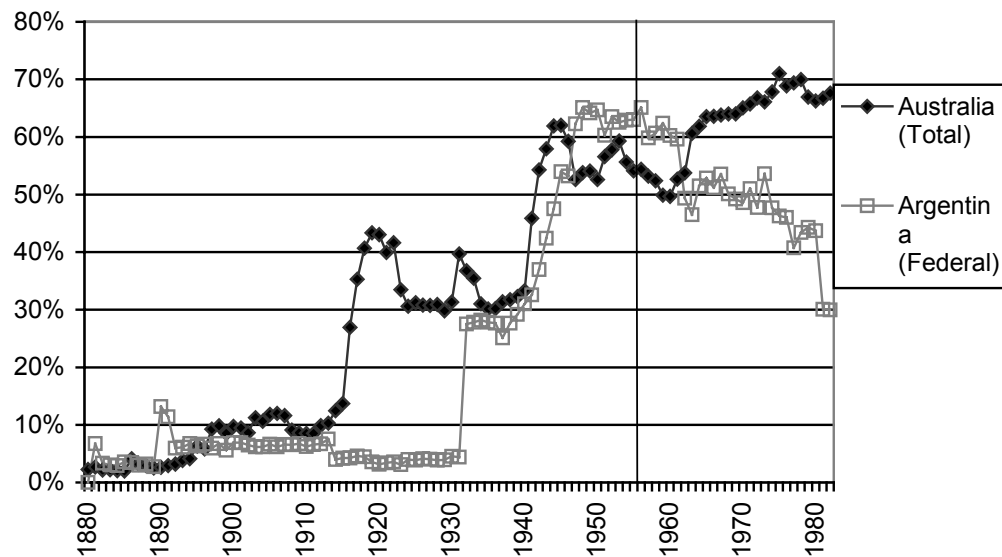
Argentine democracy failed to fulfil ‘the ideal of social democratic justice’ and establish direct progressive taxation before experiencing the ‘political shakeup’ of a military coup in 1930 that was to have long-term ‘socially grave’ consequences.

& Reality ...

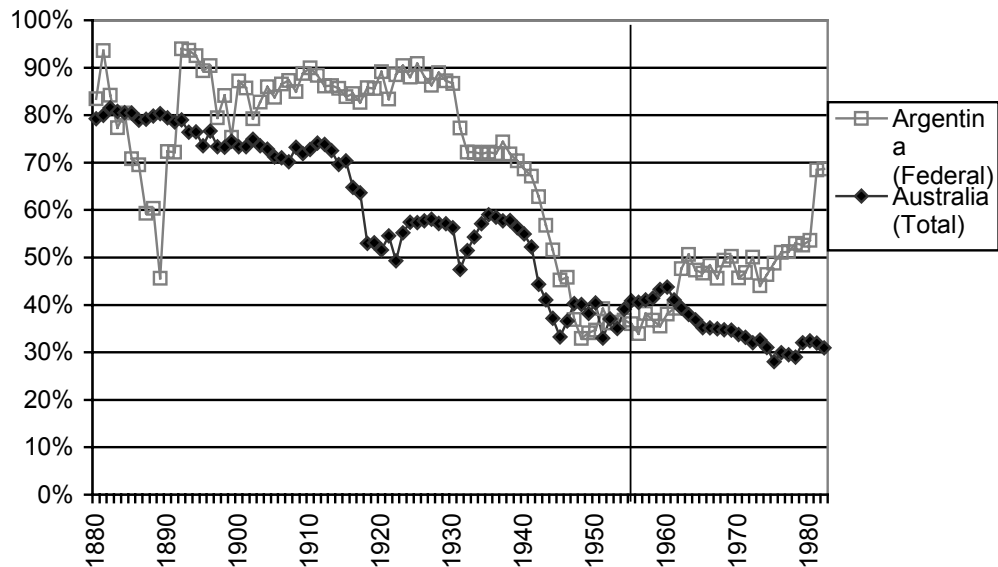
Figures 3.5 and 3.6 compare the historical experiences of direct and indirect taxation in Argentina and Australia, and were constructed from a wide variety of sources.

Figures 3.5 and 3.6

Direct Taxation as a % of State Revenue, 1880-1982



Indirect Taxation as a % of State Revenue, 1880-1982



Sources: See Statistical Appendix, Tables 3.7 and 3.8

Argentina and Australia were new and burgeoning democracies in the early twentieth century. Australia federated as a democratic state in 1901 and shortly became one of the first countries to elect a Labor government in 1904. Argentina also moved to a fuller

democracy with the democratic reform of Sáenz Peña in 1912, which became effective from 1916. Argentina and Australia should thus have increasingly moved from indirect to direct taxation as they developed their economies and fiscal institutions. As can be seen above, this was the general trend until the mid twentieth century, continuing in Australia but reversing in Argentina. The dividing line used in each Figure is 1955. Argentina conforms to expectations except for the period from the early 1930s to the mid 1950s when direct taxation dramatically increased despite a long period of democratic failure. Argentina adopted income taxation in 1932 shortly after the military coup, but late adoption was not due to a lack of prior effort. During the democratic period of 1916-30 numerous attempts were made to introduce income taxation. The revolutionary government of the 1930s also had a solid realisation of the need to provide public works and regulate public finances in order to foster credibility and develop fiscal institutions.⁴⁷⁸ Yet the lack of democratic credentials ultimately hindered an ability to foster credibility. The 1930s regime was proud of the public works achieved, and conscious of the need to publicise them. Yet the lack of greater democratic institutions meant the shift to direct taxation was not embedded and was prone to reversal.⁴⁷⁹ Figures 3.5 and 3.6 suggest Argentina suffered such a reversal from around the mid 1950s. This followed the highly socially conflictive democracy of Perón from 1945-55, which was accompanied by the re-emergence of seigniorage as a fiscal institution after a long absence. The reversal from a dependence upon direct back to indirect taxation paralleled divergence in development.

The rise and decline of direct and indirect taxation did not exactly coincide with the rise and decline of Argentine democracy, as income taxation succeeded shortly after democracy began to fail. Yet the lack of democracy made it more difficult to sustain success in direct taxation. The postwar decline in Argentine fiscal institutions led to increasing budget deficits as the state's ability to tax deteriorated.⁴⁸⁰ Argentine state credibility more closely coincides with the rise and fall of fiscal institutions than with democratic institutions. The dramatic fiscal shift from the mid 1950s was preceded by a decline in state credibility during the increasingly socially conflictive era of 1930 (the first military coup) to 1955 (the second military coup). Argentina's postwar return to

⁴⁷⁸ See discussion in next chapter.

⁴⁷⁹ See Chapter Five for a discussion on income taxation in this regard.

⁴⁸⁰ Díaz Alejandro, C. F. (1970). *Essays on the economic history of the Argentine Republic*. New Haven,, Yale University Press., p.134

indirect taxation was less auspicious than the former dependence upon indirect taxation, as Argentina had become a much less open economy in the meantime. This meant the return to indirect taxation was less efficient than before, as trade provided fewer opportunities for indirect taxation. The Argentine shift back to indirect taxation made it more difficult to raise adequate fiscal revenue and thereby provide sufficient public goods.⁴⁸¹ This shift signalled a postwar move to a negative path dependency of state credibility. Australian fiscal institutions in contrast made a long-term transition to a positive path dependency of high credibility during WWII, greatly assisted by the nationalist ideology of the World Wars and greater public goods provision. This enabled a seemingly permanent shift to successful direct taxation and all of its benefits.

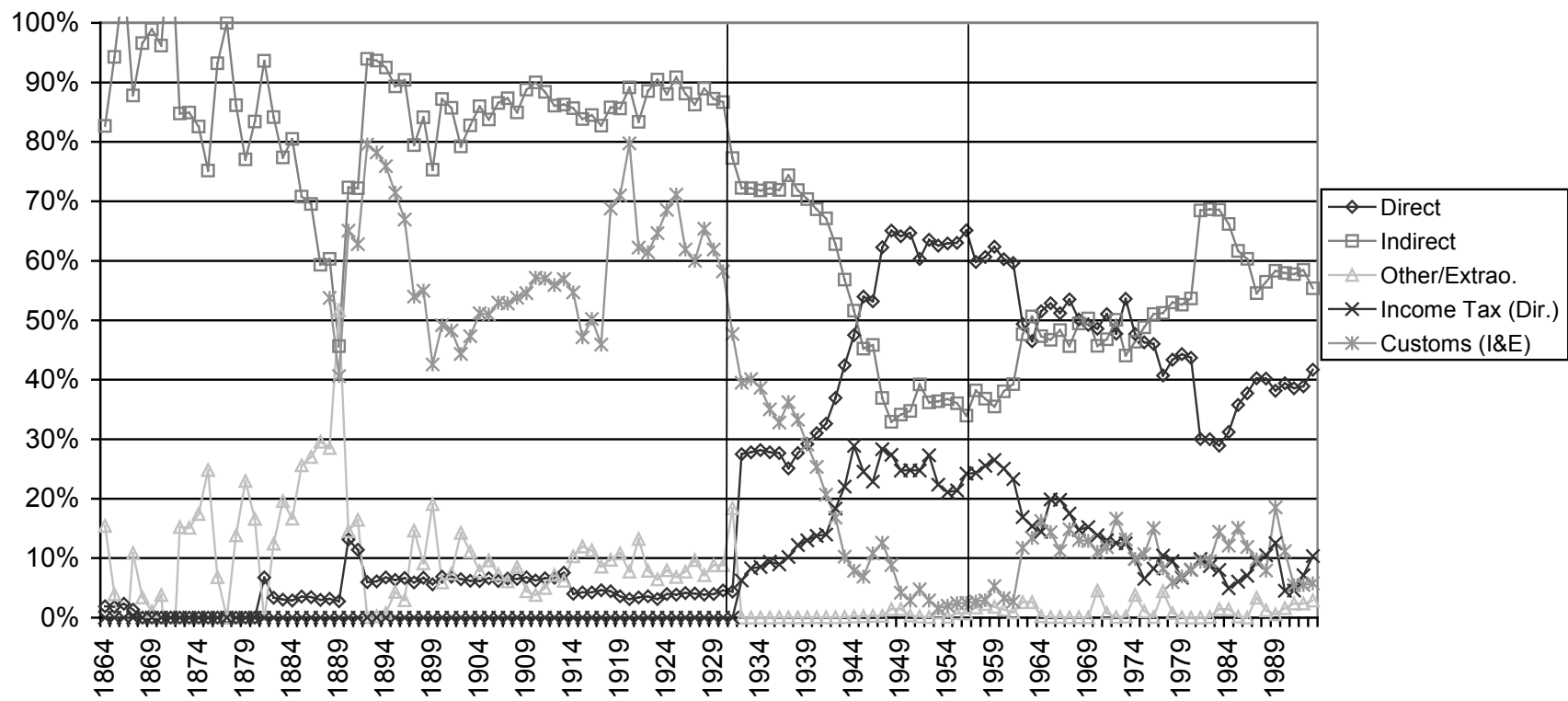
⁴⁸¹ See following chapter for a detailed history of public goods provision.

IV Revenue Base Development

Who Paid?

Figure 3.7

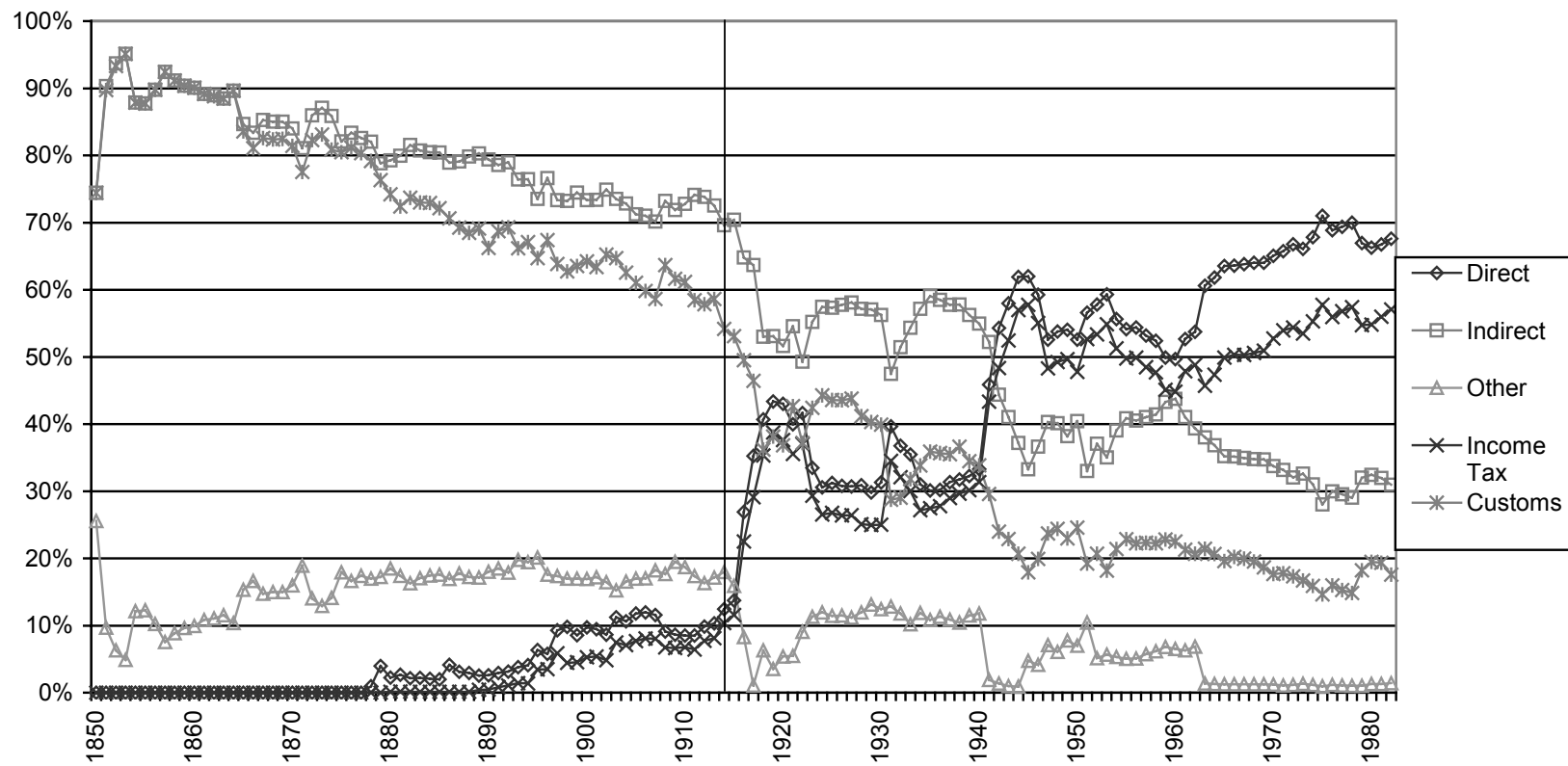
Argentine Revenue Sources, 1864-1993



Sources: See Statistical Appendix, Table 3.7

Figure 3.8

Australia Taxation Sources, 1850-1982



Sources: See Statistical Appendix, Table 3.8

The historical trajectories of Argentine and Australian fiscal revenues give some indication of who paid. They are remarkably similar from the latter third of the nineteenth century to the outbreak of WWI. Both countries were heavily reliant upon indirect taxation, especially customs duties. The key difference in the period prior to WWI is Australia's early development of income taxation in the late nineteenth century (by the individual colonies), which became a significant source of revenue from WWI when the federal state also introduced income taxation. This was part of a slow transition from indirect to direct taxation that began in the late nineteenth century. Argentina also introduced some direct taxation in the late nineteenth century (including the *contribución directa* and a variety of taxes on property and patents), but direct taxation was insignificant until the introduction of income taxation in 1932. Argentina's higher volatility prior to 1889 is partly due to the Barings Crisis, but also due to the lack of specificity in the statistical source for the period 1864-89. From 1864-1914 the average Australian dependence on indirect taxation was about 78% of taxation, which compared to about 85% in Argentina.⁴⁸² In the early twentieth century both were similarly dependent upon indirect taxation, especially customs duties, as their main source of revenue.

The shift from dependence on indirect to more progressive direct taxation begins with WWI in Australia (marked by the line in Figure 3.8). Australia's direct participation in WWI resulted in great fiscal pressure to seek new sources of revenue in what quickly emerged as a fiscal emergency.⁴⁸³ By the end of the war public finances were so poor that the acting Prime Minister and Treasurer, Mr. Watt, was ready to force Australians to lend. He stated in September, 1918 that:

‘The Government has ... decided to introduce legislation requiring all persons to subscribe to war loans in proportion to their means. ... it has been determined

⁴⁸² For Australia this is the average percentage of total taxation and was calculated from: Vamplew, W. (1987). *Australians: historical statistics*. Broadway, NSW, Fairfax Syme & Weldon., pp. 254-85. For Argentina this is the average percentage of federal taxation and was calculated from a compilation of sources: Cortés Conde, R. (1989). *Dinero, deuda y crisis : evolución fiscal y monetaria en la Argentina, 1862-1890*. Buenos Aires, Editorial Sudamericana, Instituto Torcuato di Tella.; Della Paolera, G. (1988). *How the Argentine economy performed during the international gold standard : a reexamination*: viii, 199 leaves.; & Vazquez-Presedo, V. (1971). *Estadísticas históricas argentinas (comparadas)*. Buenos Aires,, Ediciones Macchi.

⁴⁸³ For instance: Mr Joseph Cook (Prime Minister) – ‘no financial genius in the world could carry on the commitments of this Government ... out of the revenue of this country, without further heavy taxation of the people.’ Hansard *Australian Parliamentary Debates*, Parliament of Australia., 11/6/1914, p.2048, V.74

that in so far as subscriptions to any war loan fall short of the amount required, resort must be made to compulsion.’ (Hansard), 25/9/1918, V.85, p.6336.

Fortunately the Australian federal state never had to resort to compulsion and could increasingly turn to the new federal income tax. The equalising ideology of nationalism that was part of Australia’s WWI participation should have greatly helped the shift to income tax.⁴⁸⁴ Income taxes quickly became the second most important source of revenue during WWI, but indirect taxation remained the most important until WWII. In Argentina the shift from indirect to more progressive direct taxation did not occur until the early 1930s (marked by the first line in Figure 3.7). Argentina remained heavily reliant upon customs duties despite the experience of WWI, when duties dramatically declined with international trade. Argentine policymakers long saw the need for an income tax, but proved unable to achieve one until 1932.⁴⁸⁵ Once Argentina achieved, income taxation quickly became a highly important fiscal institution. By the end of WWII in 1945, Argentina and Australia converged in terms of direct taxation as a proportion of revenue. Yet the sources of their direct taxation were not quite the same. Almost all Australian direct taxation was explicitly progressive income taxation, whereas Argentine direct taxation was a mixture of taxes; including taxes on income, inheritance, and social contributions. Of these only income tax was both progressive and significant. Argentine income taxation reached a peak in terms of overall revenue of 29% in 1944. The Argentine shift to progressive income taxation lacked a unifying ideology. On the contrary the *década infame* of the 1930s and early 1940s was highly socially divisive, as was the democratic populist period under Perón. It is nonetheless possible to imagine a different postwar period for Argentine fiscal institutions of continuing convergence, where income taxation continued to increase. As explained previously, income taxation is a good tax for credibility due to a more progressive nature that best fulfils ‘the ideal of social democratic justice.’⁴⁸⁶ Over the latter half of the interwar period Argentina succeeded in closing much of the direct fiscal gap with Australia, and on a largely similar basis of progressive income taxation, but this proved

⁴⁸⁴ An example of such ‘equalising’ ideology is: Mr. Hughes (Prime Minister) – ‘The Government is a War Government. ... it will do whatever is necessary to help win the war. It is not a rich man’s Government, or a poor man’s Government: it is the people’s Government; not a Government for some people, but for all people. ... The Government stands for the development of Australian national spirit on the foundation of Imperial ideals.’, Ibid. 22/2/1917, p.10573, V.81

⁴⁸⁵ See Chapter Five for detailed discussion.

⁴⁸⁶ Jèze, G. (1923). *Las Finanzas Públicas de la Republica Argentina*, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., pp.83-5

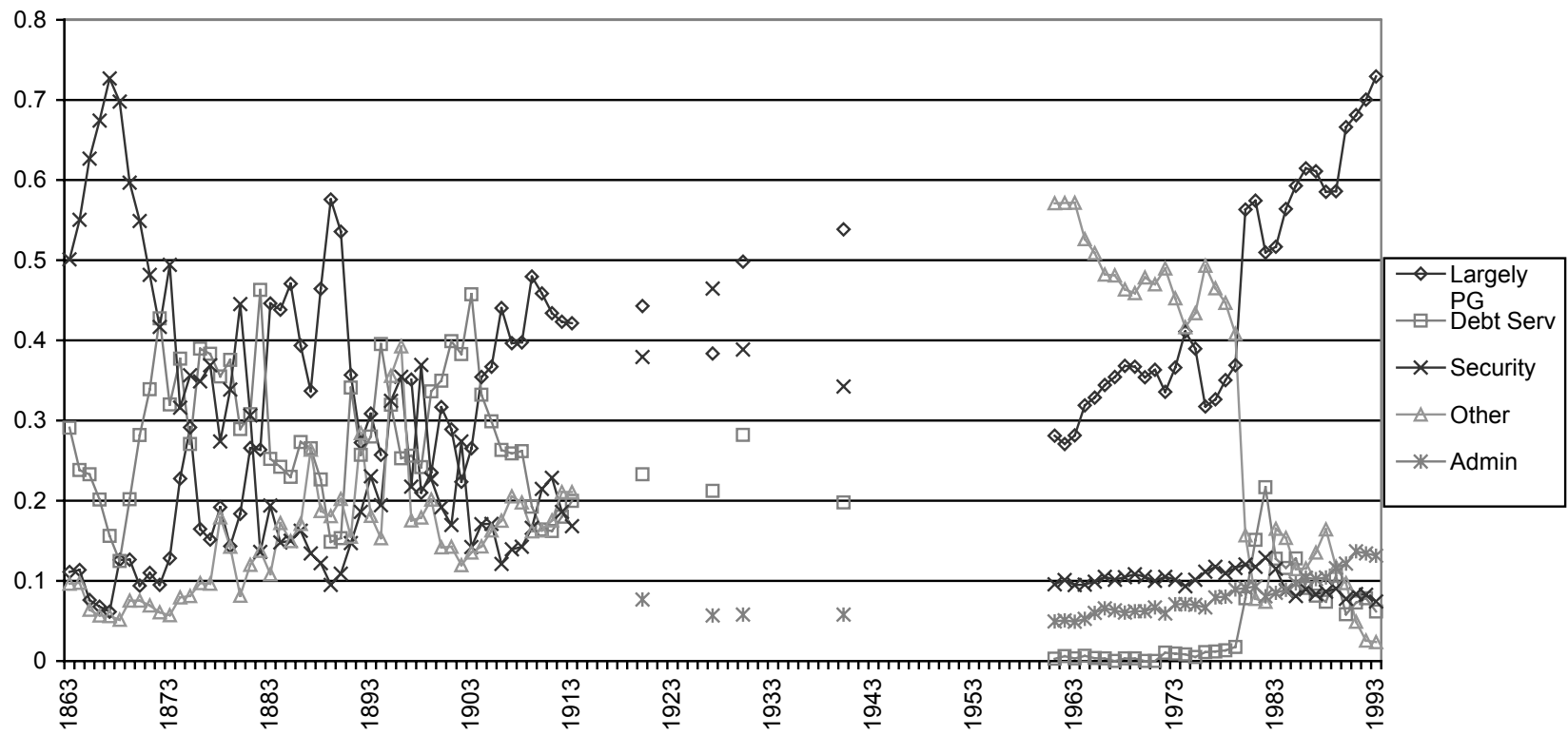
short-lived. The postwar period might have been one of continuing Argentine convergence, but this would have required more successful facilitation of compromise between state and society.

The postwar period emerges as one of clear divergence in fiscal institutions and development. In the latter half of the 1950s Argentina began a remarkable deterioration in fiscal institutions, marked by the second line in Figure 3.7. This reflected a major decline in state credibility and correlates with a general decrease in direct taxation, especially income taxation. In contrast Australia consolidated the success of fiscal development in the immediate postwar period of the mid 1940s to the early 1960s, when direct taxation once again began to increase. This consolidation was built upon income taxation, reflecting high state credibility. The purpose of this chapter is to reveal the political economy expressed so frankly by fiscal institutions by painting a broad fiscal comparison over a long period of time. This has allowed the identification of similarities, differences, and salient features. The key similarity between Argentine and Australian fiscal institutions is the dependence upon indirect taxation prior to WWI, which shows that convergence in development was matched by broadly similar underlying fiscal institutions. Differences in fiscal institutions began to emerge over the interwar period, as Australian federal income tax was successful earlier, but Argentina managed to close the gap in terms of direct and indirect taxation by WWII. In doing so Argentine income taxation was never as important as in Australia, but there appears to be no *prima facie* reason that it could not have become so in time. A salient feature that merits much further investigation in explaining divergence in development from a fiscal institutional perspective is the postwar failure of Argentine income taxation. This was the only significant progressive and socially just Argentine fiscal institution, and thereby a major indicator of state credibility. The divergence in income taxation is investigated much further in Chapter Five.

Who received?

Figure 3.9

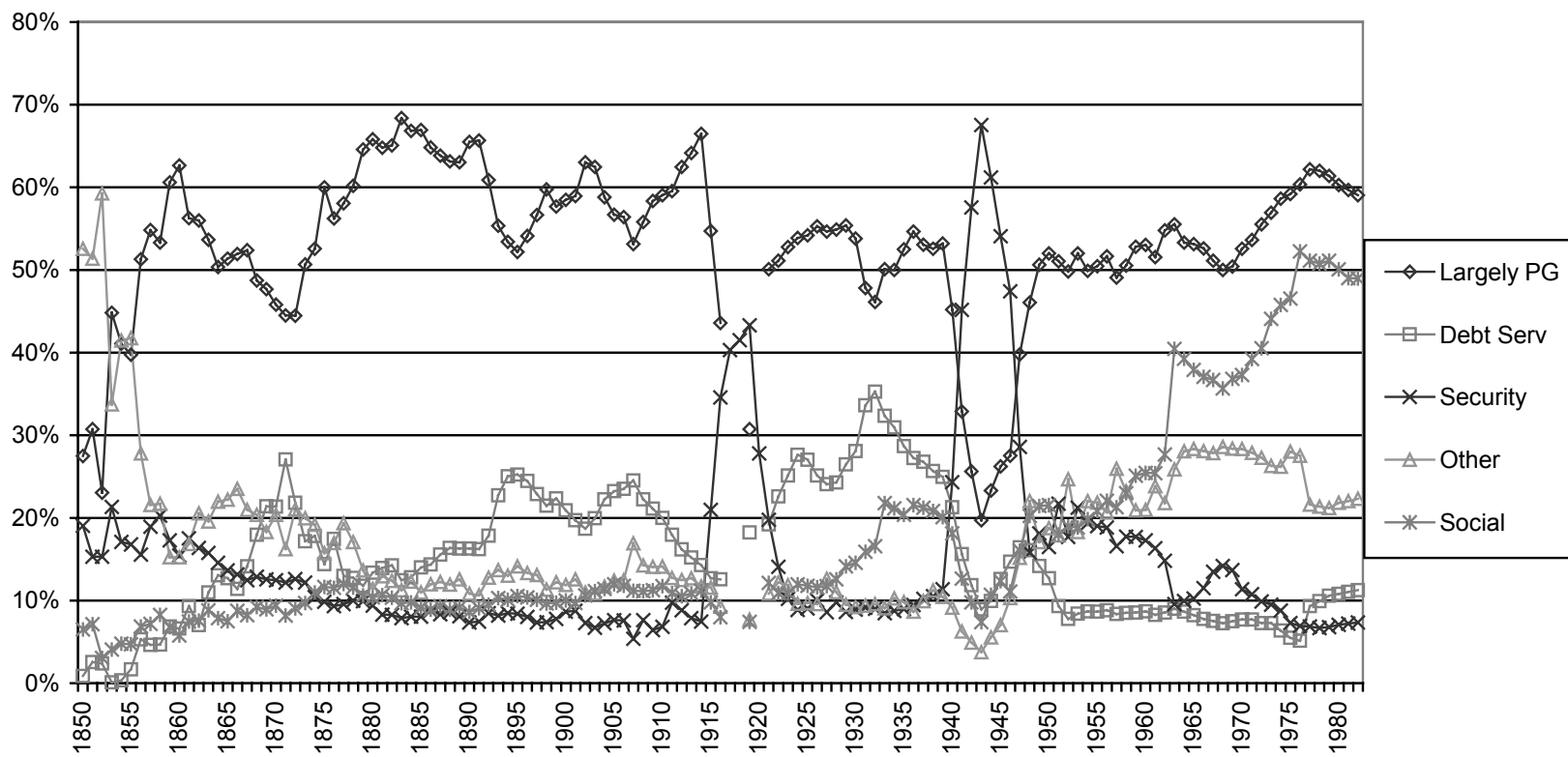
Argentine Expenditure as a % of Total, 1863-1993



Sources: See Statistical Appendix, Table 3.9

Figure 3.10

Australian Expenditure as a % of Total, 1850-1982



Source: See Statistical Appendix, Table 3.10

Figures 3.9 and 3.10 demonstrate the major trends in expenditure from the mid nineteenth century to the late twentieth century in Argentina and Australia. They attempt to portray who received state expenditure, but at a necessarily broad level. Figure 3.9 was constructed from a wide variety of sources and represents the longest known unified composition of disaggregated Argentine public expenditure. Figure 3.10 represents a novel interpretation of the data so that a comparison could be made with Argentina. A large gap remains in the data for much of the Argentine period between 1914 and 1960. Nonetheless there are some points of knowledge within this period to indicate an overall trend. Recalling the theoretical preamble to the chapter, a high level of expenditure on public goods is expected to positively correlate with state credibility, and ultimately enable the collective action upon which development depends. How does this fit with the reality of Argentina and Australia?

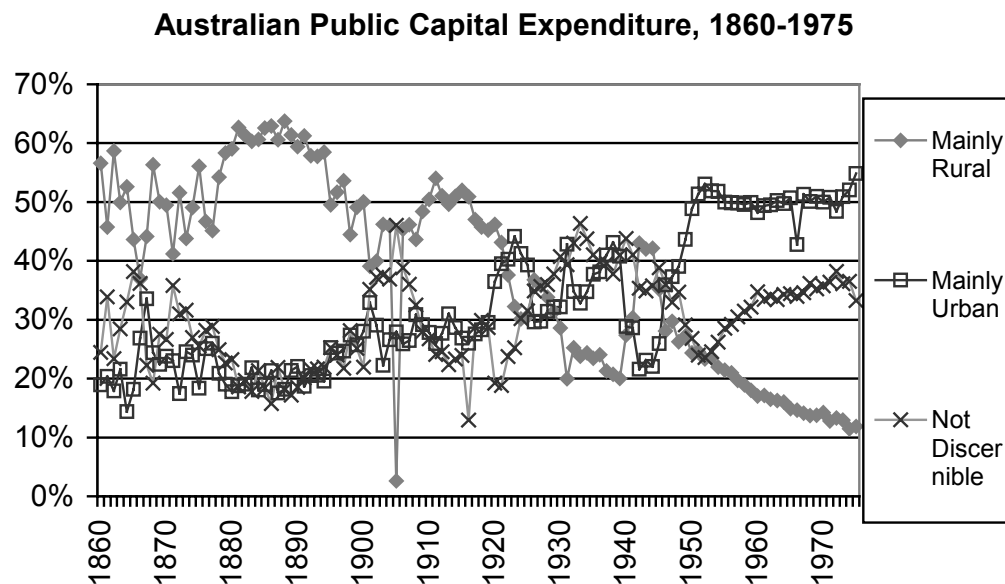
In Australia public goods expenditure was consistently the major end of state expenditure from 1850-1982 and is represented by the ‘largely PG’ line in Figure 3.10.⁴⁸⁷ The only interruptions to this trend were the World Wars. Until the mid twentieth century, the bulk of Australian public goods expenditure went towards enterprises operated by the state, especially railways, roads, and bridges; plus a significant proportion dedicated to social goods such as education. Railway construction was a major focus, as development was widely seen to depend on it. The colonial states constructed and operated railways, postal and telegraph services based on cheap British loans, especially from the early 1870s.⁴⁸⁸ Social expenditure (represented by ‘social’ in Figure 3.10 and disaggregated from ‘largely public goods’) began to increase in the interwar period, and rapidly increased in the postwar period to become the predominant public good; while overall expenditure on public goods remained relatively similar to historical norms in terms of total expenditure. This represented a shift towards the wider urban population in the orientation of public goods expenditure, reflecting the shift in development models then occurring. Increasing social expenditure also reflected a slow move away from state enterprises, which had largely fulfilled their role in enabling

⁴⁸⁷ The definition of ‘largely public goods’ in Australia consists of the following categories: State Enterprise expenditures/capital outlays; social expenditure; primary industries, and other public works. These categories are taken from: Barnard, A. (1985). *Australian Government Finances: A Statistical Overview, 1850-1982. Working Papers in Economic History; no.59*. Canberra, Australian National University: 48.

⁴⁸⁸ Ibid., p.7

initial development. The shift accorded with the expectations of a highly urbanised society in a fuller democratic setting. Australian state expenditure fulfils the expectations of a positive path dependency outlined previously, as significant public goods provision fed into state credibility, enabling more lucrative fiscal institutions and an even greater ability to provide public goods. Overall the Australian state faithfully provided a return to society and taxpayers.

Figure 3.11



Source: (Vamplew 1987)

The location of public goods expenditure, especially in large federal democracies, should influence state credibility. Figure 3.11 discerns the destination of Australian public goods, between rural and urban public goods.⁴⁸⁹ As Australian democracy expanded and shifted in the early twentieth century to the increasingly urban masses, there should have been a corresponding shift in the provision of public goods. Such a shift would have augmented state credibility. Figure 3.11 shows that rural public goods' expenditure clearly dominated until the turn of the century, followed by a mixed period

⁴⁸⁹ The rural categories are: Railways; Ports, Harbours, and Sea Transport; Agriculture, Forestry, and Lands. The urban categories are: Commonwealth Broadcasting, Urban Transit, Housing, Electricity & Gas, Education, Water & Sewerage, Public Buildings, and Miscellaneous (predominantly public buildings and recreation). See Butlin in Vamplew, W. (1987). *Australians: historical statistics*. Broadway, NSW, Fairfax Syme & Weldon.

until WWII, and then a clear dominance of urban public goods in the postwar period. A 1926 report on 'Australian Finance' notes the contemporary shift to urban public goods.⁴⁹⁰ The move from rural to urban likely resulted in a considerable increase in state credibility amongst the majority of highly urbanised taxpayers, helping pave the way for further direct taxation. The increased focus on urban public goods was somewhat diminished by the high levels of debt servicing in the 1920-30s, but this was ameliorated by a concurrent increase in social expenditures. The cities grew rapidly during the 1920s and absorbed much new investment. Public funds were heavily directed towards urban suburbs in roads, power lines, water and waste disposal.⁴⁹¹ Social public goods expanded significantly in the 1930s, and dramatically in the postwar period such that they were the dominant component of public goods by the early 1960s. In the postwar period increasing public expenditure could easily expand, as increases in taxation met little electoral opposition.⁴⁹² This suggests the state achieved a high level of credibility, sufficient to push Australia along a positive path dependency of state credibility and development. The Australian experience conforms to theoretical expectations. Originally Australia was based on rural primary exports, upon which the economy and tax revenues were based, and towards which the state directed public goods expenditure. As Australian democracy became more established and the population became more urbanised, the revenue base shifted towards the urban democratic base, along with more social public goods provision. The shift in public goods provision helped consolidate high state credibility.

The Argentine experience of state expenditure contrasts starkly with Australia. The Argentine state only periodically spent a large proportion of expenditure on public goods, and this was rarely predominant.⁴⁹³ Prior to the early 1880s the process of state

⁴⁹⁰ Cooke, S. R. and E. H. Davenport (1926). Australian Finance, Dedicated to the Imperial Conference 1926, Pelican Press., pp.19-21

⁴⁹¹ Macintyre, S. (2004). A concise history of Australia, Cambridge, UK ; New York, Cambridge University Press., p.171

⁴⁹² Barnard, A. (1985). Australian Government Finances: A Statistical Overview, 1850-1982. Working Papers in Economic History; no.59. Canberra, Australian National University: 48., p.42-3

⁴⁹³ The definition of what is considered 'largely public goods' in Argentina varies. For 1863-90 it is the Interior Ministry and Public Education. See Oszlak, O. (2004). La formación del Estado argentino - Orden, progreso y organización nacional. Buenos Aires, Ariel. For 1891-1913 it is the expenditure of the Interior Ministry. See Della Paolera, G. (1988). How the Argentine economy performed during the international gold standard : a reexamination: viii, 199 leaves. From 1920 onwards it includes: education, health, social security, welfare, housing, employment, agriculture, public buildings, and infrastructure. See Vegganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-

consolidation is clearly visible, with security as the leading expenditure due to the clear and immediate need to establish public order. Debt servicing was also high, but much of this was actually delayed security expenditure as a great deal of debt had been contracted for that purpose. Thereafter a short period of high public goods expenditure emerged until the Barings Crisis of the early 1890s. Security and debt servicing then predominated until the early twentieth century when public goods expenditure once again took the lead. This period may last until about the mid 1940s, but the few points of data show that public goods competed closely with security, a surprisingly high priority for a country not at war.⁴⁹⁴

Sometime between 1940 and 1960 there was a very large decline in public goods expenditure and a great increase in unknown 'other' expenditure. As the experience of direct and indirect taxation showed previously, there was a concurrent decline in fiscal institutions from the mid 1950s. The increase in unknown 'other' expenditure suggests that public goods provision declined in quantity and/or quality, which would have undermined state credibility and fuelled fiscal decline. First hand observers describe such an occurrence. In 1955 Raúl Prebisch describes a major decline in the quantity and quality of public goods, especially roads, sanitary works, and ports.⁴⁹⁵ The Argentine state even resorted to legislating 'secret expenditures' in 1956 (no. 5315, March 22, 1956).⁴⁹⁶ This could have only further undermined state credibility, as secret expenditures contradict the most basic principles of a public budget, let alone republican government. The 'Planes de Trabajos Publicos' provide another source of evidence. They were carefully planned and annually published from 1935-45, but then suffered a considerable decline. After publishing a plan in 1947 there was a move to five-year plans, but these were much lower in quality despite their five-year trajectory. It is reasonable to assume that the quality of public goods, judged by the decline in their planning, should also have decreased after 1945. Argentine public goods provision

awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development.

⁴⁹⁴ According to Potash, the armed forces accounted for 43.3% of total expenditure in 1945. Argentina's military outlays in 1945 exceeded the combined total of Chile, Columbia, Peru, Venezuela and Brazil. Potash, R. A. (1980). *The Army & Politics in Argentina 1945-1962, Perón to Frondizi*. London, The Athlone Press., p.4

⁴⁹⁵ See the various reports attached to: Prebisch, R. (1955). *Informe Preliminar acerca de la Situación Económica*. Buenos Aires, La Secretaría de Prensa y Actividades Culturales de la Presidencia de la Nación.

⁴⁹⁶ Bolivar, M. Á. (1996). "Los Gastos Públicos Secretos." *Boletín de Lecturas Sociales y Económicas*, Pontificia Universidad Católica Argentina (Buenos Aires)., pp.53-55

illustrates a difficult construction of state credibility followed by postwar decline, suggesting a negative postwar path dependency.

Argentine expenditure from 1960 onwards shows that public expenditure did little to increase state credibility, judged by public goods, until at least the military dictatorship of 1976-83. From 1960-76 'other' expenditures predominated, which is to say that little is known about the majority of public expenditure. Worse, small unrepresentative rent-seeking groups likely captured the expenditure earmarked for public goods.⁴⁹⁷ Public goods grew slowly over this period, decisively regaining their predominance during the 1976-83 military dictatorship when 'other' expenditures dramatically declined. This shift may reflect little more than an improvement in the management of public finances, and strongly suggests that public finances were poorly maintained previously. This would have damaged credibility, and suggests that public expenditure was poorly planned on an impressive scale. The Argentine state spent a considerable sum upon public goods provision at various times, but the productivity of this expenditure is questionable. Not all expenditure is equal, and management is decisive. Political over economic considerations, incompetence, and poor incentive structures can enfeeble the ability to allocate resources well. The lack of planning in regards to public goods provision suggests that the quality of public goods expenditure was less than it could have been. From 1983 Argentina has upheld a more viable democracy and greatly expanded public goods expenditure. This period has been the only one in Argentina when more than one party has been able to hold and exchange political power peacefully, a feat the first democracy of 1916-30 failed to achieve. The category of 'other' expenditure continued to decline from 1983-93, suggesting the quality of public financial management continued to improve. Public goods also became the primary purpose of state expenditure, for the first time since the early twentieth century. The failure of public goods provision to clearly predominate was less important when state expenditure and taxation were relatively small. As the economic role of the Argentine state expanded from the 1930s onwards, so did expenditure and the need for greater revenues. Such an expansion required greater state credibility, backed by public goods provision. Yet the Argentine state failed in this regard. Taxpayers were not endeared to

⁴⁹⁷ For instance labour expenditure quickly came to dominate expenditure on public goods in the postwar period, at the expense of capital expenditure. See Chapter Four for further discussion and Prebisch, R. (1955). *Informe Preliminar acerca de la Situación Económica*. Buenos Aires, La Secretaría de Prensa y Actividades Culturales de la Presidencia de la Nación.

the state as an insufficient level of public goods was provided, resulting in a failure to generate credibility and lucrative public finances. Rent-seeking groups within the state may have captured what was spent on public goods. In contrast to Australia, the Argentine state did not consistently provide a return of public goods to society and taxpayers.⁴⁹⁸ Postwar public expenditure is likely crucial to explaining the decline of Argentine fiscal institutions, state credibility, and divergence.

Conclusion

In the first half of the twentieth century Argentina and Australia achieved success in shifting their fiscal institutions from regressive indirect taxation to more progressive and lucrative direct taxation. Australia had long succeeded in achieving a predominance of public goods in expenditure, and began to shift public goods from rural exporters to urban democratic masses from the early twentieth century. Argentina also managed to achieve a predominance of public goods in expenditure from the early twentieth century. Shifts to direct taxation and greater public goods provision should have built state credibility, reinforcing positive path dependencies more conducive to development. Yet in spite of Argentina's increasing convergence with Australia, democratic institutions proved unsustainable from 1930 onwards. This played an initially indeterminate role in state credibility, but should have weakened credibility in the long run by reducing the scope for communication and compromise between state and society. Argentina's shift to more successful direct taxation was led by the introduction of income taxation from 1932. This process began to fail sometime during and after the populist Peronist democracy of 1945-55. More successful democratic institutions might have engendered earlier success in direct taxation and sustained it. Considering public goods provision, the postwar period was one of declining Argentine state credibility. Postwar Argentina made a dramatic deterioration in public goods expenditure, fiscal institutions, and state credibility. Argentina switched to a negative path dependency, reflected in low public goods capacity and constrained fiscal institutions, and ultimately in divergent development. In contrast Australia managed to sustain and then increase a shift from indirect to direct taxation in the postwar period, as well as continue a shift in public goods provision towards the democratic urban base.

⁴⁹⁸ See next chapter for greater detail.

This should have consolidated a positive path dependency in state credibility, fostering development.

Australia may serve as a counterfactual to Argentina in the development of fiscal institutions under greater democracy. In the long run more democratic institutions meant Australia's positive path dependency of high state credibility was more entrenched. The development of Argentine fiscal institutions from 1930 onwards lacked full political legitimacy and integrity due to the absence of democratic institutions that could have allowed for greater communication and compromise between state and society. This lack of democracy meant the successes achieved in direct taxation and public goods provision were more vulnerable to reversal, as society had no democratic ownership over them. If true, the cost of Argentina's failure to maintain and deepen the democracy of 1916-30 was very expensive indeed, ultimately eroding the state's credibility along with development. In the postwar period fiscal institutions and public goods became centred within an increasingly violent political struggle over distribution, and Argentina became entrapped in a vicious path dependency of low state credibility that has yet to be escaped. This negative path dependency helped maintain an increasingly unstable and violent political economy of flux between dictatorship and democracy that emerged from 1930 until 1983. The Argentine state failed to reverse the decline of credibility and fiscal institutions during the postwar period, and Argentina slowly slipped from a developed to a developing country. Australian political economy was relatively stable in contrast, and political institutions remained immune to open conflict. The postwar divergence in Argentine and Australian state credibility, reflected in fiscal institutions and public goods provision, appears to have engendered their divergence in development.

Chapter Four: Public Goods, Public Credit, & State Credibility

‘The chronic deficit, which is the greatest ill of Argentina’s public finances, has an undeniable consequence: Argentina lacks public credit.’ (Jèze 1923), p.64

‘From a financial point of view, *public credit assumes the recognition of the fundamental principle that taxation is the principal source of public resources; ... [A condition for public credit is] the will and the capacity of the country to pay all its taxes, as large as they may be*, that are necessary to service the debt. ... A country hounded by chronic deficits cannot enjoy public credit. The confidence necessary for public credit is not born out of a decree, it has to be deserved. *Public credit follows the budget balance, and never precedes it*. ... Public credit is a recent occurrence, for example England and France.’ (Jèze 1923), pp.67-68

Mr. Charlton – ‘Parliament was responsible for committing the country to the war debt. That debt has to be carried, and, whatever else happens, it must be met. If it is necessary to impose additional taxation for the purpose of meeting it, the burden must be borne.’ (Hansard), 19/10/1921, p.12016, V.97

Mr. Bruce (as Prime Minister) – ‘Our business is to satisfy the people that this borrowed money is being expended wisely and usefully for the development of the country, ... the great majority of public works in course of construction in Australia will make it possible for private enterprise to invest its capital in productive undertakings.’ (Hansard), 12/6/1928, p.5915, V.119

The lender is not indifferent to the borrower’s intended use of the loan. Credit is much cheaper and easier to obtain for sensible and prudent investments. *Well-managed countries, which know the destination of their finances and methodically order them, enjoy a good credit. Nations that march to the luck of events, with neither calculations nor forecasts for the future, lack good credit.* (Mexía 1913), p.170

[Italics and translations in quotations above are mine.]

This chapter continues the broad comparison of Argentine and Australian state credibility begun in the previous chapter by investigating public goods provision and public credit. As mentioned in the introduction, fairly direct measurements of state credibility are fiscal institutions, the provision of public goods, and public credit. Public goods and public credit are linked, as the main purpose of public credit should be to facilitate public goods provision. Public credit should largely be invested to be sustainable. The importance of public goods in determining path dependencies of state credibility and development has already been illustrated. An historical comparison of public goods provision is undertaken here to further substantiate this idea. Public credit, considered an extension of fiscal institutions, is also compared to give a fuller portrait of state credibility and reveal further insights into the underlying political economies of Argentina and Australia. Budget deficits, which are seen to neatly express state credibility in Chapter Three, are investigated and contrasted in greater detail. The budget deficit is important to public credit as ‘public credit follows the budget balance, and never precedes it.’⁴⁹⁹ After a theoretical preamble on the links between public credit and state credibility the chapter is divided into three sections: a history of public goods provision; a broad portrait of public credit, and a more detailed investigation of budget deficits as a reflection of state credibility. Taken as a whole, this chapter furthers the investigation of state credibility and divergence, completing the broad picture begun in Chapter Three.

Preamble on Public Credit and State Credibility

Public credit is based on the will and capacity of society to pay taxes and service government debts as Jèze illustrates above, but will is likely the more important factor.⁵⁰⁰ Public credit is defined as the enduring ability to borrow significantly on reasonable terms. The will to service debts is the essence of public credit, and a clear indication of state credibility. Public credit ultimately represents the faith a society has in the state. If a society trusts the state to safeguard the value of the currency and repay loans (much the same thing), public credit is generated. If a society does not trust the

⁴⁹⁹ Jèze, G. (1923). *Las Finanzas Públicas de la Republica Argentina*, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., pp.67-8

⁵⁰⁰ Ibid., pp.67-8

state to safeguard the currency or repay loans, public credit declines. A state might bypass a lack of local faith by borrowing abroad, but affordable and sustainable public credit ultimately requires credibility from the society a state is embedded within, as citizens shoulder the taxation that ultimately services all public credit. Lack of public credit demonstrates that a state has not achieved the feat of credible fiscal institutions that must stand behind public credit, as public credit is nothing more than a promise to pay in the future. In order to fulfil such a promise states must be able to earn appropriate revenues, and can only do so on a substantial scale with lucrative fiscal institutions. Credible fiscal institutions are necessary to establish a lasting ability to borrow substantially on inexpensive terms. States lacking public credit are much less capable of overcoming collective action problems, as solvency is limited, and generating the resources necessary to achieve the common good is more difficult. Public credit increases the state's capacity and flexibility to act, as well as reflecting society's faith, and should be a useful means for measuring and comparing credibility between states over time.

Public credit and state credibility are something of a Catch 22. States need to foster public credit in order to attain solvency and thereby credibility, but they also need to be credible in order to attain public credit. This argument may be important in explaining the existence of path dependencies, as public credit not only requires credibility but also feeds back into credibility via solvency and flexibility. As Snider observes, flexibility enhances state power.⁵⁰¹ The construction of public credit in Britain is a leading historical example. Britain's relatively high ability to borrow (and hence public credit) was fundamental to becoming the hegemonic western power in the nineteenth century, as British fiscal institutions alone were neither sufficiently elastic nor reliable to finance abrupt transitions from peace to wartime expenditure.⁵⁰² Public credit provided the necessary flexibility, and was a means of deferring taxation. Yet the British example shows that causation ultimately runs from state credibility to public credit, despite the feedback into credibility. As Jèze observes above: 'public credit follows the budget balance'. The capacity to foster public credit ultimately lies within states and their ability to manage public finances. Such a capacity is not easy to achieve, but the

⁵⁰¹ Snider, L. M. (1987). "Identifying the Elements of State Power - Where Do We Begin?" Comparative Political Studies 20(3): 314-356., p.333

⁵⁰² O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review 41(1): 1-32., p.2

existence of credible states with ample public credit clearly shows that a potentially vicious cycle of low public credit and credibility is either avoidable and/or escapable. Ultimately public credit depends upon both the ability to tax and the credible maintenance of public finances.

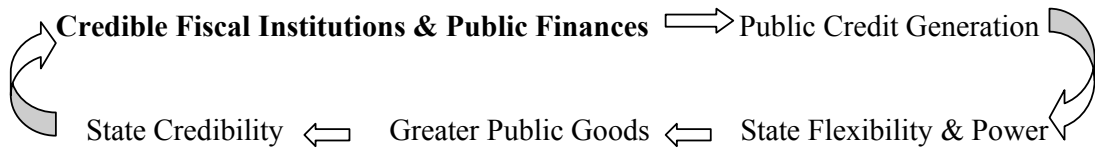
The provision of public goods for development was essential to the construction of more positive path dependencies in public credit. In 1882 Argentines marvelled at what Australia had achieved in public goods provided by the state via well-invested public credit.⁵⁰³ They perceived the links between credibility, public credit, and public goods provision. In the early 1920s Gaston Jèze similarly observes that the proper destination for public credit is public goods provision: ‘The only expenses that should be covered by the emission of internal debt are “investment expenditure”; in trains and in things of strictly national utility.’⁵⁰⁴ The provision of public goods is crucial to state credibility and the ability to tax, and is also the proper destination of public credit.

Public credit feeds back into credibility via the flexibility of solvency and the ability to provide public goods. A means of building credibility, as discussed in the previous chapter, is the provision of public goods to promote development. If such public goods succeed in fostering development, they also enhance fiscal institutions via potentially greater fiscal revenues (and hence a greater ability to repay public borrowing). Many public goods that foster development (e.g. infrastructure) require large amounts of capital over a long period of time before they provide a profitable return. They may be desirable from a societal point of view, but be difficult or inefficient for private markets to provide on their own, leaving the state as the sole potential provider. Such projects could provide society with significant savings and development than would otherwise be possible but require public credit. A means of viewing the relationships and feedback between public credit and state credibility is path dependency. The path dependencies below extend those from Chapter Three, which outlined how to achieve credible fiscal institutions via public goods provision, and detail the link between public credit and

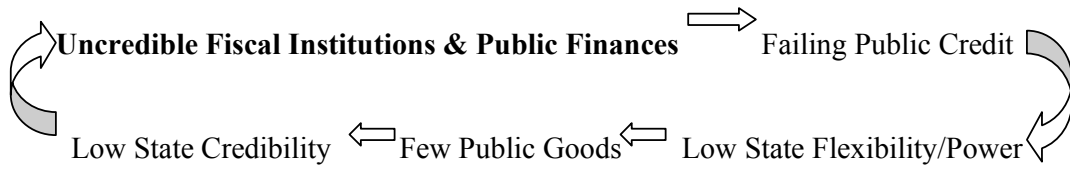
⁵⁰³ See the opening quote from the previous chapter. Newton, R. and J. Llerena (1882). Viajes y Estudios de la Comisión Argentina sobre la Agricultura, Ganadería, Organización y Economía Rural en Inglaterra, Estados-Unidos y Australia., Comisionados por el Exmo. Gobierno de Buenos Aires., Vol.8, pp.114-115

⁵⁰⁴ Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., pp.73-4

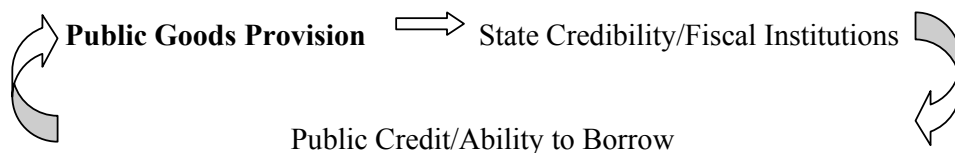
credibility. An illustration of a positive path dependency between public credit and state credibility is:



An illustration of a negative path dependency of public credit is:



As depicted above, low state credibility can create a somewhat self-fulfilling cycle where the state likely remains small and potentially destructive due to a scramble for resources. Some common examples of the destructive effects of scrambling for resources are: excessive external borrowing on unreasonable terms (i.e. unsustainable and expensive), inflationary financing via seigniorage, and the monopolisation of necessary public goods that fail to be provided. In order to escape such a negative path dependency and generate public credit, a state must build credibility via capable management of public finances. The key variables in the determination of public credit in both path dependencies are credible fiscal institutions (i.e. the ability to tax) and the management of public finances.



The crucial test of whether a state has achieved public credit is if it can enduringly borrow on sustainable terms from domestic society, i.e. inexpensive local credit. A further test could be how much external debt can be issued in the native currency. The issue of internal versus external debt clarifies what is meant by the achievement of public credit. Even if a state is on a negative path dependency of public credit, there may be periods when significant external loans can be obtained, even if these are

denominated in a foreign currency. Such external loans can dramatically reinforce a negative path dependency of public credit if they lead to external default and financial crisis. Poorly invested (if not stolen) external loans raised on unsustainable terms lend credence to a society's later refusal to repay them, especially in an undemocratic polity. After all the same society likely refused to lend freely to the state, and a state's own citizens are best placed to judge credibility. Yet access to external credit might also be a golden opportunity to generate credibility and escape a negative path dependency. The role that external debt plays is largely dependent upon the borrower. If external credit is the predominant source of public credit, it often signals an underlying lack of state credibility. It begs the question: why can't the state locally obtain the funds required at a reasonable cost?

I Brief History of Public Goods Provision

Public goods are fundamental to development, not least in Argentina and Australia. Argentina originally provided significant public goods by fostering private foreign investment, which required that the state achieve sufficient credibility to establish order and protect and enforce property rights. The Australian colonies borrowed directly from Britain to directly provide the vast majority of public goods. Argentina also borrowed directly to provide substantial public goods in the 1880s (and via normal expenditure in the 1900s) as seen in Figure 3.9, but less consistently and on a smaller scale than in Australia. Over the first half of the twentieth century the Argentine state became a significant direct provider of public goods, but this was increasingly problematic. Hence the following section on Argentina is divided into two subsections: an overview of public goods delivery and a discussion of the increasing failure to deliver substantial public goods despite considerable expense.

Argentina

Facilitator of Public Goods to Direct Provider

Prior to independence from the Spanish Empire there was no development of public works, an important public good for development, in the Argentine.⁵⁰⁵ Little attention was paid to their development other than the very minimum until the battle of Caseros in 1852. After 1852 the need for public works became clearer as the country began to organise politically and fix its attention on economic development. The Argentine state desired to provide public works to promote development, and tried to use the resources within its power to do so; including ordinary expenditure, borrowing, land grants to stimulate railway construction, and guaranteeing interest rates.⁵⁰⁶ This led to the construction of railways, bridges, roads, public buildings, the improvement of shipping lanes, telegraph lines, etc. One early public work in the Argentine was the water works of 1870 for the city of Buenos Aires.⁵⁰⁷ As the most basic public good of peaceful order was not achieved until the last quarter of the nineteenth century, it is unsurprising that not many other public goods were achieved until then.⁵⁰⁸ The construction of national institutions to consolidate order began in the 1860s and was completed from 1880 onwards. Three institutions were crucial: 1) the Ministry of War and Navy – the state's repressive apparatus; 2) the Ministry of the Interior – to establish relations between the national state and the provinces, and assume all activities not delegated to other Ministries; and 3) the Ministry of Justice, Culture, and Public Education.⁵⁰⁹ Order was the fundamental public good provided by the Argentine state and included a national military, courts, and education to unify a new nation.

The first national law of public works was in 1876.⁵¹⁰ Yet it was not until 1898 that a Ministry of Public Works was created, much later than other Ministries.⁵¹¹ In the last

⁵⁰⁵ Espósito, J. (1940). Ley No. 775 sobre Obras Públicas - Necesidad de su Reforma. Buenos Aires, Talleres Gráficos de Ministerio de Obras Públicas., pp.1-2

⁵⁰⁶ Ibid., p.3

⁵⁰⁷ Nación, S. d. E. d. O. P. d. I. (1966). Administración General de Obras Sanitarias de la Nación. Republica Argentina., p.7

⁵⁰⁸ See Chapter Two for discussion of the establishment of public order.

⁵⁰⁹ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.159

⁵¹⁰ Mó, F. F. (1977). Régimen Legal de las Obras Publicas - Doctrina, Legislación, Jurisprudencia. Buenos Aires, Depalma., p.7-8

quarter of the nineteenth century the Ministry of Interior played the vital role in providing public goods. It included the Department of Agriculture (created in 1871) and the Department of Civil Engineers (created in 1875), which were made into their own Ministries in 1898.⁵¹² In the early 1870s President Sarmiento desired to construct as many public works as possible, but was considerably restrained by insufficient fiscal revenues. The Argentine state had to escape the lingering effects of low credibility stemming from a long history of civil warfare in order to access substantial, largely foreign, public credit. Public goods provision was a continuing political goal. The generation of 1880 sought the construction of large, reproductive public works to promote development.⁵¹³ Under the Presidency of Roca (1881-86), the emphasis of public expenditure finally switched from consolidating “order” to fomenting “progress” through the construction of necessary physical infrastructure. Instead of borrowing for the military, the state began to borrow to construct railways and other public infrastructure. Unfortunately much of this public expenditure was wasteful.⁵¹⁴ By the late 1880s the state’s roles as a borrower, constructor, and guarantor of public works and services went beyond the ability to extract genuine resources. From 1890 foreign capital found direct investment more attractive than public debt, and no new loans were made to the national government until 1914.⁵¹⁵ Expenditure on public goods expanded in the 1880s and 1900s, but only on the basis of public credit in the 1880s. Many of the late nineteenth century public works were constructed privately. The state’s contribution was largely limited to establishing an institutional environment that was stable and secure enough to enable the large flows of capital and labour required to construct them.

⁵¹¹ Vazquez, R. I. (1938). Cuestiones de Administracion Publica. Buenos Aires, La Facultad., p.20-1

⁵¹² Patterson, E. F. (1956). "The Extent and Pattern of the Expenditures of the Argentine National Government." Public Finance **XI**(1), p.44

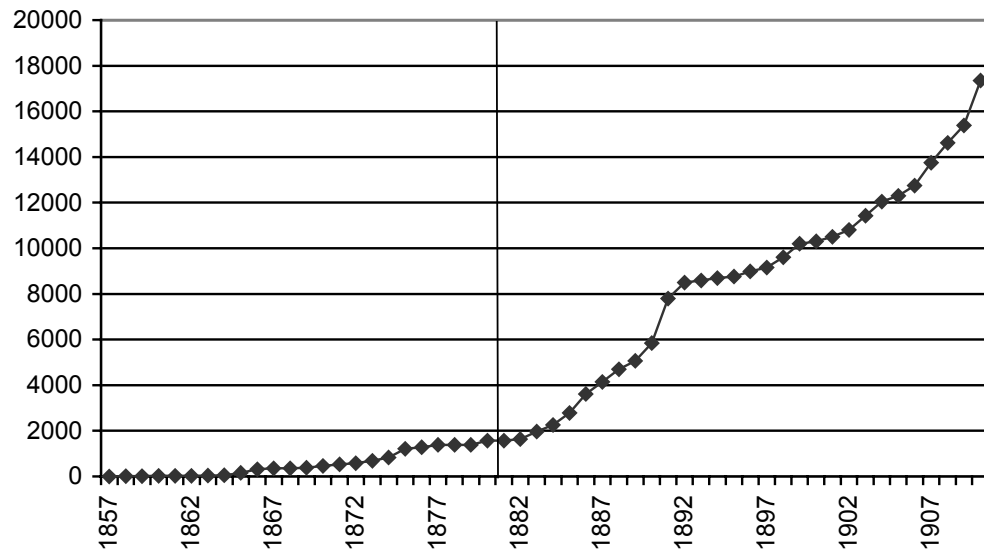
⁵¹³ Cuccorese, H. J. (1966). Historia Económica Argentina (1862-1930). Buenos Aires, El Ateneo., p.42

⁵¹⁴ Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano., pp.216-222

⁵¹⁵ Ibid., p.226

Figure 4.1

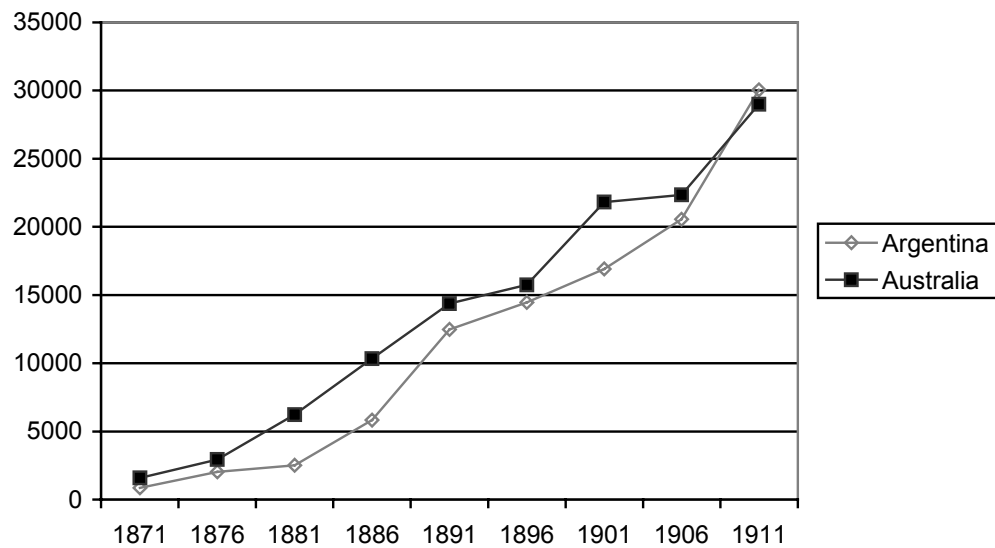
Argentine Railway Mileage, 1857-1910



Source: (Scobie 1967), p.171

Figure 4.2

Open Railway Track in kms, 1871-1911



Source: (Schedvin 1990), p.549

The key role of the Argentine state in providing greater public goods was the achievement of order and institutional stability, which enabled a massive expansion in

public goods. The expansion in public goods was often provided privately and backed by state subsidies and guarantees. An important example of public works enabled by the achievement of order is railways, which were the public work par excellence of the late nineteenth and early twentieth centuries.⁵¹⁶ Railways were essential to the development of staple exports. The final consolidation of the institutional environment in 1880 marks a turning point in railway construction, and shortly led to a massive expansion. This turning point is clear in Figure 4.1. Figure 4.2 shows the relative success of Argentine railway construction to Australia. In Argentina railways were largely built privately with state guarantees and subsidies, whereas in Australia the state directly built and operated almost all railways.⁵¹⁷ The two different strategies led to similar levels of construction in the late nineteenth and early twentieth centuries.

The Ministry of Public Works directed public works from 1898, overseeing the study and realisation of everything related to means of communication, hydraulic construction, and architecture. The Ministry's internal division in 1906 reflected its priorities: 1) railways; 2) hydraulic works; 3) bridges, roads, and telegraphs; 4) irrigation; 5) architectural works; and 6) accountability and control.⁵¹⁸ The first priority was clearly public goods of an infrastructural nature to promote development. Water works expanded significantly in the early twentieth century, contributing much to public health. Between 1904 and 1911 water works were provided to 14 provincial capitals, including sewerage works in four of these; and by 1925 almost the entire federal capital was provided with potable running water.⁵¹⁹ In the early twentieth century the Argentine state shifted to developing infrastructure that the private sector had neglected, and making modern, competitive investments.⁵²⁰ The prevailing liberal conception of the time meant the state was limited to those areas where the private sector was reluctant to

⁵¹⁶ For greater detail see Lewis, C. M. (1983). British railways in Argentina, 1857-1914 : a case study of foreign investment. London, Athlone.

⁵¹⁷ In Australia less than 4.5% of about 14,000 miles of railway were owned privately in 1904. Clark, V. S. (1908). "Australian Economic Problems. I The Railways." The Quarterly Journal of Economics, Harvard University Press 22(3): 399-451., p.399

⁵¹⁸ Espósito, J. (1940). Ley No. 775 sobre Obras Públicas - Necesidad de su Reforma. Buenos Aires, Talleres Gráficos de Ministerio de Obras Públicas., p.40

⁵¹⁹ Nación, S. d. E. d. O. P. d. I. (1966). Administración General de Obras Sanitarias de la Nación, Republica Argentina., p.7

⁵²⁰ Veganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.173

invest.⁵²¹ For instance the state constructed railways to develop under populated and distant regions of the country, and explored for oil. The state also continued in more familiar areas, such as the construction of ports, bridges and roads.

World War I saw the state continue to increase a more direct role in providing public works, and the beginning of a conversion into a large direct provider of industries and services in areas previously supplied by the private sector. This followed the example of European states, which played an important role in the reconstruction of public works after the War and in reducing unemployment. The Argentine state's growing direct role in public goods was reflected in the budget. In 1923 public works had a budget of about 64 million pesos, but this more than doubled to 163 million in 1930.⁵²² The change in the state's remit from WWI onwards was paralleled by the introduction of democracy in 1916. The first elected President, Yrigoyen, made an early but largely unsuccessful attempt to greatly increase the state's economic responsibilities. He proposed a large series of economic projects in 1916-17 that included the state's direct provision of: agricultural colonies, a national agricultural bank, a merchant marine, oil exploitation, and a Bank of the Republic.⁵²³ These proposals were not successful at first, but they show an early desire by a more democratic polity for the state to take on a larger and more direct economic role.

State expenditure rapidly increased in the 1920s under the new democracy. Much of this was spent on political patronage, as the Radicals sought to secure their popular following by enlarging government bureaucracy and increasing salaries.⁵²⁴ The Radicals extended political patronage to the middle classes, and to such a large extent that jobs were reported as being sold on the open market in June 1929.⁵²⁵ Upon Yrigoyen's return

⁵²¹ Herschel, J. F. and S. Itzcovich (1957). "Fiscal Policy in Argentina." Public Finance **XII**(2 & 3), pp.102-3

⁵²² These figures appear to be nominal but there was little inflation at this time. Espósito, J. (1940). Ley No. 775 sobre Obras Públicas - Necesidad de su Reforma. Buenos Aires, Talleres Gráficos de Ministerio de Obras Públicas., pp.48-50

⁵²³ Cuccorese, H. J. (1966). Historia Económica Argentina (1862-1930). Buenos Aires, El Ateneo., p.101-5

⁵²⁴ Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press., p.155-6

⁵²⁵ Rock, D. (1975). Politics in Argentina, 1890-1930 : the rise and fall of radicalism. Cambridge, Eng., Cambridge University Press., pp.107-117, 242-243

to power in 1928, the state soon became a vast employment agency for political ends.⁵²⁶ The extent of populism can be gauged by the estimated 20,000 government employees who were dismissed in Buenos Aires alone in 1930-31 in the immediate wake of the military coup.⁵²⁷ Such populist state expenditure were not legitimated by an increase in public goods, asides from the brief Presidency of Alvear in 1922-28, and suggest a decline in state credibility. At this time Australia was making an increasingly successful transition from indirect taxation on trade to direct taxation on incomes. Argentine attempts to make a similar shift failed in the 1920s.⁵²⁸ The populist nature of state expenditure also made the landed class increasingly hostile towards the Radicals in the 1920s.⁵²⁹ So it is unsurprising that an expansion of direct taxation would have been difficult.⁵³⁰ State expenditure rapidly increased under the last Presidency of Yrigoyen from 1928-30, dramatically more quickly than revenue and largely for populist purposes.⁵³¹ The great increase in politicised expenditure combined with the landowners' increased feeling of political isolation. Increasingly popular attacks against landowners in the 1920s never became outright, but they caused fear and resentment amongst the landowners. The military coup and ensuing 'decada infame' of the 1930s was at least partly the result of the landed class' political isolation.⁵³² Despite the landowners' partial role in the 1930 coup, the majority of them favoured a return to constitutional rule, but one without the worst vices of popular democracy.⁵³³ Their participation in the coup was a response to Yrigoyen's demagoguery, not a promotion of authoritarianism. The great increase in state expenditure without a matching increase in public goods provision was a trend that would strongly remerge under the populism of Perón.

⁵²⁶ Rock, D. (1987). Argentina, 1516-1987 : from Spanish colonization to Alfonsín. Berkeley, University of California Press., p.212

⁵²⁷ Ibid., p.221

⁵²⁸ A serious attempt to introduce income taxation was made by Victor Molina under Alvear's government in the 1920s. See Sánchez Román, J. A. (2004). "Chapter 2: Economic Elites, Regional Cleavages, and the Introduction of the Income Tax in Argentina." Unpublished. See also Chapters Three and Five.

⁵²⁹ Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press., p.158

⁵³⁰ See Chapter Five for a more detailed discussion in regards to income taxation.

⁵³¹ Rock, D. (1987). Argentina, 1516-1987 : from Spanish colonization to Alfonsín. Berkeley, University of California Press., p.212

⁵³² Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press., pp.175-177

⁵³³ Ibid., pp.159, 191

The year 1930 marked the end of democracy, but also the beginning of a major change in the state's role in public goods provision.⁵³⁴ Elections were rigged throughout the 1930s but this was also a period of substantial reform.⁵³⁵ The state began to take on a much larger direct economic role. From 1935 to 1945 Argentine public works clearly began to be rationally planned public investments, which was reflected in detailed annual 'Planes de Trabajos Públicos'. The number of public works undertaken in the 1930s and early 1940s greatly increased, taking over from private investment.⁵³⁶ This built upon earlier precedents. For instance the military had begun to produce basic industrial goods in the late 1910s. The state made important economic contributions in the 1930-43 period by constructing roads and founding a Merchant Marine.⁵³⁷ In 1932 the National Direction of Roads was created to define the trunk network of roads and begin their construction.⁵³⁸ From 1939-42 public works were grouped into a system of plans.⁵³⁹ The 1930s regime was very proud of the public works provided, publishing a detailed ten volume set aimed at educating the general public of what had been achieved. The stated goal of the publication was to 'make known to the whole country the work realised by the present Government ... that are unfamiliar due to the lack of publicity ... emphasising the most notable progresses made in public works.'⁵⁴⁰ The titles of the volumes display the priorities. Volume I is devoted to the Treasury, demonstrating the priority of improving the administration of public finances. The remaining volumes are dedicated to more specific public works: national roads; public works; petroleum; police & fire-fighters; the army and state railways; marina, post & telegraphs; external relations and culture; justice, public education, and the interior; agriculture and sanitary works. Public goods began to move beyond the goals of

⁵³⁴ Veganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.124; Latinoamericanas, F. d. I. E. (1991). El Gasto Público en la Argentina 1960-1988. Buenos Aires, (FIEL) Fundación de Investigaciones Económicas Latinoamericanas., p.59

⁵³⁵ Rock, D. (1987). Argentina, 1516-1987 : from Spanish colonization to Alfonsín. Berkeley, University of California Press., p.214

⁵³⁶ Veganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.146-7

⁵³⁷ Herschel, J. F. and S. Itzcovich (1957). "Fiscal Policy in Argentina." Public Finance XII(2 & 3), p.109

⁵³⁸ Fiorito, M. R. S. d. O. P. (1969). Análisis económico de la evolución del gasto público en inversión en la Secretaría de Estado de Obras Públicas. Finanzas Públicas Segundas Jornadas, Trabajos Presentados en los Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi., p.509

⁵³⁹ Poder Ejecutivo Nacional, I. e. I. S. d. A. T. (1956). Servicio de Coordinación de Trabajos Públicos - Proyecto de Creación. Buenos Aires, Taller Grafico de la Secretaria de Asuntos Técnicos., p.14

⁵⁴⁰ Publicas, M. d. O. (1938). El Poder Ejecutivo Nacional 1932-38, Kraft Ltda., pp.5-6

infrastructure and development to include employment, health care, and other social public goods. The predominant theme nonetheless remained the provision of public goods to foster development. A sad irony is that the regime that did so much to damage Argentine democratic institutions understood so presciently other aspects of state credibility, i.e. public goods provision and sound public finance. As public goods were provided on a much greater scale than previously, the 1930-45 period should have been one of increasing state credibility, but instead credibility was handicapped by undemocratic political institutions.

From the 1930s state enterprises were an increasingly important means for providing public goods. They began as “Independent Agencies” administered by the federal state; and prior to 1930 included state banks, railways, national sanitary works, and petroleum (YPF).⁵⁴¹ These became an ever larger element of state expenditure in the 1930s, growing from 18.7% of total federal expenditure in 1930 to 27.6% in 1942. This increased further in the 1940s, reaching almost half (48.5%) of federal expenditure in 1950.⁵⁴² State enterprises represented a considerable decentralisation and fragmentation of the budget. Their expenditure focussed upon the production of goods and services, an arena formerly left to private enterprise.⁵⁴³ The legacy of extensive state enterprises continued until the 1980s. In 1983 Argentina had 353 state enterprises, and despite the extensive inflation and economic difficulties of the 1980s there were still 305 in 1987. Provincial and municipal governments owned a slight majority of them.⁵⁴⁴ In the quantity and diversity of state enterprises in the postwar period, Argentina was only comparable to Italy, India, and the communist states. State enterprises had an unfortunate legacy upon public expenditure explored further in the following section, but generally represented an increasing sloppiness and loss of control of the budget.

⁵⁴¹ Patterson, E. F. (1956). "The Extent and Pattern of the Expenditures of the Argentine National Government." Public Finance **XI**(1), p.48

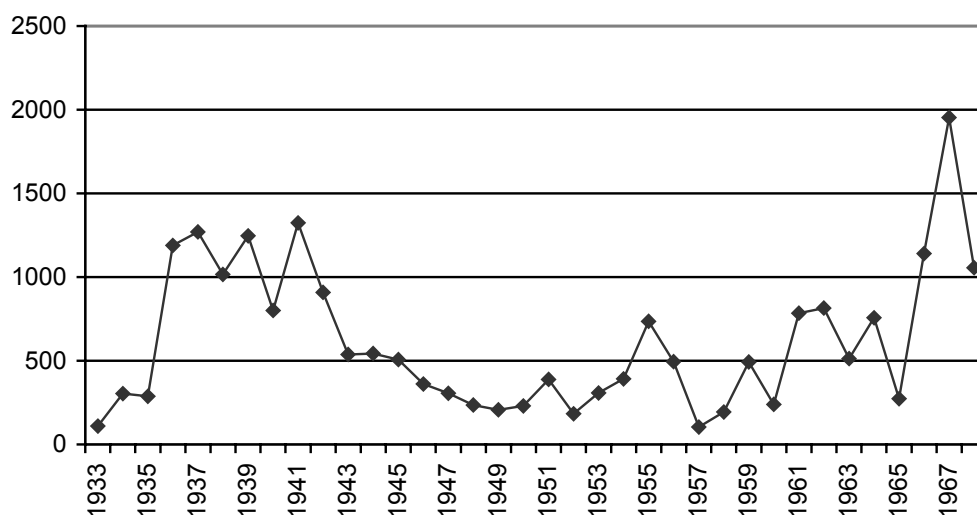
⁵⁴² Ibid., p.49

⁵⁴³ Ibid., p.54

⁵⁴⁴ Latinoamericanas, F. d. I. E. (1987). "El Gasto Público en la Argentina, 1960-1985." Boletín Informativo TECHINT(350), p.96

Figure 4.3

**New Argentine Road Construction, kilometres
constructed per annum, 1933-68**



Source: (Fiorito 1969), p.527

The state's direct provision of public goods further expanded under the first Perón government of 1945-55, which saw the state nationalise most public services; increase production of goods and services; build low-cost housing, hospitals, water and sewerage systems; and increase social security coverage.⁵⁴⁵ Public goods expanded rapidly in the 1943-55 period, especially during Perón's two Five Year Plans (1947-51 and 1952-56). Yet these did not contribute sufficiently to the need for investment in key areas for development, especially transport, energy and heavy industry.⁵⁴⁶ The quality of public goods provision deteriorated markedly from the early 1940s, reaching a nadir in the 1943-55 period, as resources became assigned to political rather than economic ends.⁵⁴⁷ Public investment was high as a proportion of total expenditure, but productivity was exceptionally low. The preponderance of investment went to the National Direction of Architecture for the construction of housing, tourist hotels, etc, damaging the realisation

⁵⁴⁵ Veganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.129

⁵⁴⁶ Herschel, J. F. and S. Itzcovich (1957). "Fiscal Policy in Argentina." Public Finance XII(2 & 3), pp.209-212

⁵⁴⁷ Fiorito, M. R. S. d. O. P. (1969). Análisis económico de la evolución del gasto público en inversión en la Secretaría de Estado de Obras Públicas. Finanzas Públicas Segundas Jornadas, Trabajos Presentados en los Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi., p.512

of basic public infrastructure required for development.⁵⁴⁸ For instance new road construction greatly declined during Perón's administration, as can be seen above, despite the importance for development. The first five year plan was not actually a plan of public works, as it did not include realistic plans or budgeting. The second five year plan was guided not by public works but the containment of debt expenditure.⁵⁴⁹ Those new public works initiated reflected political interests. Perón proposed the myth that his was the first government to provide planned public works.⁵⁵⁰ In fact the opposite was true. The Five Year plans were considerably poorer in detail than the previous decade or so of annual plans. Regulating employment became a primary aim. This goal had existed previously, evident in the annual plans of 1941 and 1938, but became overriding under Perón. In 1956 Raúl Prebisch observed a recent major deterioration in the provision of Argentine public works.⁵⁵¹ He partly attributes this to the considerable increase in labour expenditure, which came to represent almost the entire public works expenditure. There was a shift within public goods from capital expenditure on investment to current expenditure on salaries. Perón expanded expenditure upon public goods, but so extensively used them for redistribution that the actual provision of public goods significantly diminished.

Public investment became more dynamic again in the late 1950s and 1960s, when energy and industrial projects were given priority. Road construction also began to increase again. Nonetheless Argentine state enterprises had become characterised by inefficiency. By the late 1960s the state monopolised large sectors of the economy including: railways, telecommunications, electricity, gas, coal, large banks, oil, and food processing.⁵⁵² The state nationalised enterprises that foreign firms were often happy to relinquish, especially in public services (e.g. gas, telephones, and railways). The level and quality of infrastructure was lower than in industrialised countries, and worsened

⁵⁴⁸ Ibid., p.513

⁵⁴⁹ Poder Ejecutivo Nacional, I. e. I. S. d. A. T. (1956). Servicio de Coordinación de Trabajos Públicos - Proyecto de Creación. Buenos Aires, Taller Grafico de la Secretaria de Asuntos Técnicos., pp.16-18

⁵⁵⁰ 'Having converted our internal economy into a social economy, and conquered our economic independence, we were able to devise and launch the first public works plan that the Nation had ever known.', Perón, J. (1950). Mensaje del Presidente de la Nación Argentina (General Juan Perón) al Inaugurar el 84 Periodo Ordinario de Sesiones del Honorable Congreso Nacional, Conceptos Doctrinarios. Buenos Aires, Subsecretaria de Informaciones de la Presidencia de la Nación., p.38

⁵⁵¹ Prebisch, R. (1955). Informe Preliminar acerca de la Situación Económica. Buenos Aires, La Secretaría de Prensa y Actividades Culturales de la Presidencia de la Nación., p.14-15, 45

⁵⁵² Vezanones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.149

considerably in the 1960s due to poor investment planning and management.⁵⁵³ This led to a great deterioration in infrastructure due to a lack of maintenance, and the adequacy and quality of infrastructure worsened. This had predictably negative consequences for development. Poor management of state enterprises, inadequate economic planning and lack of investment led to a quantitative and qualitative deterioration of state services and an increase in production costs.⁵⁵⁴ This was especially true in transport and telecommunications, but energy was also affected. Ultimately the Argentine state came to obstruct development, as the qualitative and quantitative inadequacies of the infrastructure it monopolised were so extensive as to limit the potential growth of the private sector.

Much Expenditure, but Failure to Deliver

The historical summary of Argentine public goods provision above points to a large and dramatic increase in the state's role in directly providing public goods. This grew from one of limited supervision in the early twentieth century to one of monopolistic provision from the mid twentieth century. Despite the increase in the state's role and expenditure as a direct provider of public goods, there was an increasing failure to deliver. The Argentine state's transformation into a monopolistic provider of public goods ultimately failed, ending in hyperinflation in the late 1980s. The failure to deliver was by then complete, and privatisation of state enterprises in the 1990s was widely supported and popular due to the spectacularly poor quality of goods and services.⁵⁵⁵ For much of the postwar period, the state impeded development by asserting its domination over public goods provision but delivering little of what was required. The postwar period was also when Argentine divergence in development occurred. What went wrong and why? The following historical summary of problematic Argentine public finances and management in relation to public goods provision will attempt an answer.

Lack of clarity and financial planning were clearly norms of Argentine governance by the late nineteenth century, which was little important as long as the state remained

⁵⁵³ Ibid., pp.173-4

⁵⁵⁴ Ibid., pp.178-9

⁵⁵⁵ Manzetti, L. (1999). Privatization South American style. Oxford ; New York, Oxford University Press., pp.84-7

small. An early example from 1885 is when the Minister of the Treasury found it necessary to write a special chapter in the Memoria of the Treasury to clarify what the public debt actually was. His report revealed that it had recently grown very rapidly, and without a plan of investment to direct borrowing.⁵⁵⁶ The traditional lack of financial and public works planning suggests that both the borrowing and use of public money were inefficient. British investors perceived Argentine public credit as a poor investment from an early date.⁵⁵⁷ The provision of a large quantity of public works logically requires a uniform process; from the contracting of work, to execution and payment. This process didn't occur in Argentina. On the contrary, a wide variety of procedures and norms were used, and no system for regulating the contraction of public works had arisen by 1940.⁵⁵⁸ The state continued a tradition of haphazard financial planning for public goods in the early twentieth century, despite the state's increasing role in direct provision. Public goods were financed by irregular special laws and budget inclusions effected directly by the Executive, often attending to local needs with political ends.⁵⁵⁹ Their late inclusion into the budget was only completed in order to authorise the emission of bonds to obtain the necessary funds. The state made no overall studies as to what public works were necessary, nor how to finance them. This had predictable consequences for state credibility, let alone efficiency, and had to be addressed if the state was to become the major provider of public goods without disastrous consequences for development.

The emergence of public works as a major state priority did not involve a parallel emergence of a well-administered system of public works that responded to the needs of the Argentine economy. In 1913, shortly after the creation of the Ministry of Public Works, the former Minister Ramos Mexía wrote a book expounding the need for a much better administration of public works.⁵⁶⁰ He finds that public works were neither well planned nor well financed. The financing of public works was largely dependent upon the whims of what was available in the annual budget. He describes how public

⁵⁵⁶ Cuccorese, H. J. (1966). Historia Económica Argentina (1862-1930). Buenos Aires, El Ateneo., pp.47-9

⁵⁵⁷ See section below comparing British investment in Argentina and Australia.

⁵⁵⁸ Espósito, J. (1940). Ley No. 775 sobre Obras Públicas - Necesidad de su Reforma. Buenos Aires, Talleres Gráficos de Ministerio de Obras Públicas., pp.3-8

⁵⁵⁹ Poder Ejecutivo Nacional, I. e. I. S. d. A. T. (1956). Servicio de Coordinación de Trabajos Públicos - Proyecto de Creación. Buenos Aires, Taller Grafico de la Secretaria de Asuntos Técnicos., p.13

⁵⁶⁰ Mexía, E. R. (1913). Un Plan de Obras Públicas y de Finanzas. Buenos Aires, Librería Nacional., pp.16-17, 19

works would often grind to a halt for a sudden lack of resources, due to their low priority in the budget. He argues that public works needed to be financed outside annual budgets in order to provide stable financing.⁵⁶¹ He also notes the necessity of linking public goods' provision to public credit:

‘The product of loans has to be exclusively destined to reproductive public works, which will remain the property of the government.’ (Mexía 1913), p.50

The public goods necessary for development had to be funded by long-term public credit in order to lift ‘the weight off the present generation’, and the necessary public credit could only be found in the federal state.⁵⁶² He acutely observes the link between public credit, public goods and state credibility:

‘The lender is not indifferent to the borrower’s intended use of the loan. Credit is much cheaper and easier to obtain for sensible and prudent investments. Well-managed countries, which know the destination of their finances and methodically order them, enjoy a good credit. Nations that march to the luck of events, with neither calculations nor forecasts for the future, lack good credit.’ (Mexía 1913), p.170

Finally Ramos Mexía observes that the provision of public works was already ‘absolutely insufficient for the fast material progress that the republic desires’.⁵⁶³ This was reinforced geographically, as the provincial governments required financial assistance from the national state in order to provide more public works that were necessary for development.⁵⁶⁴ Unfortunately little heed was paid to Ramos Mexía’s advice, and public goods and finance continued on haphazard trajectories.

Ramos Mexía’s early twentieth century concern that public credit be directed towards reproductive public goods was ignored. It was still observed in 1929 that the accumulated public debt had largely been spent on fiscal deficits.⁵⁶⁵ An Argentine study of public credit and public goods provision in 1934 judges the public debt as too large considering the lack of underlying investment in public goods. The study compares the use of public credit with the provision of public goods over the period 1910-31, and concludes that public credit was used poorly asides from the presidency of Alvear in

⁵⁶¹ Ibid., pp.22-26

⁵⁶² Ibid., p.23-26

⁵⁶³ Ibid., p.175

⁵⁶⁴ Ibid., pp.25-27

⁵⁶⁵ Mata, C. G. (1929). "La Deuda Publica Argentina, Comparada con las de Otros Paises." Revista de Economía Argentina 23(136)., p.401

1922-28.⁵⁶⁶ Under Alvear there was a great increase in public works alongside a considerable improvement in public finances that included rationalisation of public credit. Unconsolidated debt became consolidated at this time via external loans and increased taxation.⁵⁶⁷ Unfortunately the Alvear presidency appears to have been unique in fostering credibility via the provision of public goods and competent financial management. Another study of public works in 1941, undertaken by the state, finds (once again) that the coordination of public works is 'anarchic'; that there is a lack of knowledge of what public works are being undertaken; and that there is a need to harmonise the diverse public works embarked on.⁵⁶⁸ The listed consequences of this 'anarchy' are numerous, but are primarily the inability to manage the nation's resources well and the impossibility of prioritising public works.

During the period of 1918-39 the need to approve budgets prior to beginning, continuing, or increasing public works was recognised but little practised.⁵⁶⁹ The Executive continued to use arbitrary powers to authorise public works, and there continued to be a lack of knowledge of the true technical, social, and economic necessities of public works. This was a poor institutional foundation upon which to increase the state's role in public goods provision. In 1942-43, modifications were made in the financial control and accountability of public works. Yet the state continued to fail to construct an institution that would study and investigate public works, one capable of effecting general coordination. The system for providing public works until 1942 was imperfect, but nonetheless productive of successive legislative improvements in 1917, 1938 and 1942. This system was abandoned in 1943, when the de facto government began a disastrous policy of unilaterally assigning Ministries enormous sums, based upon quickly drawn up programs that lacked concrete plans of realisation and annual developments.⁵⁷⁰ What little institutional evolution had occurred in the first half of the twentieth century was jettisoned, and the state became even less capable of

⁵⁶⁶ Luisi, D. E. (1934). "Estado de la deuda publica por Presidencia, 1910-1931." La Revista de Ciencias Económicas **Año 22**(154): 363-79.

⁵⁶⁷ Cuccorese, H. J. (1966). Historia Económica Argentina (1862-1930). Buenos Aires, El Ateneo., p.110

⁵⁶⁸ Nación, M. d. O. P. d. I. (1941). "Estudio sobre el régimen de ejecución de los Trabajos Públicos y del Proyecto de Plan para 1941; Informe de la Comisión Mixta nombrada por Resolución del Ministerio de Obras Públicas de 17 de enero de 1941 y del Representante del Departamento Nacional del Trabajo.", pp.24-27

⁵⁶⁹ Poder Ejecutivo Nacional, I. e. I. S. d. A. T. (1956). Servicio de Coordinación de Trabajos Públicos - Proyecto de Creación. Buenos Aires, Taller Grafico de la Secretaria de Asuntos Técnicos., pp.13-14

⁵⁷⁰ Ibid., p.16

managing public finances and providing public goods. The economic role of the state greatly expanded in the first half of the twentieth century, but did so without expanding the capabilities necessary for such a role.

Argentine democratic institutions began to flourish in the period of 1916-30, when the Radical Party dominated the state. Unfortunately the Radical Party under the Presidencies of Yrigoyen (1916-22 and 1928-30) also pioneered the extension of a patronage system to consolidate a political clientele.⁵⁷¹ This was done by using employment in state bureaucracy as a means for consolidating political support, as discussed in the previous subsection. The opening of democracy in 1916 quickly led to a competition between political parties fought via increasing state expenditure.⁵⁷² The Radical period was not a complete disaster from a public finance perspective, as the Alvear Presidency in the 1920s was a period of improvement in public goods and finances. Nonetheless the increase in state patronage was tied to the nature of Argentine democratic institutions, and had two main effects on public accounts: 1) an increase in public expenditure; and 2) a redistribution of expenditure towards administration, salaries, and pensions in detriment to public works.⁵⁷³ This trend continued throughout the twentieth century, impeding a more efficient use of resources that might have provided much greater public goods. Such clientelism greatly increased again during the Perón administration.

The undemocratic decade infame of the 1930s succeeded in imposing stricter public finances after the Radical experience of democracy, but financial orthodoxy was completely abandoned when democracy returned under Perón, when the state became the leading developmental actor and the deficit greatly increased.⁵⁷⁴ The Peronist state's approach was that expenditure would generate its own income. The state's new role generated enduring responsibilities for expenditure that would slowly spiral out of state control over the twentieth century. State bureaucracy greatly expanded in the 1943-55

⁵⁷¹ Montequin, A. (1995). "Sector publico y sistema tributario argentino, 1914-1932." Ciclos (año 5) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires 5(9)., p.145

⁵⁷² Ibid., p.150

⁵⁷³ Ibid., p.163

⁵⁷⁴ Vegganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., pp.127-9

period, with a great increase in the number of civil servants.⁵⁷⁵ The number of public employees more than doubled from 1943 to 1955, partly due to the extension of public activities, but also due to political patronage.⁵⁷⁶ This combined with low salaries to conspire against efficiency. As has been seen, the first Perón government of 1945-55 witnessed a great decline in the quality of state expenditure, especially in terms of public goods and investment.⁵⁷⁷ This was a marked change from earlier in the twentieth century when state expenditure could be dynamic, profitable, and technologically advanced (even if haphazard and erratically planned).⁵⁷⁸ The proliferation in public administration and bureaucracy, coupled with budgetary fragmentation, were major reasons for decline in the quality of state expenditure, especially after 1946. A sustained increase in the number of state employees occurred at all levels of government as public employment became increasingly political.⁵⁷⁹ Resources were increasingly assigned to salaries with the great increase in civil servants.⁵⁸⁰ The weight of public expenditures shifted from capital to current (or consumption) expenditure, even as total expenditure decreased. In the 1950-56 period, for instance, consumption expenditure was maintained while investment expenditure greatly declined.⁵⁸¹ The Peronist period initiated a long and disastrous period for public goods and finance.

Perón's two five-year plans foresaw a great expansion in expenditure, but did not increase taxation sufficiently to fund that expansion. The problem was not the increasing degree of state intervention, but the manner in which intervention was done. For instance Prebisch is in favour of a larger state economic role, which he sees as 'indispensable' to accelerating development and imparting it with a social sense. Yet he finds that state intervention under Perón's government was excessive, disordered, badly

⁵⁷⁵ Blanco, E. A. M. d. H. d. I. N. (1956). La Política Presupuestaria, La Deuda Publica y La Economía Nacional. Conferencia dictada en la Escuela Superior de Guerra.

⁵⁷⁶ Herschel, J. F. and S. Itzcovich (1957). "Fiscal Policy in Argentina." Public Finance XII(2 & 3), pp.208-209

⁵⁷⁷ Vegganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.129

⁵⁷⁸ Ibid., p.147-8

⁵⁷⁹ Latinoamericanas, F. d. I. E. (1991). El Gasto Público en la Argentina 1960-1988. Buenos Aires, (FIEL) Fundación de Investigaciones Económicas Latinoamericanas., p.59

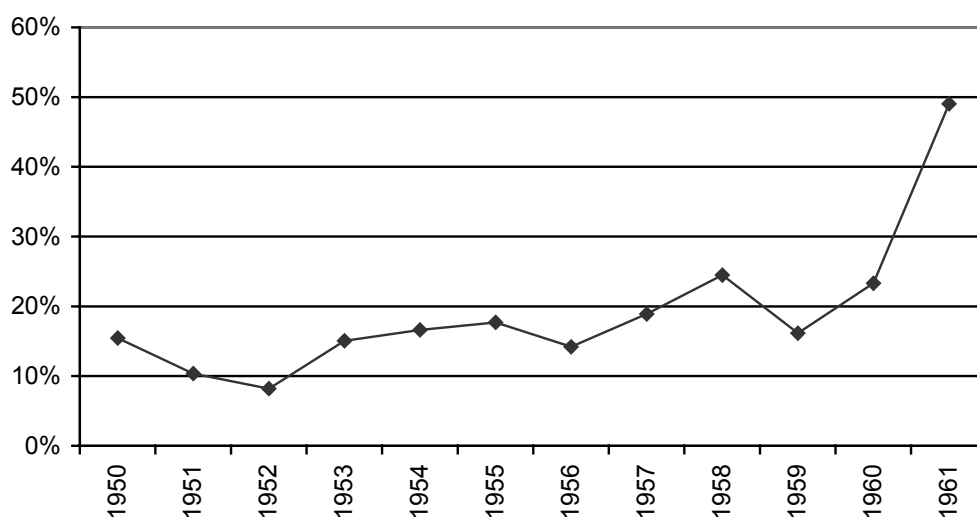
⁵⁸⁰ Fiorito, M. R. S. d. O. P. (1969). Análisis económico de la evolución del gasto público en inversión en la Secretaría de Estado de Obras Públicas. Finanzas Públicas Segundas Jornadas, Trabajos Presentados en los Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi., p.517

⁵⁸¹ Treber, S. (1969). Tendencia a la inversión real del sector público argentino. Finanzas Públicas - Segundas Jornadas, Trabajos Presentados en las Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi., p.578

directed, and the cause of inflation.⁵⁸² He calls for a rational planning of public works as a form of investment, which had not occurred despite the two recent five year plans. The inefficiency of Argentine public goods provision in the mid twentieth century was exceptional even by Latin American and other developing country standards. Of eleven Latin American countries, Argentina had one of the highest formations of capital but one of the lowest rates of economic growth.⁵⁸³ In the period 1950-66, the Argentine relationship between capital and economic growth was the least favourable not only in Latin America, but of all developing countries that submitted statistics to the United Nations. Public investment was poorly managed on a colossal scale.

Figure 4.4

Loss on Argentine State Enterprises as a proportion of the Federal Deficit, 1950-61



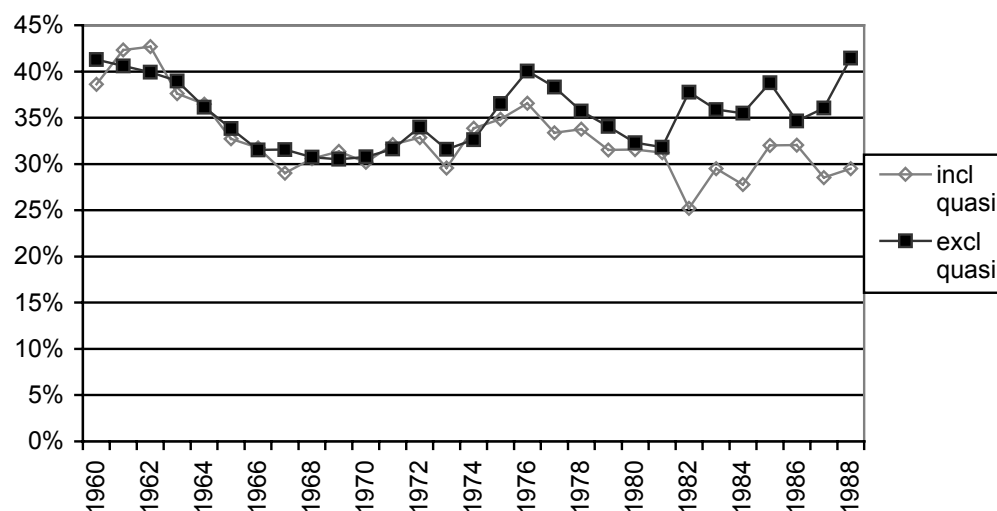
Source: (Secretaria del Consejo Nacional de Desarrollo 1967)

⁵⁸² Prebisch, R. (1955). Informe Preliminar acerca de la Situación Económica. Buenos Aires, La Secretaría de Prensa y Actividades Culturales de la Presidencia de la Nación., pp.33-4, 38, 45

⁵⁸³ Treber, S. (1969). Tendencia a la inversión real del sector público argentino. Finanzas Públicas - Segundas Jornadas, Trabajos Presentados en las Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi., p.578

Figure 4.5

State Enterprises as a proportion of total state expenditure in Argentina, 1960-88



Note: Quasi-fiscal is expenditure outside of normal fiscal definitions.

Source: (Latinoamericanas 1991), p.20

The major reason for the increase in expenditure without a corresponding increase in public goods provision was the lack of financial control over state enterprises. From WWII onwards, Argentine state enterprises made a huge uncontrolled, and often unknown and unknowable, contribution to the public deficit. This was largely due to gross inefficiency that was greatly encouraged by the state's lack of control. This lack of control was so extensive that state enterprises did not even furnish the state with accounts. From the 1960s the financial condition of state enterprises was particularly poor, and often accounted for over 80% of the total public deficit.⁵⁸⁴ As can be seen above, they accounted for a very large part of the federal deficit and total state expenditure by the late 1950s and early 1960s. These state enterprises, continuing a long Argentine institutional tradition, lacked investment planning, implying that a much better allocation of resources could have been made. State enterprises simply lacked incentives to save or invest in improving productivity due to the lack of any constraints

⁵⁸⁴ Véganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development., pp.151-2

on their financing or results.⁵⁸⁵ State enterprises were very important in socio-economic policy by the 1950s.⁵⁸⁶ Yet their large and uncontrollable expenditures helped undermine Argentine public finances.

The budget was briefly restored to sustainability in the 1960s, after many failed attempts. Yet the deterioration of Argentine fiscal institutions continued without any serious response.⁵⁸⁷ Investment in public goods also recovered to a certain degree in the 1960s, partly correcting the sustained and persistent decline that had occurred since 1943 due to the shift towards consumption expenditure.⁵⁸⁸ This consumption expenditure was successfully reduced in the 1957-60 period, and investment expenditure slightly recovered. Yet investment expenditure began to decline again in 1962-65, while consumption expenditure was maintained or increased from 1960-67. From WWII until at least the late 1960s, state expenditure shifted increasingly away from public investment towards salaries. The amounts budgeted for investment were larger than those actually expended throughout this period, as investment expenditure was easier to reduce than salaries.⁵⁸⁹ From 1956 to 1965, the amount budgeted for investment exceeded actual expenditure by almost a third (31.6%). This led to dramatic under-investment. For instance the railways, then entirely state owned, required an investment of US\$915 million in the period 1958-67, but only a fifth of this was achieved.⁵⁹⁰ Lack of investment led to a great decline in the quality of public goods and services by the 1970s and 1980s.⁵⁹¹ Perón's return to government in 1973 fuelled another upsurge in public expenditure, and the emergence of a new phenomenon from 1975 where inflation produced considerable declines in fiscal revenue (due to the delay in collecting income and inheritance taxes). This continued until the hyperinflationary

⁵⁸⁵ Ibid., p.154

⁵⁸⁶ Mann, A. J. and W. E. Schulthess (1981). "Nivel y la Composición del Gasto del Sector Gubernamental de la Republica Argentina, 1930-1977." *Desarrollo Económico* 21(82), p.262

⁵⁸⁷ Vezanzones, M.-A. and C. Winograd (1997). *Argentina in the 20th century : an account of long-awaited growth*. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.130

⁵⁸⁸ Fiorito, M. R. S. d. O. P. (1969). *Análisis económico de la evolución del gasto público en inversión en la Secretaría de Estado de Obras Públicas*. Finanzas Públicas Segundas Jornadas, Trabajos Presentados en los Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi., p.514

⁵⁸⁹ Treber, S. (1969). *Tendencia a la inversión real del sector público argentino*. Finanzas Públicas - Segundas Jornadas, Trabajos Presentados en las Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi., pp.588-591

⁵⁹⁰ Ibid., p.598

⁵⁹¹ Vezanzones, M.-A. and C. Winograd (1997). *Argentina in the 20th century : an account of long-awaited growth*. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.133

collapse of public finance in 1990.⁵⁹² Most Argentines were grateful for the privatisations of the 1990s as they meant necessary goods and services previously “supplied” by the state might once again become attainable.

Australia

The Australian experience of public goods provision (both as formerly individual colonial states and as a federal nation state from 1901) stands in contrast to Argentina. The role of the state as a significant direct provider of public goods was established early in Australia, in the latter half of the nineteenth century. The Australian colonial states developed an early and exceptional ability to directly provide extensive public goods, especially reproductive public works for infrastructure considered necessary for development. This stood in contrast to the norms of the state in the colonial founder, Britain, which saw public goods as being best provided by the market until the twentieth century. The Australian state provision of public works was necessarily linked to the cultivation of public credit from an early date. Government securities became regularly available from the 1860s, were considered relatively safe, and provided a certain income.⁵⁹³ The colonial states acted as middlemen, obtaining British financing relatively inexpensively and channelling it directly to public works via state enterprises. These state enterprises had a significant degree of natural or artificial monopoly.⁵⁹⁴ Periods of high public borrowing were periods of high public goods investment by state enterprises. If this public borrowing were reasonably well invested, it would make public credit more credible, reinforcing a positive path dependency. Taxpayers, directly benefiting from state borrowing via the provision of desirable public goods, were more likely to be willing to service public debts with future taxation. Barnard identifies the periods of high public borrowing and public goods investment in Australia as the late 1850s, the late 1870s-1880s, 1910-16, the 1920s, and the first half of the 1950s.⁵⁹⁵ Only the last period occurred after the widespread emergence of Keynesianism and wider acceptability of direct state economic involvement. The Australian colonial states were

⁵⁹² Ibid., pp.130-1

⁵⁹³ Butlin, S. J. (1986). *The Australian monetary system, 1851 to 1914*. [s.l], J.F. Butlin., p.69

⁵⁹⁴ Butlin, N. G., A. Barnard, et al. (1982). *Government and capitalism : public and private choice in twentieth century Australia*. Sydney ; Boston, Allen & Unwin., p.13

⁵⁹⁵ Barnard, A. (1985). *Australian Government Finances: A Statistical Overview, 1850-1982*. *Working Papers in Economic History*; no.59. Canberra, Australian National University: 48., p.11, 16

leaders in the field, developing both the credibility to expand the role of the state and the capacity to deliver public goods.

Australian capitalism has been described as being born through the state.⁵⁹⁶ About 70 percent of all Australian borrowing in London was borrowed by the colonial states, and public debt soared from £11 million in 1861 to £155 million in 1891. Almost all of this went to the provision of public goods, about two-thirds to railways and the remainder to telegraphs, tramways, water and sewerage.⁵⁹⁷ Australian colonial states were not laissez-faire in character. Their interaction with the economy in the nineteenth century was one of 'colonial socialism', a large and direct economic participation to bring capital and labour from abroad to increase economic growth.⁵⁹⁸ Yet the Australian colonial states were also committed to the rules of the market. The Australian states played a fundamental role in the successful development of export industries.⁵⁹⁹ The roots of public goods provision via the state, tailored to fostering development, extend back to the governorship of Macquarie in 1810-21. His policy was to promote, by authoritarian means if necessary, the welfare of convicts and colonists.⁶⁰⁰ He was an ambitious builder of public works in buildings, roads, and communications. By the eve of federation in 1900, the Australian colonial states owned roughly half the country's total fixed capital (excluding land) and operated the economy's largest enterprises, absorbing about 5% of the total workforce and generating about 6% of GDP.⁶⁰¹ The long experience of building and operating large enterprises such as railways perfected methods of public administration in Australia by the early twentieth century.⁶⁰² The management of Australia's natural or artificial monopolies as state enterprises also largely eliminated a significant potential source of social conflict between public and

⁵⁹⁶ Buckley, K. D. and E. L. Wheelwright (1988). No paradise for workers : capitalism and the common people in Australia, 1788-1914. Melbourne ; New York, Oxford University Press., p.3-8

⁵⁹⁷ Ibid., p.105

⁵⁹⁸ Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin., p.13, 320-1

⁵⁹⁹ Pinkstone, B., D. Meredith, et al. (1992). Global connections : a history of exports and the Australian economy. Canberra, AGPS Press., p.9

⁶⁰⁰ Butlin, S. J. (1953). Foundations of the Australian monetary system, 1788-1851. [Carlton], Melbourne University Press., p.5-6

⁶⁰¹ Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin., p.16-17

⁶⁰² Clark, V. S. (1908). "Australian Economic Problems. I The Railways." The Quarterly Journal of Economics, Harvard University Press 22(3): 399-451., pp.448-9

private interests.⁶⁰³ The strategy of providing public goods directly through the state on the basis of public loans was highly successful until at least the late nineteenth century. It was also a logical strategy considering the nature of the economy as a settler economy with limited initial factor endowments. Contemporary studies find it unlikely that railways would have been privately built on any considerable scale due to Australian geography, as Australian railways suffered from a large mileage relative to business and a lack of through freight.⁶⁰⁴ The state was clearly essential to development in Australia.

By the early twentieth century the role of the state in fostering development via the provision of public goods financed by public credit was well established. Prime Minister Bruce made a clear statement of the extraordinary role played by the Australian state in providing public goods for development via public credit:

‘It is to be remembered that certain works that are carried out by Australian governments would be carried out by private enterprise in other countries. ... Our business is to satisfy the people that this borrowed money is being expended wisely and usefully for the development of the country, and that the interest payments are not to be regarded as a millstone hung round the neck of the people. ... It is said that we do not encourage private enterprise as much as we should do; ... As a matter of fact, the great majority of public works in course of construction in Australia will make it possible for private enterprise to invest its capital in productive undertakings.’ (Hansard), 12/6/1928, Vol. 119, p.5915

The Australian attitude towards public credit and expenditure was also well expressed by Dr Earle Page as Treasurer. He states that:

‘Australia cannot progress, however, without a certain amount of overseas borrowing. The savings of the people of Australia are not yet sufficient to enable us to carry out a policy of development as rapidly as we could wish. If we relied entirely upon the people’s savings for the development of this country it would progress slowly.’ (Hansard), 22-23/7/1926, Vol. 114, p.4535

Mr Fisher, as opposition leader and future Prime Minister, also summarised well the developmental role of the Australian state, public goods, and public credit:

⁶⁰³ Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin., p. 13-14, 237, 340-1

⁶⁰⁴ Clark, V. S. (1908). "Australian Economic Problems. I The Railways." The Quarterly Journal of Economics, Harvard University Press 22(3): 399-451., p.451. See also Howell, P. (1899). "Comparative Statistics of Australasian Railways." Journal of the Royal Statistical Society 62(1): 83-124., p.84

‘The opening up of Australia from north to south, and from east to west, whether by water or by land, is a national duty, and the mere fact that we expend a few millions on such work does not matter. The credit of the country can be safely pledged, because, not only does the railway represent an asset for the actual amount expended, but that asset increases in value as the years go by’.

(Hansard), 11/6/1914, Vol. 74, p.2047

The role of the Australian state in directly providing reproductive public goods was accepted across the political spectrum, and can be seen in a 1914 exchange between the Liberal Treasurer, Sir John Forrest, and opposition leader, Mr. Fisher.⁶⁰⁵ Nonetheless Australian public works provision directly via the state was not a complete success. MP Richard Foster observes in 1915:

‘Over and over again we have had indisputable evidence as to shocking extravagance and waste in our public works due to inefficiency and very largely to inexperience and irresponsibility. Yet there is no attempt to remedy this condition of affairs. ... When are taxpayers to receive consideration?’ (Hansard), 29/10/1915, Vol. 79, pp.7053-7054

The role of the state in providing public goods on the basis of public credit was clear and little questioned by the Australian state in the early twentieth century.

The crucial step between public credit and state credibility is that the destination of public credit should be the provision of widely accepted public goods. In the context of nineteenth and early twentieth century Australia, such widely accepted public goods were reproductive public works that fostered development. The high provision of public goods by the Australian colonial states was reflected in their fiscal structures. As a whole the Australian colonial states reaped high fiscal returns from the use and sale of crown lands from primary exporters, which vied for being the single most important source of fiscal revenue until the 1880s.⁶⁰⁶ In return for these land revenues the Australian colonial states provided primary exporters with large state enterprises that constructed and operated the railways and utilities. The Australian state acted much like a firm, directly providing public goods to primary exporters on the basis of inexpensive

⁶⁰⁵ Hansard Australian Parliamentary Debates, Parliament of Australia., 25/6/1914, Vol. 74, pp.2581-2586

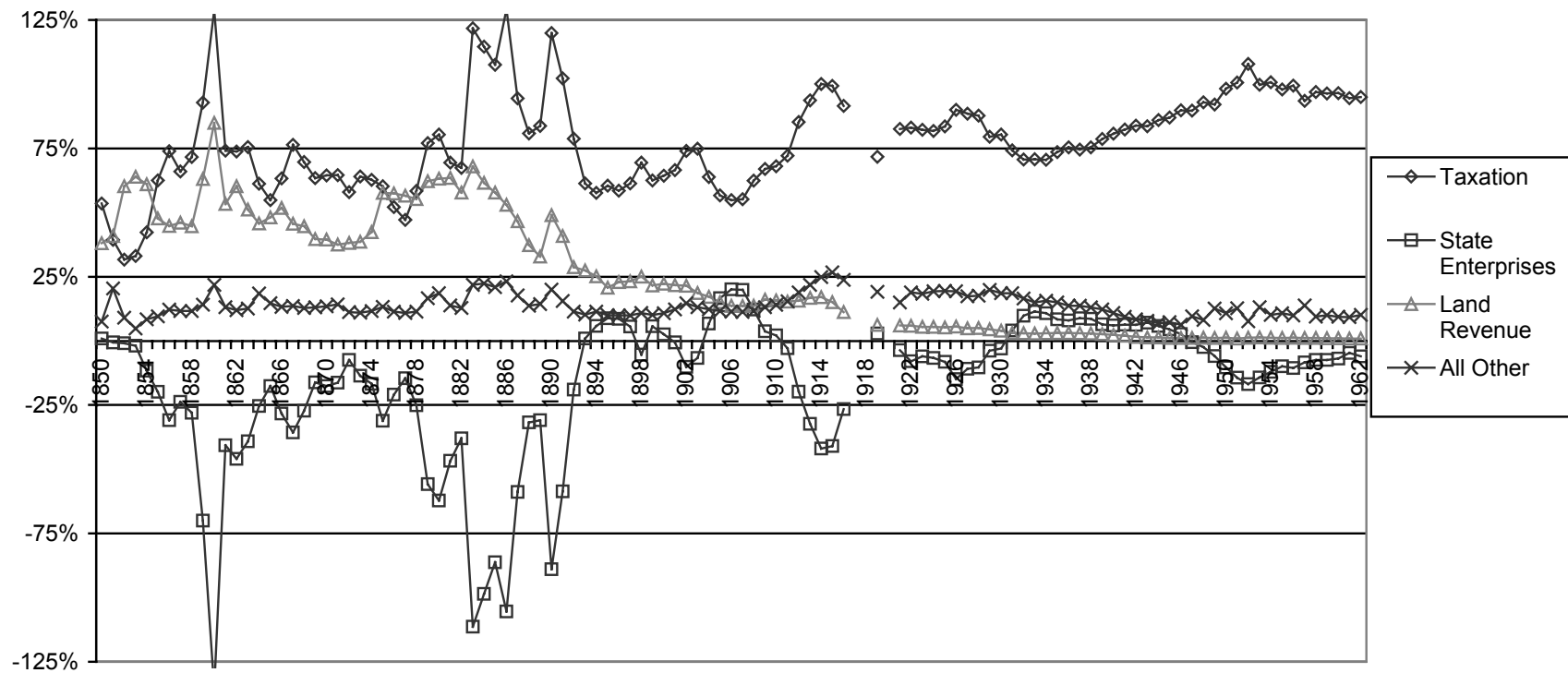
⁶⁰⁶ This was particularly true for New South Wales (NSW).

public credit in return for revenue.⁶⁰⁷ The successful operation of such an arrangement should have greatly increased both state credibility and public credit.

⁶⁰⁷ See preamble in Chapter Three.

Figure 4.6

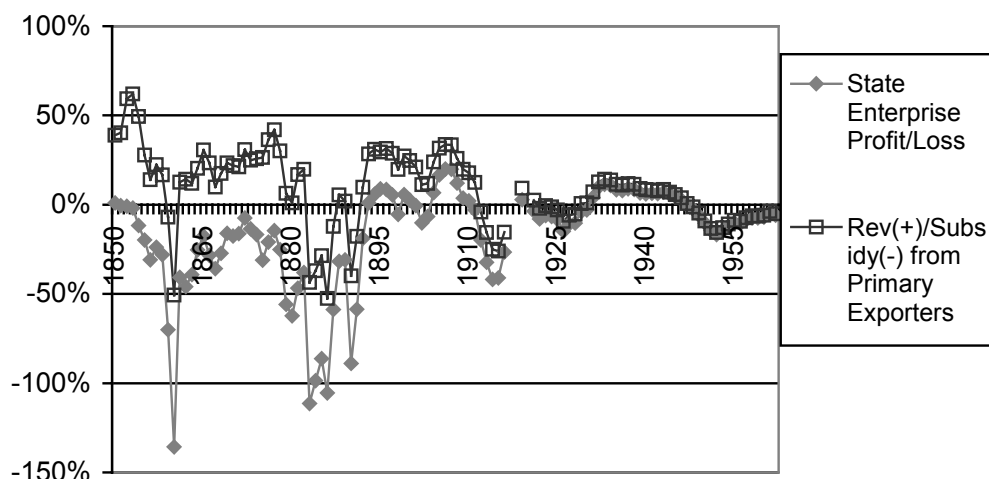
Australian Revenue Sources (Total), 1850-1962



Source: See Statistical Appendix, Table 4.6

Figure 4.7

Public Goods Provision, Australian Primary Producers and the State



Note: The revenue/subsidy line above is obtained by adding land revenue to state enterprise revenue. Both lines are a proportion of total public revenue. Source: See Statistical Appendix, table 4.6.

Australian primary producers appear to have been heavily subsidised by the state for much of the nineteenth century, judging simply by the continual losses incurred by state enterprises in terms of fiscal revenue alone. A different picture emerges when these losses are balanced by the land revenues paid by primary producers. A line in Figure 4.7 represents the balance and shows that, asides from a few brief periods, primary producers more than repaid the subsidy they received from state enterprises via land payments. Furthermore primary producers clearly did not fully capture all the benefits provided by state enterprises.

Three broad trends emerge in the Figures above that extend the discussion of who received public goods from Chapter Three. These trends are: the latter half of the nineteenth century until the 1890s depression; a mixed transition period from the 1890s until the 1940s; and a postwar period. The first is largely a period of highly loss making state enterprises more than balanced by extraordinarily high land revenues. With the 1890s depression this approach lost sustainability, as land revenues began a large and

irreversible decline, and state enterprises began an unheralded period of profitability.⁶⁰⁸ This was likely due to the sudden inability to access external public credit imposed by the Barings crisis. From 1850-90, the average positive balance between losses on state enterprises and revenue from land was about 13% of total fiscal revenue. There was thus a large and mutually beneficial relationship between the state and Australian primary producers in this period. Primary producers paid the state more than they received, but in turn received public goods that might not have been provided otherwise. The second period of transition sees a continual decline of land revenues to almost total insignificance, paralleled by the increasing importance of taxation. State enterprises return to making losses with economic recovery from 1910, and again during the 1920s. The return of depression in the 1930s sees their forced return to profitability. As seen in Chapter Three, the destination of Australian public goods changed in the early twentieth century, from the provision of rural public goods for primary producers to more urban and social public goods for the democratic masses. In the postwar period taxation is almost the sole source of revenue, as land revenue disappears and state enterprises maintain small and stable losses. These periods reflect large underlying changes in Australian political economy. The successful relationship between the state and primary producers should have greatly increased state credibility amongst at least the primary producers until the early twentieth century, when the model began to decline. The first period, the latter half of the nineteenth century to the 1890s, was important to developing initial public credit and an institutional ability to run state enterprises. The Australian state went above and beyond providing the important basic public good of order, directly providing public goods such as railways that might not otherwise have been built. In contrast the Argentine state did not go much beyond the public good of order and stability, and this did not hamper the ability to foster key public goods for development, at least measured by railways as seen in Figure 4.2. This meant the Argentine state did not build public credit to fund the direct provision of public goods on a significant scale, as will be seen below; nor did the Argentine state begin to develop an institutional ability to run state enterprises until the 1930s.

⁶⁰⁸ Periods of state enterprise profitability appear to closely correlate economic depression.

Australia began to fall behind economically from the turn of the twentieth century, as the 1890s depression proved longer and deeper than elsewhere.⁶⁰⁹ The state adjusted by moving to more indirect means of intervention, and eventually to macroeconomic management.⁶¹⁰ The great expansion in public debt that occurred with WWI created great problems, as the state acquired large debts from non-reproductive expenditure. As MP Sampson noted in 1915:

‘all our borrowings have been in respect of public works, public institutions, and public trading operations, and that until the outbreak of this war we had no national debt in the ordinary sense of the term as understood in Europe.’
(Hansard), 25/8/1915, Vol. 78, p.6093

It took some time for the impact of WWI to sink in. For instance one MP (Kerby) argued in 1920 that the state could continue its developmental role despite the large recent accumulation of debt:

‘Immense loans are outstanding, and there are great public works which should be undertaken, and for the carrying out of which the Government must provide financial assistance. ... The development of Australia ... must not be kept back’.
(Hansard), 26/2/1920, Vol. 91, p.52

Dr Earle Page argued for a stall in expenditure, but did not challenge the validity of the model itself:

‘we ought seriously to consider whether it is proper to revert to the old-time policy [of public works]. ... with money only procurable at about 8 per cent ... it is a very open question whether a big public works policy should be entered upon by the Government in view of the fact that money is so dear at the present time. ... The maintenance of public works should be provided out of revenue, and not out of loan account, at this stage of our history.’ (Hansard), 13/10/1920, p.5564

The model of public goods directly provided by state enterprises lingered until 1930, as it required access to foreign capital. From 1930 Australia found external loans could not be obtained, severely constraining the ability to continue the model.⁶¹¹ A revaluation of the state’s developmental role followed, and the state moved towards more indirect

⁶⁰⁹ An interesting article in this regard is: McLean, I. W. and A. M. Taylor (2001). "Australian Growth: A California Perspective." NBER Working Paper Series Working Paper 8408: 30.

⁶¹⁰ Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin., p.10

⁶¹¹ Ibid., pp.321-324

methods of intervention such as fostering the development of human capital in education and immigration. This was preceded to some extent by growing concern over the Australian model by British lenders. For instance a British Economic Mission in 1927 blamed Australia's economic difficulties upon extensive state economic intervention; specifically the high extent of public ownership, excessive tariffs, and the use of an arbitration system for determining wages.⁶¹² The Mission also expressed concern over the size of Australia's public debt. Another 1926 report for British investors asked 'Is Australian finance sound?' and saw the Australian federal state as a 'voracious borrower' with unsustainable debts spent on loss-making state enterprises.⁶¹³ After 1950 state enterprises were increasingly run for profit, which coincided with their decline as the economy's leading investors and producers, and an increase in regulatory authority over private decision-making.⁶¹⁴ The Australian state shifted away from direct public goods' provision via state enterprises towards indirect provision via market regulation in the postwar period. This was the opposite trajectory of the Argentine state.

In the twentieth century less tangible public goods such as welfare became increasingly important. These were indirectly important to fostering development by increasing domestic demand and minimising social conflict. Australia began the shift to a welfare state early, from 1894 to 1914 through the introduction of State-backed industrial tribunals that brought many areas of employment under minimum-wage rules. Prior to 1914, arbitration was used primarily to support the trade unions' bargaining power, increase wages to minimum levels, and encourage the development of federal unions.⁶¹⁵ The basic wage was introduced in 1907 and became widespread by the early 1920s, an almost unique achievement. Similar was the adoption and spread of old-age pensions, along with maternity and invalid pensions, from 1908.⁶¹⁶ By 1914 the Australian state was establishing floors to incomes and consumption, well in advance of other countries. Welfare further expanded in the interwar period to cover the war-wounded and bereft, as well as poverty relief due to unemployment. This was funded by a large extension of

⁶¹² Groenewegen, P. D. and B. J. McFarlane (1990). A history of Australian economic thought. London ; New York, Routledge., p.124

⁶¹³ Cooke, S. R. and E. H. Davenport (1926). Australian Finance. Dedicated to the Imperial Conference 1926, Pelican Press.

⁶¹⁴ Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin., p.320

⁶¹⁵ Ibid., p.150-1, 328-9

⁶¹⁶ Ibid., p.337

income tax to include 60-70 percent of the workforce.⁶¹⁷ During WWII the Australian state prepared for postwar reconstruction by planning a comprehensive system of social security and welfare, with full employment as the main goal.⁶¹⁸ The development of this broad welfare program met little opposition, partly due to the policy of protectionism. Protectionism had become the basis for the idea that the relationship between manufacturers, rural producers and wage earners was symbiotic.⁶¹⁹ The achievement of such a unifying ideology was highly significant in reducing the potential for destructive social conflict. Prior to 1949, the state was largely limited to replacing those welfare services previously supplied privately, but after 1949 it consciously shifted to providing welfare via the market.⁶²⁰ From 1949-66 welfare policy shifted from a goal of poverty alleviation to one of assisting middle and upper income groups. Australian welfare in the postwar period was relatively ungenerous in regards to poverty relief, evidenced by the substantial capture of benefits by the middleclass.⁶²¹ This was logical considering the coinciding shift in the state's fiscal base towards a more urban and democratic base.

II Broad Brushstrokes in Public Credit

Public credit originally played an important role in the construction of fiscal institutions in Western Europe. Regular warfare resulted in an accumulation of public debt, forcing states to better develop their fiscal institutions in order to service and repay it. In Britain war and public debt combined to achieve the introduction of income tax, which was previously strongly resisted.⁶²² The British history of fiscal institutions and public credit provides guidance as to how states can enter a positive path dependency of public credit. Britain's shift from a feudal demesne state to one based on taxation was soon followed by a dramatic increase in public debt in the late seventeenth century, as Parliament established dominance over the Crown through control over finance.⁶²³ Public debt rose from almost nothing in the reign of Charles II to a nominal Figure of

⁶¹⁷ Ibid., p.172-3

⁶¹⁸ Ibid., p.192-3

⁶¹⁹ Ibid., pp.330-332

⁶²⁰ Ibid., p.193-4

⁶²¹ Ibid., p.196-7

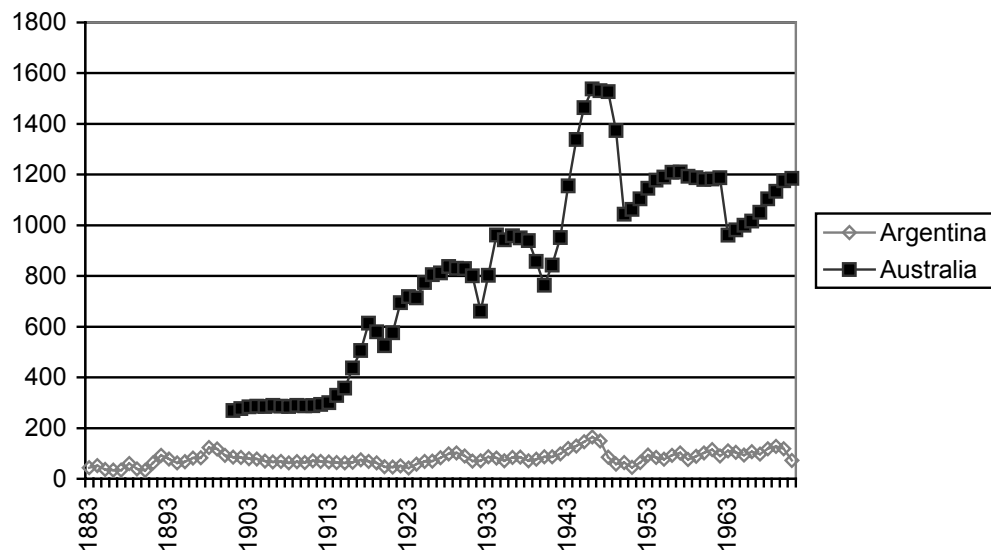
⁶²² O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review 41(1): 1-32., pp.17-22

⁶²³ Capie, F. (2001). The Origins and Development of Stable Fiscal and Monetary institutions in England. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p., p.25

£823 million by the accession of George IV.⁶²⁴ This public debt boom reflected a dramatic increase in the credibility of the British state, opening an opportunity for a virtuous cycle of increased state power. The growth and success of public credit allowed an expansion of financial intermediation and financial institutions, and the proper emergence of the stock market.⁶²⁵ The rise of the financial services industry was arguably the power behind the rise of the British Empire.⁶²⁶ The British example shows that the establishment of public credit upon achievements in state credibility can have large positive externalities, such as financial markets.

Figure 4.8

Dept per capita in US\$, 1883-1971



Sources: See Statistical Appendix, Table 4.8

How did public credit develop in Argentina and Australia over time? A simple starting point is the amount of public debt each accumulated and sustained over time in per capita terms. As public credit develops, the potential amount of sustainable debt increases. Of course actual debt per capita is not equal to the maximum sustainable debt,

⁶²⁴ O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." *The Economic History Review* 41(1): 1-32., p.26

⁶²⁵ Capie, F. (2001). The Origins and Development of Stable Fiscal and Monetary institutions in England. *Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century*. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p., p.39-43, 49-50

⁶²⁶ See Cain, P. J. and A. G. Hopkins (2001). *British imperialism, 1688-2000*. New York, Longman.

but an historical context gives some idea. Figure 4.8 compares the nominal levels of total debt per capita in US\$. Argentine debt per capita is consistently low, whereas Australian debt per capita grew over time, increasing dramatically during the World Wars. Was Argentine credibility too low to borrow significantly? Did Argentina lose an opportunity to build greater public credit and credibility via public goods provision? The Argentine state took a commanding economic role in the postwar period, but this is invisible from the record of debt per capita until the 1970s. Argentine debt rose significantly in the late 1970s at the height of the latent civil war, almost all of which was external. Argentine public debt quickly proved unsustainable, and Argentina defaulted along with many other Latin American countries in the early 1980s. In contrast, Australia's strong and sustained growth in debt per capita over the twentieth century shows that state credibility and public credit were relatively high. Despite persistently higher public debt per capita, there was never any real threat of default as debt servicing was equal or easier than in Argentina. Australia's increasingly high national debt per capita suggests a concurrent increase in state credibility. Considering the state's extensive postwar economic role, Argentina's low public debt per capita suggests credibility was low. Why wasn't increasing public goods provision funded through greater public credit? The quick default on public debt in the early 1980s shows that the Argentine state possessed little credibility and credit by this time.

Divergence in public credit began in the interwar period. The World Wars helped achieve a cohesive nationalist ideology that gave credibility to greater collective action by the Australian state. As the tap of external credit dried in WWI, the Australian state began to successfully cultivate an internal market for public credit that had previously not existed. WWII developed this further, and was financed by a mixture of domestic loans and increased taxation.⁶²⁷ As a result external public debt actually declined by 12.3% during WWII, by £79 million from 1938/39 to 1945/46. WWII was also an opportunity for Australia to foster closer relations with the US, the centre of the postwar world economy.⁶²⁸ Argentina took a different trajectory. The Argentine experience of WWII was relatively easy and profitable, but with less opportunity to build a unifying

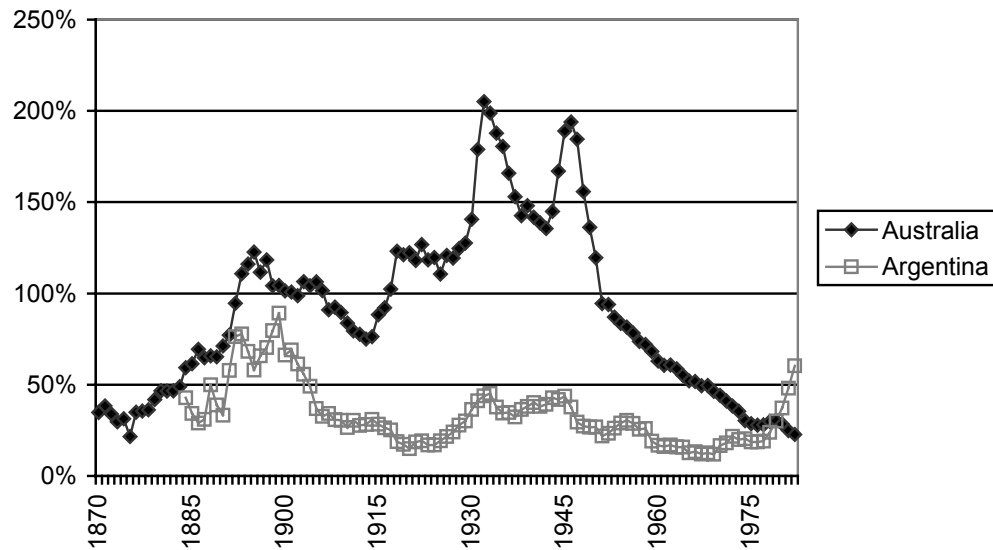
⁶²⁷ Pinkstone, B., D. Meredith, et al. (1992). *Global connections : a history of exports and the Australian economy*. Canberra, AGPS Press., p.144-5

⁶²⁸ Due to Australia's cooperation with the US in the War of the Pacific, it obtained a subsidy of roughly US\$0.5 billion from the US government. This benefit should be balanced against the considerable costs of war. Ibid., p.144-5

nationalist ideology; one that might have cut through class divisions and achieved a greater capacity for collective action. Argentina also played an extremely poor diplomatic hand during WWII by supporting the Axis, emerging in a highly acrimonious position with the US in the postwar period.

Figure 4.9

Public Debt to GDP, 1870-1982



Sources: See Statistical Appendix, Table 4.9

Another way to compare public credit over time is public debt to GDP, which indicates the sustainability of public debt and how much public credit the state has achieved, at least in times of crisis. The greater a state's credibility, the greater the proportion of resources the state can command. As public credit develops, the sustainable level of public debt/GDP should thus increase. Of course the actual level of public debt/GDP is usually less than the maximum sustainable, but historical trends give some indication within context. Recall that it is the will of society to pay, not the capacity to pay, that ultimately determines public credit. What is initially striking is how much less burdened Argentina was by public debt than Australia. Argentina made little use of public credit asides from the late nineteenth century, which was the high point of Argentine public credit. Argentina and Australia sustained similarly high debt ratios during the Baring Crisis. This suggests they then possessed similar levels of public credit. Neither

Argentina nor Australia technically defaulted on their public debt at this time.⁶²⁹

Australia was less successful in reducing public debt to GDP after the Baring crisis due to a long economic depression (unlike Argentina). Despite Australia's high debt ratio at the start of WWI, the state could sustain a further large increase in public debt, which peaked in 1932 at 205% of GDP, and continued at a remarkably high level into the late 1940s. That Australia did not default despite the extraordinarily high ratio of debt to GDP strongly suggests high underlying credibility. 'The will and the capacity of the country to pay all its taxes, as large as they may be' was very high in Australia.⁶³⁰

Australians were remarkably willing to sustain their state's credit for the common interest. The World Wars revealed how high Australian public credit had become. The relative lack of Argentine public debt suggests much lower public credit. Just how low became clear in the late 1970s and early 1980s, when Argentina defaulted on public debt despite only reaching 60% of GDP.⁶³¹ By the early 1980s Argentine public credit had seriously declined since 1899, when a public debt of 89% of GDP was sustained without default. Argentine taxpayers were unwilling to finance their state's relatively small public debt by the early 1980s, which may have been a reasonable response.⁶³²

Success in fostering state credibility and public credit should be mirrored in a rise in the sustainable proportion of public debt to GDP, which will only become truly known during a crisis.

⁶²⁹ Argentina only managed this with the assistance of the Bank of England, but it did not technically default according to Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., p.225

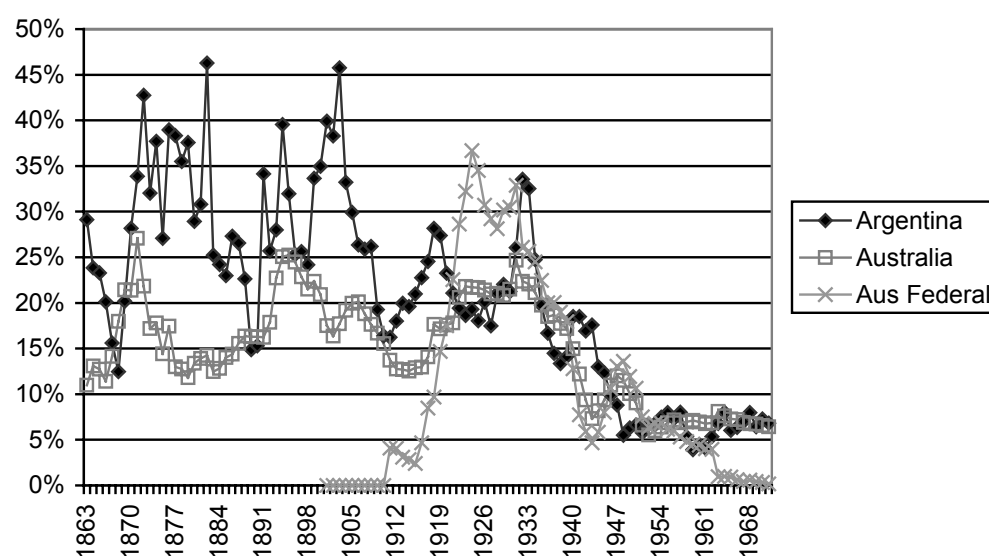
⁶³⁰ Quotation from: Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., pp.67-8

⁶³¹ Dornbusch, R. and J. C. d. Pablo (1987). "Argentina: Debt and Macroeconomic Stability." NBER Working Paper Series(2378).

⁶³² The public debt greatly expanded under the 1976-83 military dictatorship. By and large the funds were either not invested well or were stolen. One source claims that US\$4.2 billion of loans simply went missing in the 1970s. See: Adams, P. (2004). *Odious Debts - Loose Lending, Corruption, And the Third World's Environmental Legacy*, Probe International. **2005**: Electronically published book., Chapter 12

Figure 4.10

Debt Servicing/Expenditure, 1863-1971



Sources: See Statistical Appendix, Table 4.10

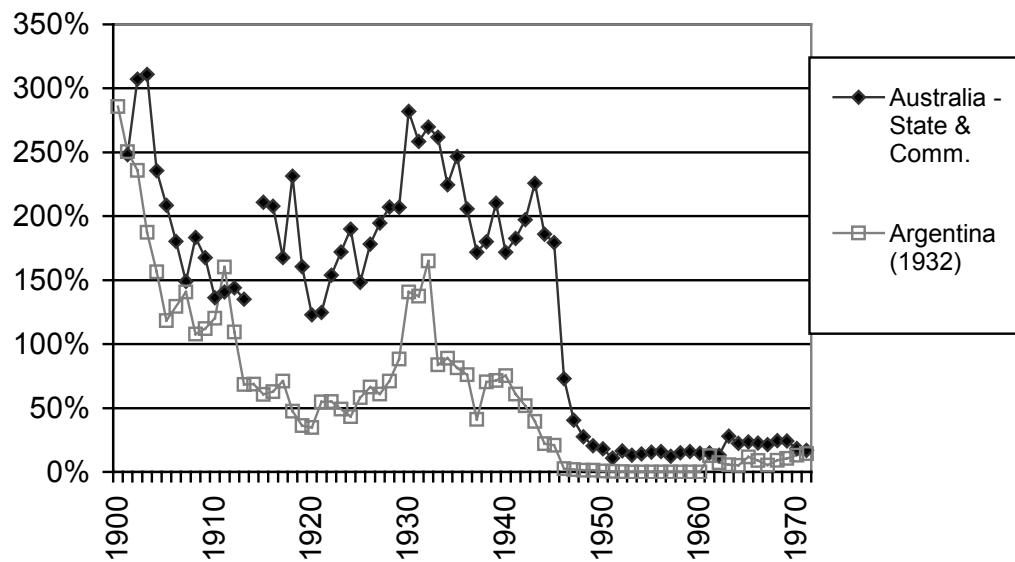
A state's ability to sustain public debt is reflected in the ratio of debt servicing to expenditure. The higher the ratio of debt servicing to expenditure, the more constrained and less flexible a state's options are, and thereby the lower a state's power. The ratio is inversely correlated with state flexibility and power. Argentine debt servicing in Figure 4.10 reflects servicing relative to federal expenditure, whereas Australian debt servicing reflects total debt servicing to total expenditure. A third line of Australian federal debt servicing to federal expenditure has been included but is less illustrative as the federal state only came into being in 1901. What is striking about the comparison is that Argentina's ratio of debt servicing was higher in the nineteenth and early twentieth centuries than in Australia, despite Argentina's lower levels of debt relative to GDP. Only from 1921 to 1931 did Australian federal debt servicing, not total, exceed that of Argentina. The higher Argentine ratio of debt servicing in the nineteenth century, despite lower debt to GDP, shows that Argentine public credit and credibility were lower. This gap narrowed considerably in the late nineteenth and early twentieth centuries. It is remarkable how Australia, on the whole, could greatly increase public debt in the interwar period without similarly increasing debt servicing. This shows the increasing strength of Australian fiscal institutions, which must have more than

accommodated the need for greater debt servicing. Both Argentina and Australia freed themselves from debt servicing by the early postwar period, but this was for different reasons. Argentina's high trade surplus over WWII led to a large accumulation of external credit, allowing an eradication of public debt. The Argentine debt decline did not reflect a corresponding increase in fiscal capacity. Australia could always maintain a reasonable level of debt servicing to expenditure, about 15-25%, despite a dramatic increase in debt to GDP. Higher credibility meant the Australian state could borrow a significant proportion of the economy cheaply and easily.

External Public Credit & Exports

Figure 4.11

External Debt to Exports, 1900-71



Sources: See Statistical Appendix, Table 4.11

Another indication of an ability to sustain public credit is the level of external public debt to exports. Until the first half of the twentieth century this indication works well for Argentina and Australia, as both were dependent on foreign loans for their public credit. Exports indicate a country's ability to earn foreign currency, and external debt is usually contracted in foreign currency. The ratio can thus indicate the sustainability of public credit, as the greater the ratio of external debt to exports, the lower the ability to repay in foreign currency. The ratio of public external debt to exports indicates a state's

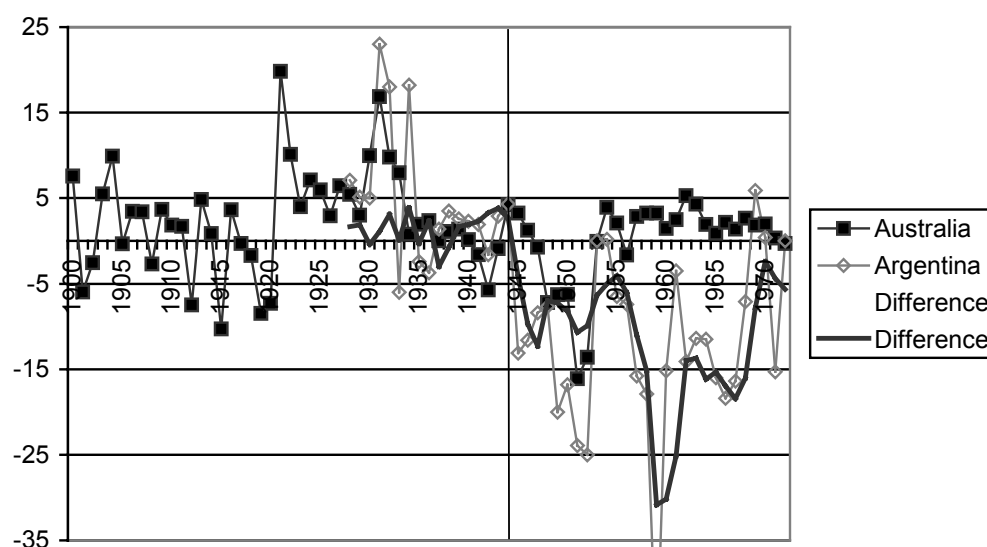
vulnerability to foreign creditors. In a crisis external creditors might refuse to roll over loans, deepening the situation. Figure 4.11 shows that Argentine and Australian states had very high levels of external debt to exports as they moved out of the Baring Crisis at the start of the twentieth century. This recovery was short-lived for Australia, as WWI greatly increased external debt while decreasing the ability to export. In contrast Argentina successfully reduced external debt until the late 1920s when it surged again with the populist expenditure of Yrigoyen.⁶³³ Australia must have successfully inspired continued foreign creditor confidence, as the Australian state was highly exposed to external debt measured by exports. In the 1930s the Australian state must have had sufficient credibility (and/or was a sufficiently large borrower) to coax foreign lenders into continually rolling over external loans, as the ratio of external public debt to exports soared well above the immediate ability to pay. The strategy employed was to move as much of this debt to domestic creditors as possible. By the postwar period Argentina and Australia had greatly diminished their levels of external debt. Australia did so by developing a strong internal credit market, reflected in the rapidly declining ratio of external debt to exports and increasing debt per capita.⁶³⁴ The decline in external debt to exports thus reflects a dramatic success in internal credit. In contrast Argentina used the opportunity of WWII to accumulate a large external credit, later used to eliminate external debt by 1952-53. Argentina did not develop a corresponding internal credit market. Argentine public credit, in a sense, disappeared for much of the postwar period. When public credit reappeared in the 1970s, state credibility was too low for internal credit, and external debt quickly proved unsustainable.

⁶³³ See brief history above for further detail.

⁶³⁴ See the next subsection for a greater discussion of internal public credit.

Figure 4.12

Real Government Bond Yields, 1900-72



Note: The difference line above is a three-year moving average.

Sources: See Statistical Appendix, Table 4.12

Perón's first government of 1945-55 made the elimination of public foreign debt a major priority, part of a nationalist ideology to recover national wealth.⁶³⁵ Foreign debt was seen as a rapacious intrusion upon national pride and independence. Its disappearance in 1952-53 removed the ability to measure public credit, but did not necessarily indicate an improvement in public credit. Public credit represents the faith of creditors in the state, and an absence of external debt does not necessarily say anything in this regard. By 1961 Argentina had already begun to seek foreign public loans again, to fund the nationalisation of the Electrical Services Company of Greater Buenos Aires (SEGBA).⁶³⁶ Public credit was not significant in state financing until the 1960s, largely due to a lack of demand from the state. Yet it is unlikely that there would have been much willing supply from creditors in light of Figure 4.12. The emergence of persistent inflation meant public debt was an evidently poor investment, as bonds quickly eroded in value (they were not guaranteed against monetary depreciation). Figure 4.12 compares real bond yields, an evident means of comparing state

⁶³⁵ Vizcaino, J. G. (1972). *La Deuda Publica Nacional*. Buenos Aires, EUDEBA - Editorial Universitaria de Buenos Aires., pp.168-174

⁶³⁶ Ibid., p.176

credibility.⁶³⁷ The trend is one of relative convergence previous to 1945, when Argentina offered slightly higher real bond yields than Australia. This is further confirmed in Figure 4.17 that compares bond spreads between 1870 and 1935. After 1945 a long period of divergence begins, when Argentina offers a large and constant negative rate. Argentine public debt would have been an amazingly poor investment throughout the postwar period. One 1967 source speculates that even if the state had tried to emit public debt guaranteed against inflation (e.g. at a set interest rate plus inflation), there would have been little interest, as state guarantees were not credible. Previously the state had reneged on debts with just such a guarantee (July 9 bonds).⁶³⁸ The lack of Argentine public debt in the postwar period was not due to sound management of public finance, but because the Argentine state persistently chose seigniorage financing. External credit suddenly became abundantly available to Argentina in the 1970s with the surge in petrodollars. State credibility was little considered and the Argentine state did not invest the newly available funds well. From 1975 to 1985 the military dictatorship increased the foreign debt massively, by 300% in real terms.⁶³⁹ The default on external public credit in the early 1980s revealed a deepening crisis of state credibility.

A major contrast between Argentina and Australia in the postwar period was their differing abilities to export.⁶⁴⁰ In the late postwar period Argentina became prone to external debt related financial crises, such as in the early 1980s and in 2002. This was despite the relatively low ratio of public debt to GDP. Australia did not experience any such crises, even though public debt to GDP reached much higher proportions. Argentina's ability to export declined dramatically in the postwar period, and did not begin to recover its ability to export until the military dictatorship of 1976-83, but this recovery was exaggerated by economic decline. Nonetheless Argentine exports doubled in real terms between 1976 and 1990. Yet the ratio of exports to GDP was still well

⁶³⁷ Capie, F. (2001). *The Origins and Development of Stable Fiscal and Monetary institutions in England. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century*. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p., p.55

⁶³⁸ Secretaría del Consejo Nacional de Desarrollo, S. P. E. N. (1967). *Estudios de Política Fiscal en la Argentina (Versión Preliminar)*, Republica Argentina, Presidencia de la Nación., Vol. 7, pp.18-20

⁶³⁹ Vezanzones, M.-A. and C. Winograd (1997). *Argentina in the 20th century : an account of long-awaited growth*. Paris, Development Centre of the Organisation for Economic Co-operation and Development., p.220

⁶⁴⁰ See Figures 1.9 and 1.10 in the subsection of Chapter One on Exports and Timing of Divergence.

below the norm before the Great Depression. Prior to the late 1930s the ratio of exports to GDP was significantly higher than in Australia despite then similar GDP per capita. This suggests Argentina had more to lose by moving away from an export led model. Australia's remarkably constant ratio of exports to GDP explains the greater capacity to engage with external credit, even if there was a preference for internal over external credit. Argentina's move to lower postwar exports helps explain the lower capacity to borrow externally, asides from the question of state credibility.

Internal Public Credit

Internal public debt over time represents a state's ability to achieve deeper and more meaningful public credit from a state credibility perspective. For a state to achieve significant internal public credit requires the faith of society, which is best placed to judge the state's credibility as a borrower. Argentina and Australia both showed a major decline in their levels of external debt financing, but for different reasons. It is also worth recalling that external debt markets were largely closed for new lending from WWI until the 1970s, with the brief exception of the 1920s. External debt should have declined from the interwar period due to limited supply. Public credit was increasingly forced onto an internal basis from WWI onwards.

Figure 4.13

Internal Debt, 1901-71

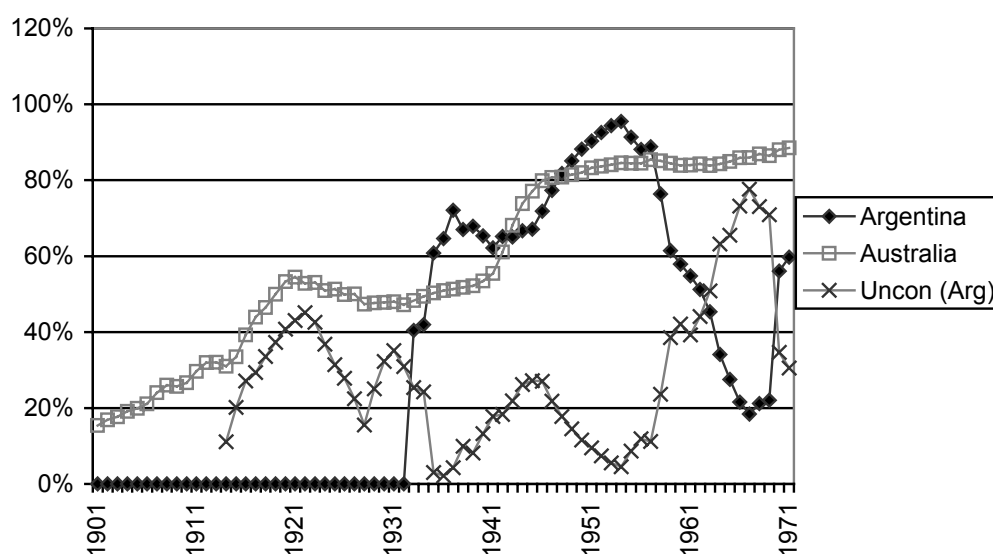


Figure 4.13 shows a deceptive convergence in trends until the late 1950s, but this convergence was for different reasons. Australia managed to greatly increase overall public credit via a large increase in internal public credit, while Argentina increased the proportion of internal public credit by eliminating external debt. The amount of internal public credit Argentina generated was insignificant, and the success above is illusory. Previous to 1933 all Argentine debt is considered external, despite a considerable amount of debt labelled as ‘internal’. Reliable contemporary sources (the most credible in 1923, and the last in 1932) make it clear that internal debt was typically held overseas, as internal debt was allowed to pay higher interest than external debt.⁶⁴¹ Argentines may have purchased Argentine public debt, but they did so largely on overseas markets in foreign currencies.

Unconsolidated public credit in Argentina was a mixture of internal and external credit, and emerged from 1914.⁶⁴² It consisted of immediate short-term loans to cover budget deficits, and was from a large variety of sources including large domestic banks, foreign banks, and ‘various [unspecified] creditors’. By nature unconsolidated debt was a symptom of fiscal distress, but it is unclear how much more expensive unconsolidated debt was relative to consolidated debt. Unconsolidated debt quickly evolved into largely internal public credit over the 1920s.⁶⁴³ Unconsolidated debt quickly became a financial crutch of the Radicals during the 1920s, when passing budgets was difficult, but it was never regarded as a desirable form of public credit. President Alvear’s (1922-28) successful efforts to transform unconsolidated into consolidated debt are clear in Figure 4.13. Then in the late 1950s unconsolidated debt increased dramatically alongside external debt, evidence of a more desperate scramble for resources. Recalling how low total Argentine public debt then was, it is extraordinary that the state could not seek

⁶⁴¹ ‘To say the truth, Argentina has no internal public debt, ... the national public debt labelled as being “internal” is in the hands of foreigners.’ Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., p.64. This idea is repeated in: Trevisán, E. (1932). Reforma del Régimen Rentístico Argentina. Buenos Aires, Talleres S A Casa Jacobo Peuser.

⁶⁴² Luisi, D. E. (1934). "Estado de la deuda publica por Presidencia, 1910-1931." La Revista de Ciencias Económicas **Año 22**(154): 363-79.

⁶⁴³ The external proportion of the unconsolidated debt was roughly: 52% in 1916, 18% in 1922, 10% in 1928, 22% in 1930, and 13% in 1931. This is based on my own calculations and only includes debt that can easily be definitely as external. Ibid., p.364

more credible means of borrowing. The proportion of unconsolidated debt reached 78% of public debt by 1967. Unconsolidated debt was popular likely because it was a means for delaying the inflationary effects of seigniorage via “loans” from the central bank. The trend in unconsolidated debt shows that the decline in Argentine public credit occurred from the late 1950s, similar in timing with the decline of state credibility by other measures.

It is not clear that Argentina ever developed internal public credit to any significant degree. Australia was initially forced to foster internal public credit during WWI.⁶⁴⁴ Australia found public credit to be the easiest means for raising the necessary, sudden financing required. This was a silver lining to the expense of war, by forcing the beginning of more meaningful and varied internal public credit, as well as providing an ideology to achieve it. Nonetheless nationalism alone was insufficient for internal credit’s long-term success, which ultimately required sound financial management to be sustainable. The postwar period was one of continuing success in Australian public credit, as internal public debt grew faster than public debt such that the vast majority of public credit was internal by 1971. In contrast Argentine public credit clearly declined from the 1950s, experiencing a first collapse in the default of the early 1980s.

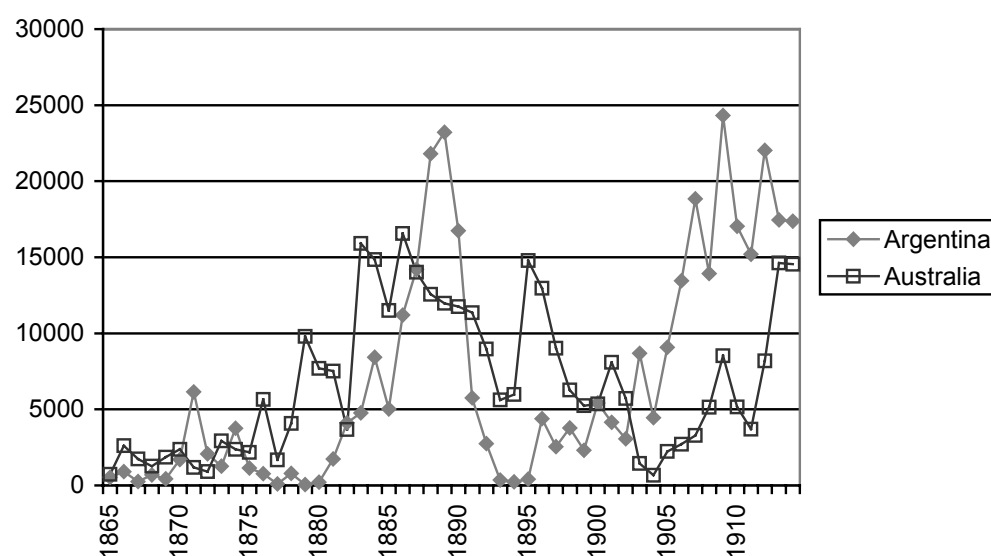
British Investment and Public Credit

As detailed above, Argentine and Australian public credit were centred on external credit from the nineteenth century into the first half of the twentieth century. The global capital market at this time was based in London, and the majority of external credit was traded there. A comparison of the nature of British investment in Argentina and Australia may reveal their perceived credibility overseas.

⁶⁴⁴ This was novel at the federal level, and the internal debt of the States was relatively small.

Figure 4.14

Total Annual British Investment flows (£'000), 1865-1914



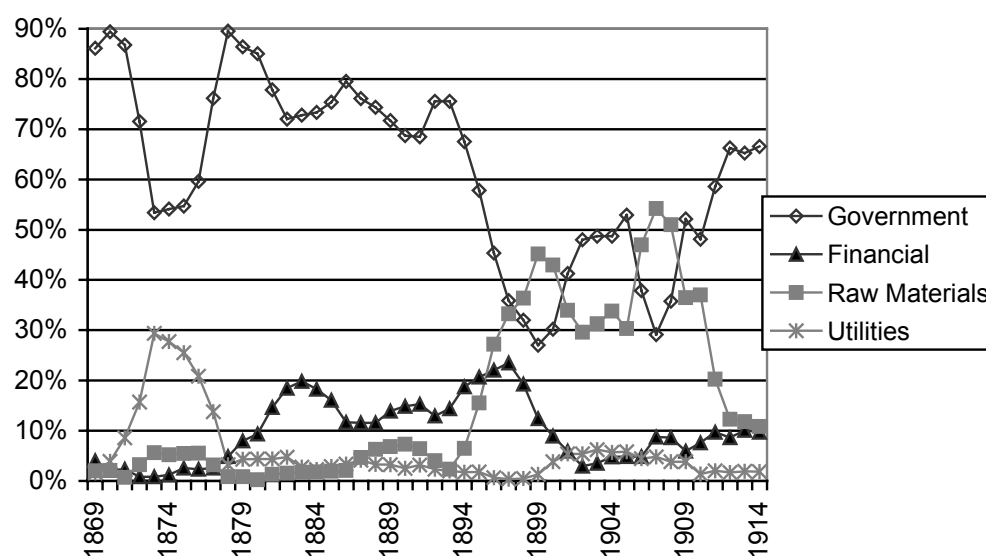
Source: Derived from (Stone 1999), pp.62-71

Argentina and Australia were strikingly similar in their ability to attract similar sums of British investment prior to WWI. Australia attracted more consistent British capital flows, but Argentina periodically exceeded these. The total amount invested per capita from 1880-1914 was £73.4 in Argentina and £90.7 in Australia, which is to say that Argentina, an independent and clearly sovereign nation, achieved 81% of the British investment that Australia, a British colony, did in per capita terms. Total British investment into Argentina from 1880-1914 was higher than into Australia, at about £329 million versus £298 million.⁶⁴⁵ The property rights of British investment were less secure in Argentina than in Australia. All else being equal, British investment capital should have favoured Australia. That British capital did not merits further investigation, especially as it relates to state credibility.

⁶⁴⁵ Stone, I. (1999). The global export of capital from Great Britain, 1865-1914 : a statistical survey. New York, St. Martin's Press.

Figure 4.15

British Investment in Australia, Top 4 Sectors (5MA)



Note: The lines above are five year moving averages.
Source: Derived from (Stone 1999), pp.62-71

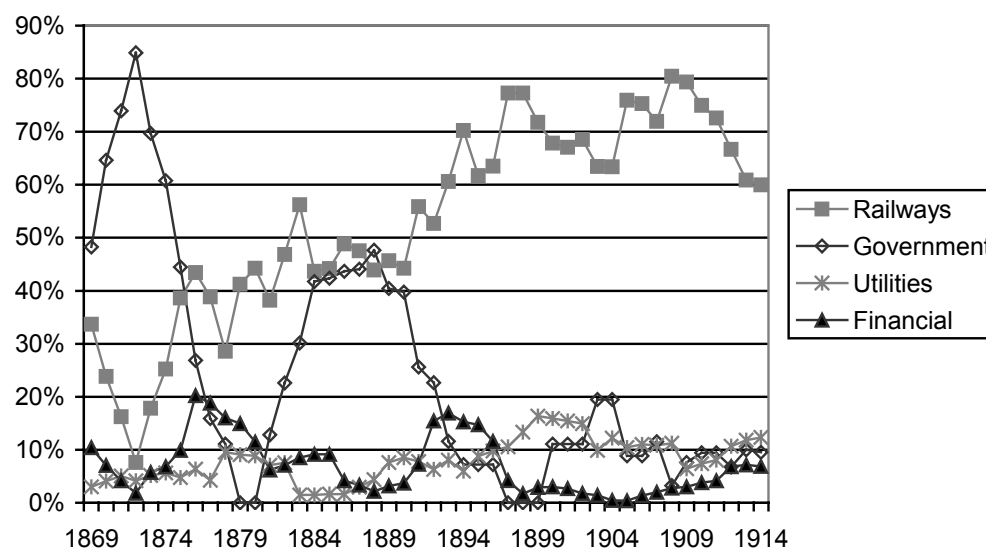
Underneath the apparently similar capital flows there were large differences in the nature and direction of British investment in Argentina and Australia. British investment in Australia largely went directly to the public credit of the colonial states, who then invested it in reproductive public works. The colonial states were entrusted as middlemen, and British investors used their sovereign status to limit their risk. As can be seen above, the vast majority of British investment in Australia was in public credit, asides from a brief competition with raw materials at the turn of the century (likely due to the West Australian gold rush). The third most popular sector for British investment was the financial sector, which should have bolstered Australian financial institutions and the internal capital market. This would have enabled greater financial intermediation and positively affected development. The Australian colonial states made early achievements in public credit, backed by the security of revenues and abilities in sound financial management. The colonial states offered highly appealing public securities in London at yields well below those demanded by British investors for Australian private activity.⁶⁴⁶ This arrangement was collectively beneficial to Australia,

⁶⁴⁶ Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin., p.16

as the state provided public works on the basis of loans that would have been more expensive otherwise. Australian colonial states borrowed half of all the foreign capital imported between 1860 and 1900.⁶⁴⁷ Their efficiency at borrowing was evidenced by relatively low interest rates.⁶⁴⁸ The Australian private sector gained indirectly via the lower capital costs of state enterprises.

Figure 4.16

British Investment in Argentina - Top 4 Sectors (5MA)



Note: The lines above are five year moving averages.
Source: Derived from (Stone 1999), pp.62-71

British investment in Argentina was quite different and quickly diverted from an initial enthusiasm for public credit in the early 1870s and 1880s to direct foreign investment. This shift was due to the Baring Crisis, which was a result of Argentina coming to the brink of default on public debt. From 1890 foreign capital was directed to investments (especially railroads, properties, and mortgages) instead of state financing, and there were no new loans to the national government until 1914.⁶⁴⁹ British investors had become aware of the opportunities in Argentina, but quickly learned to be wary of lending to the state. Investment in railways was especially predominant, and direct investment in public utilities was much higher than in Australia. The Australian colonial

⁶⁴⁷ Ibid., p.16-17

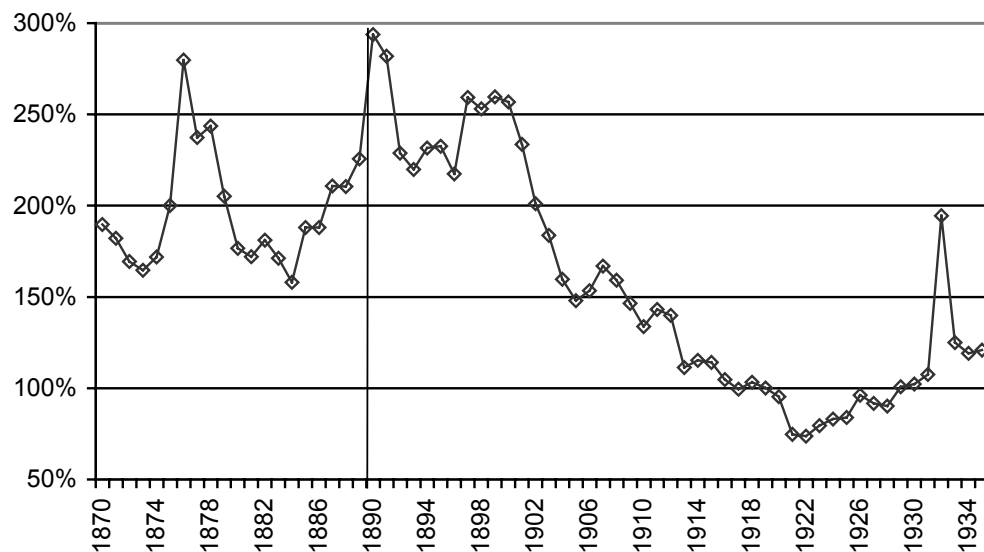
⁶⁴⁸ Buckley, K. D. and E. L. Wheelwright (1988). *No paradise for workers : capitalism and the common people in Australia, 1788-1914*. Melbourne ; New York, Oxford University Press., p.105

⁶⁴⁹ Oszlak, O., A. Fontana, et al. (1982). *La formación del estado argentino*. Buenos Aires, Republica Argentina, Editorial de Belgrano., p.226

states were entrusted to invest foreign capital to best uses, and must have shown themselves relatively capable of doing so (or at least upheld a good mirage to British investors backed by locally credible fiscal institutions). After the Baring Crisis, the Argentine state was not entrusted to any significant extent to responsibly invest external funds, even though this appears to have been the initial preference of British investors. The 1890 Baring Crisis greatly diminished whatever public credit the Argentine state had in the minds of foreign investors. Direct British investment provided the public goods necessary for Argentina's continued development, and the state was largely relegated to providing a secure institutional environment. British investment in Argentina largely bypassed the state, leaving public credit relatively undeveloped. In contrast British investment played a major role in constructing colonial states' public credit and credibility in Australia, pushing them towards positive path dependencies that later proved crucial in the early twentieth century.

Figure 4.17

Argentine Bond Spread over Australia, 1870-1935



Sources: See Statistical Appendix, Table 4.17

As seen previously, there was remarkable divergence in the real interest rates of bonds after 1945. Figure 4.17 shows that between 1870 and 1935 there was a considerable convergence in interest rates on public bonds. The higher risk of investing in the public debt of Argentina resulted in a generally higher interest rate than in Australia. The

Baring Crisis greatly and understandably compounded this, and interest rates on Argentine public debt soared to three times those of Australia. This did not last long, and by 1904 the spread between Argentine and Australian public debt had decreased to a more normal historical level, continuing to converge thereafter. From 1913 Argentine and Australian public credit interest rates more or less fully converged, suggesting they were considered roughly equal in desirability by foreign lenders.

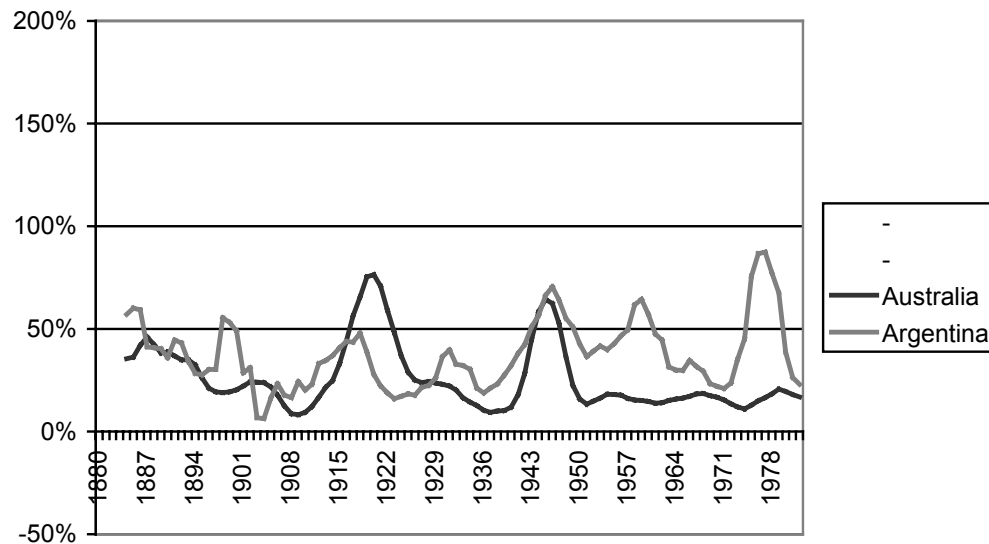
III Budget Deficits and Public Credit

The budget deficit as a percentage of GDP was seen in the previous chapter as a good indicator of overall state credibility. The budget deficit also reveals much about public credit, as budget deficits must be met in the short term by borrowing and/or seigniorage. In the medium to long term extra taxation is also an option, but a budget deficit is essentially what taxation fails to cover. As long as a state can finance deficits through borrowing (and/or reserves), budget deficits are not inflationary.⁶⁵⁰ If a state lacks credibility and credit, taxation and borrowing are not viable options. The only options for such a state are seigniorage and balanced budgets. Seigniorage causes inflation that erodes the value of debts held in national currency and is thus not only a default on money but also on locally denominated debts, and should make creditors increasingly wary of public credit. Opting for seigniorage to cover budget deficits over the long run is akin to opting for a path dependency of low state credibility and public credit. Argentina was eventually forced to choose seigniorage in the postwar period to cover sustained high budget deficits. The other option of increasing taxation and balancing the budget was not taken. Extensive seigniorage undermined public credit, compounding the underlying problem of low credibility. Divergence began in the postwar period, as persistently high budget deficits in Argentina resulted in seigniorage, undermining public credit and credibility, and hopefully ending in the hyperinflation of the 1980s.

⁶⁵⁰ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., p.85-7

Figure 4.18

Budget Deficits/Revenue, 1880-1982



Note: The lines above are five year moving averages.

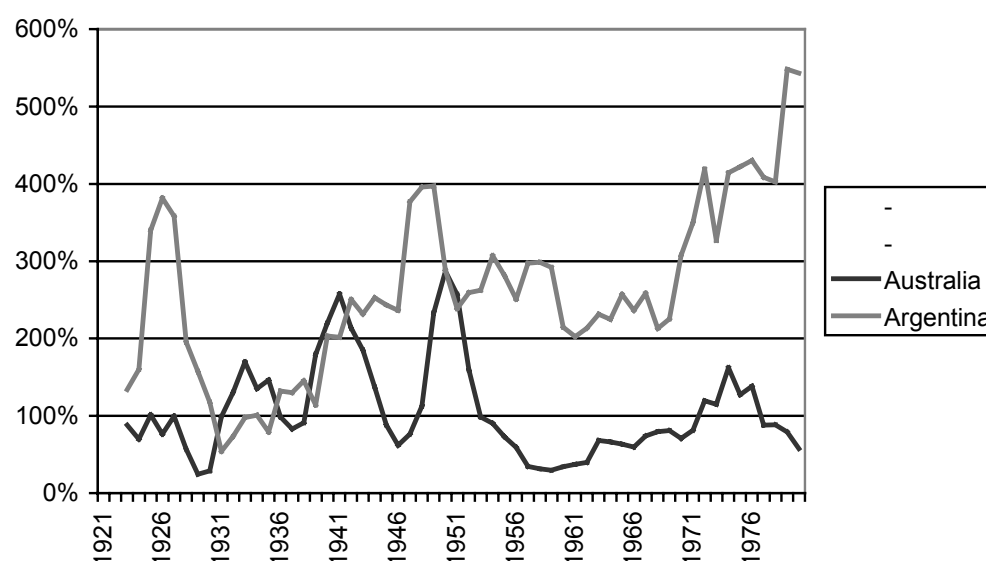
Sources: Australian data is total public deficits to revenue and is derived from (Vamplew 1987), pp.254-85; Argentine data is federal and derived from (Della Paolera and Taylor 2003), appendix. See also Statistical Appendix, table 4.19

The budget deficit problem in terms of the state's extractive power can be seen in the proportion of budget deficits to revenue. A credible state can maintain a low average ratio, being able to increase fiscal revenues as required. A high and sustained deficit to revenue suggests low credibility, as the state is either unable to obtain sufficient taxation or adjust expenditure accordingly. Figure 4.18 shows that Australia, asides from the World Wars, was able to maintain a low and relatively constant level of budget deficits to revenue, which improved in the postwar period. Argentina followed a similar if more volatile course until the postwar period, when it moved to a high level of budget deficits to revenue. Unlike budget deficits to GDP in Chapter Three, the entire postwar period emerges as one of clear fiscal crisis, a crisis that emanated from insufficient fiscal revenues. Argentine fiscal institutions failed to provide enough revenue due to an underlying failure of credibility, whereas Australian fiscal institutions moved to a higher level of credibility in the postwar period. This begs the question of how such high Argentine budget deficits relative to revenue were financed. The previous section showed that Argentine public credit declined in the postwar period. As a result the

dramatic increase in budget deficits must have been financed by seigniorage. Such a scenario would have consolidated a negative path dependency of Argentine state credibility and credit.

Figure 4.19

Annual Debt+Monetary Increase/Budget Deficit, 1921-80



Note: The lines above are five year moving averages.

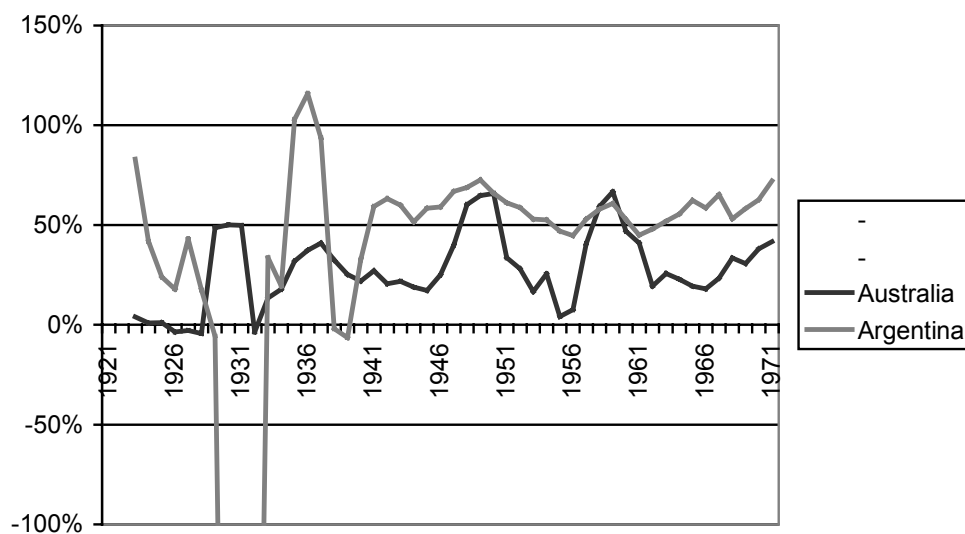
Sources: See Statistical Appendix, Table 4.19

The Argentine budget deficit figures underestimate the actual deficit in the postwar period as measured by combined annual growth in borrowing and seigniorage. Figure 4.19 tests how well budget deficits were met by seigniorage and borrowing. If there were a perfect fit between theory and reality the budget deficit would be covered by seigniorage and borrowing over time, oscillating around 100% in Figure 4.19. The Australian data fits this expectation fairly well, but the Argentine data does not. One caveat is that only the figures for the Argentine federal budget deficit are available, but the Argentine federal state was the most important and eventually assumed the debts of the provinces. The level of combined borrowing and seigniorage is probably a very good indication of total actual Argentine budget deficits, especially in the postwar period. The postwar period, once again, marks a turning point. Until 1946, the average ratio of debt and monetary growth relative to the budget deficit in Australia was 134%, slightly above the expectation, but understandable considering the extraordinary expenditures of the World Wars. In the postwar period of 1946-81 the average dropped

to 92%, slightly below expectations. Argentina in contrast was often well above the expectation indicated by the federal budget deficit. Until 1946 the growth of money and debt relative to the budget averaged 159%.⁶⁵¹ This is greater than 100%, but not greatly different than Australia. Dramatic change occurs after 1946, when the Argentine average increases to 324% from 1946 to 1980. This is well beyond reasonable expectations, indicating that the budget deficit grossly underestimates the actual growth of money and debt. This suggests that the budget deficit was much greater in the postwar period than previously indicated. Argentina issued far more money and debt than was justified by the budget deficit alone, suggesting that public financial management was particularly poor. State enterprises were likely a major reason for this, as they were a major expense outside state control. In contrast the budget deficit reasonably approximates Australian debt and money creation over time.

Figure 4.20

Balance towards Money Creation(M1), 1921-71



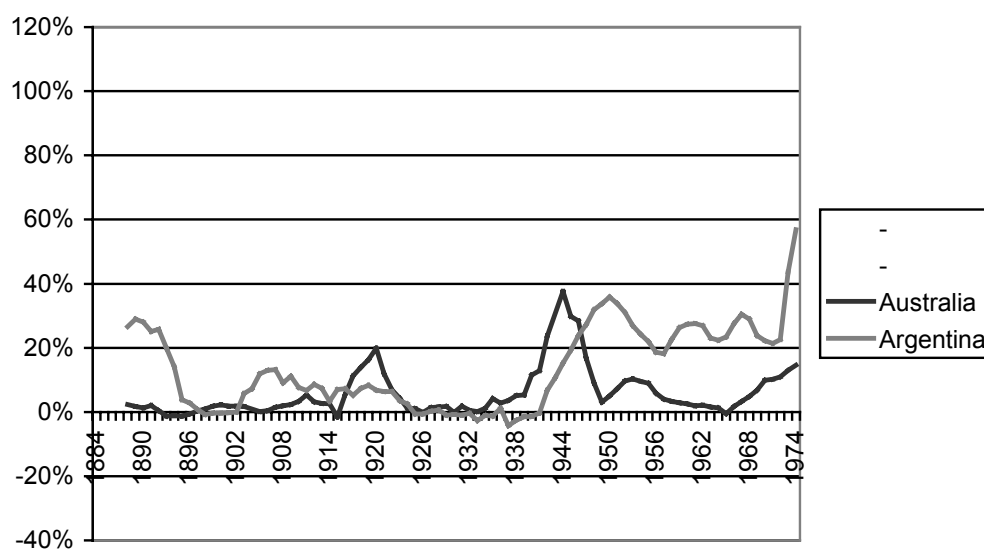
Note: The lines above are five year moving averages.

Sources: See Statistical Appendix, Table 4.19

⁶⁵¹ This does not include the exceptional year of 1920, when there was a massive reduction in both M1 and in debt. If this is included the average drops to the unlikely Figure of 60%.

Figure 4.21

Currency Growth Rates, 1884-1974

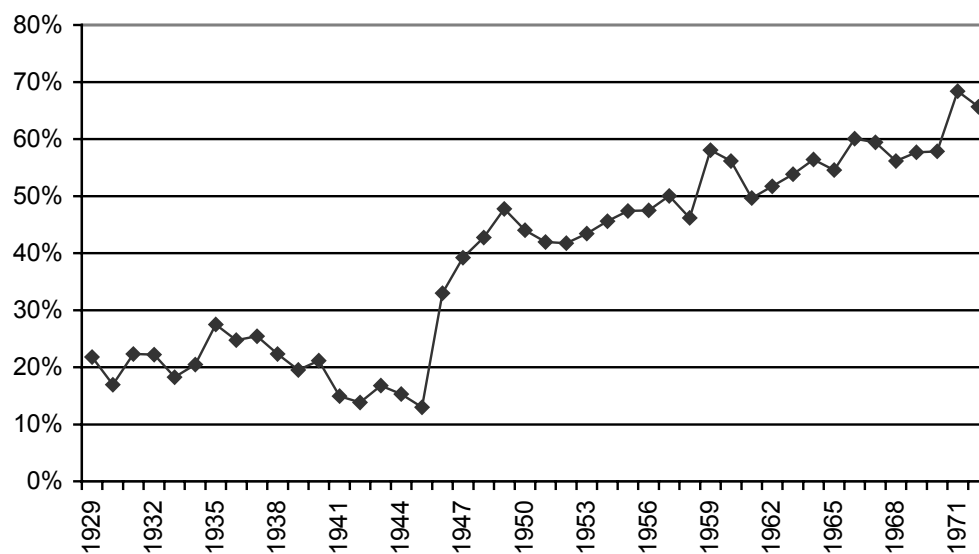


Note: The lines above are five year moving averages.

Sources: Derived from (Mitchell 2003); (Mitchell 2003)

Figure 4.22

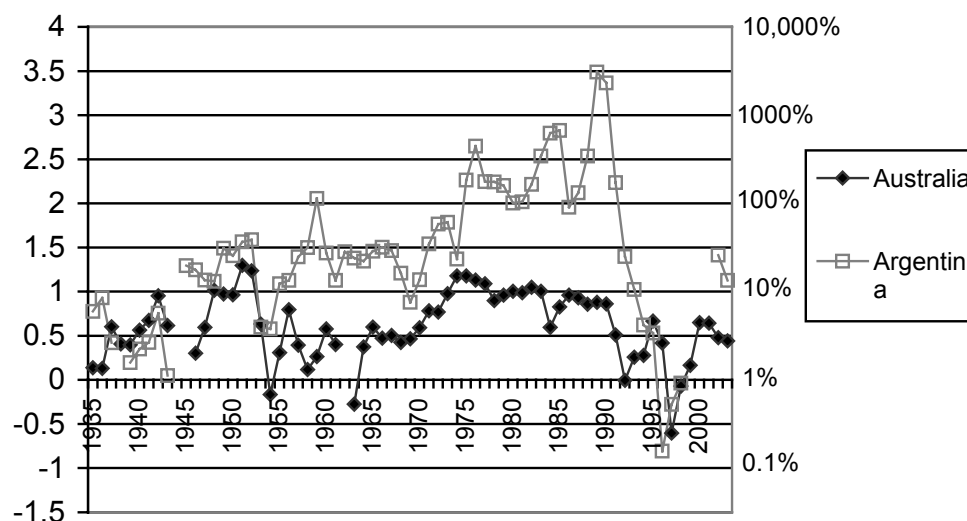
Argentine seigniorage, % of deficit financing, 1929-72



Source: (Reutz 1991)

Figure 4.23

Annual CPI in Logs (base of 10), 1935-2003



Sources: Australian data derived from (Statistics 2005) 1935-49, and (International Monetary Fund) 1950-2003; Argentine data derived from (Cottely 1981) 1935-48 and (International Monetary Fund) 1949-2003.

The picture of debt and seigniorage financing as a percentage of the budget deficit is by no means perfect, especially for Argentina. One way to get beyond this is to disaggregate the annual increase in debt and money to see which predominates. Figure 4.20 compares the proportion of money growth within the total of debt and money growth. This shows that Argentina began a long and slowly increasing reliance upon seigniorage for financing from the early 1940s onwards, whereas Australia remained much more dependent on debt. Figure 4.21 confirms the trend towards seigniorage by comparing annual growth of currency in circulation. In Argentina currency growth increases substantially from the early 1940s onwards. The Perón government of 1946-55 begins a shift to seigniorage that lasts throughout the postwar period and greatly accelerates in the 1970s.⁶⁵² Figure 4.22 is from a detailed study of Argentine public financing, and shows a dramatic shift to dependence on seigniorage in the postwar

⁶⁵² Figure 4.21 has been abbreviated to 1974 as Argentine currency growth is so high thereafter that graphical comparison is no longer useful.

period that begins with Perón.⁶⁵³ After the initial shift, the reliance upon seigniorage grew persistently throughout the postwar period, from around half to almost three quarters of deficit financing. Figure 4.23 shows the ensuing inflationary effects of seigniorage financing in Argentina relative to Australia. Only a logarithmic scale can achieve the comparison as inflation reached such heights in Argentina, and inflation is very divergent in the postwar period. The exponential scale on the right hand side corresponds to the annual levels of inflation. Figures 4.20, 4.21, 4.22, and 4.23 tell very similar stories of postwar divergence. A credible state with access to public credit should obtain most financing for deficits via public credit, rather than seigniorage. To maintain credibility, the money supply should be managed according to the overall economic cycle as a macroeconomic tool. In Argentina seigniorage covered an average 58% of Argentine deficit financing from 1942-80 and 51% from 1946-72.⁶⁵⁴ In Australia seigniorage covered 18-35% of deficit financing from 1942-80.⁶⁵⁵ The postwar Argentine period was one of persistent defiance of the intertemporal budget constraint.⁶⁵⁶ This eventually leads to default, either through a repudiation of debts or their monetisation (i.e. hyperinflation).

⁶⁵³ Reutz, T. (1991). "Ilusiones Fiscales, dimensión y método de financiamiento del déficit fiscal del gobierno, 1928-1972." Ciclos (año 1) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires 1(1).

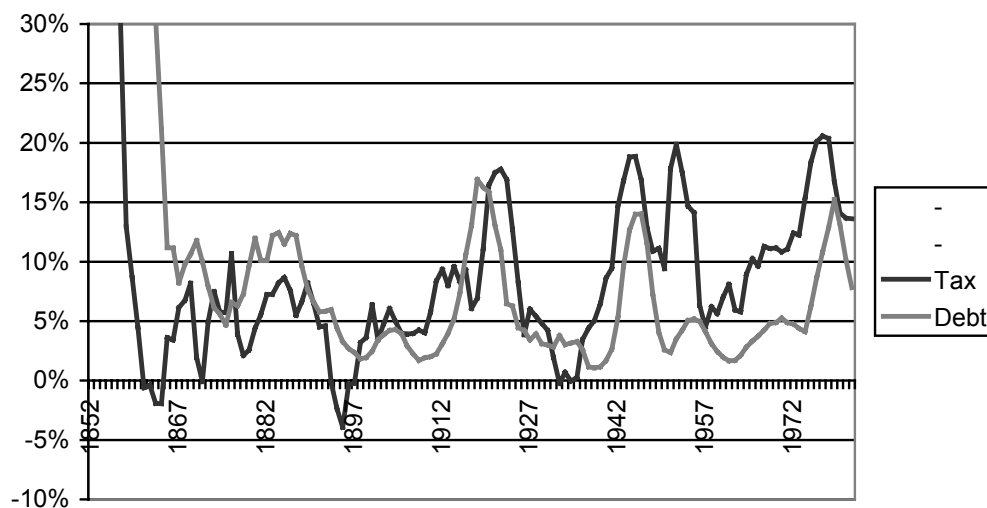
⁶⁵⁴ The first Figure is derived from Figure 4.20 and the second is from Figure 4.22. See Ibid., pp.137-138

⁶⁵⁵ The range is due to the inclusion and exclusion of 1960 from the average (excluded from Figure 4.20). Including 1960 lowers the average to 18%.

⁶⁵⁶ A state's intertemporal budget constraint is the requirement that the discounted present value of primary surpluses in terms of GDP be equal to the initial stock of government debt in terms of GDP. See: Horne, J. and International Monetary Fund. Fiscal Affairs Department. (1991). Indicators of fiscal sustainability. Washington D.C., International Monetary Fund., p.3-4

Figure 4.24

Australian Growth in Tax & Debt, 1852-1982, unadjusted for inflation

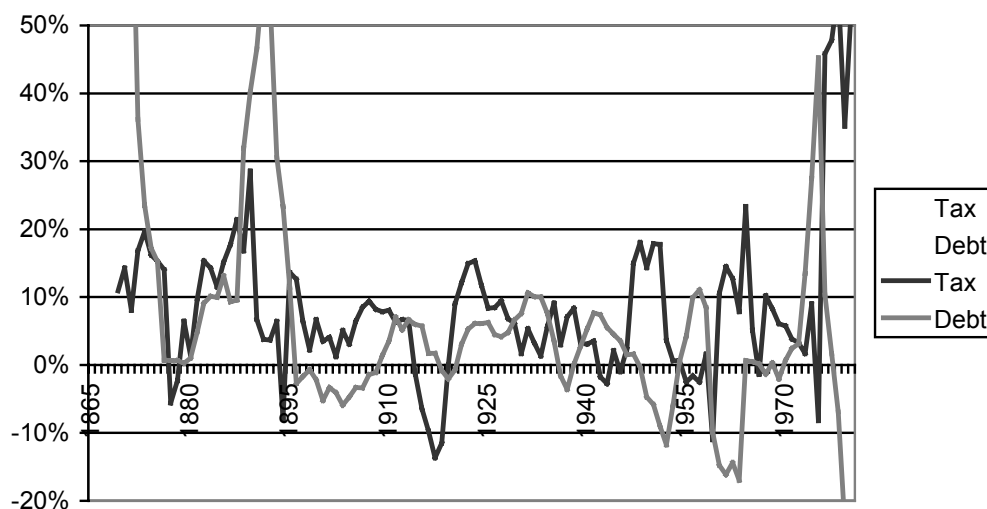


Note: The lines above are five year moving averages.

Sources: Figures are for total tax and public debt outstanding, (Vamplew 1987), pp.254-285

Figure 4.25

Argentine Growth in Tax & Debt, 1865-1980, adjusted for inflation from 1914



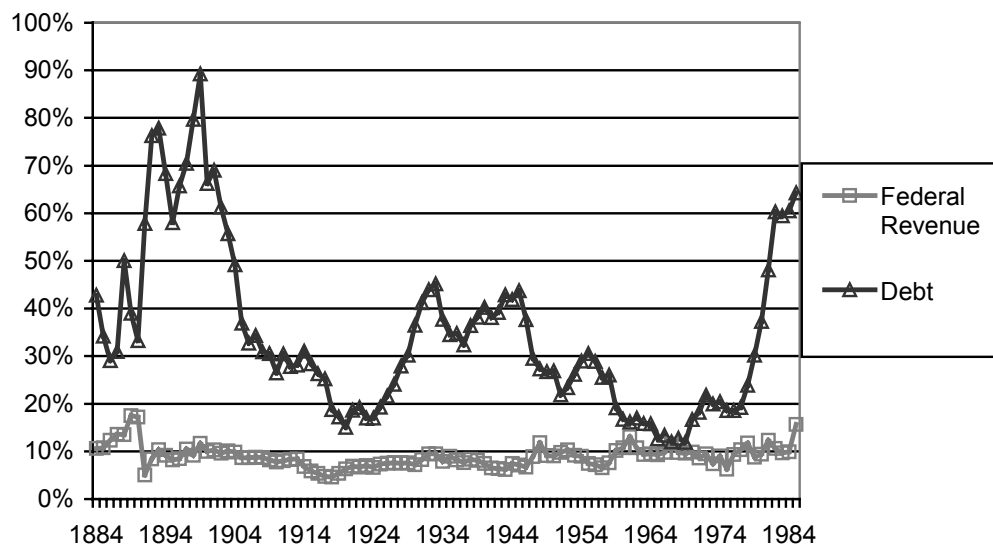
Note: The lines above are five year moving averages.

Sources: See Statistical Appendix, Table 4.25

Increasing state credibility should be reflected in debt and taxation growth, but with taxation growth exceeding debt growth overall. The comparison of Argentina and Australia on these lines is somewhat similar prior to the postwar period. Both countries experienced relatively high growth in debt relative to taxation prior to the Baring Crisis. During WWI there was another burst of relatively high debt growth that was quickly followed by taxation growth in each. Yet the postwar period was remarkably different. Australia sustained a clear and remarkable growth in taxation, well in excess of debt growth. As debt was quite high in the mid twentieth century, this explains how the debt was so greatly reduced. Fiscal revenues grew even faster than debt. In contrast Argentina did not experience a single predominant postwar trend, as both debt and taxation growth rates were increasingly erratic. Relatively high taxation growth occurred in the mid twentieth century, but this then collapsed. The period thereafter is increasingly volatile and unclear. Figures 4.24 and 4.25 illustrate some similarity in Argentina and Australian fiscal and public credit prior to the postwar period, and their striking postwar divergence.

Figure 4.26

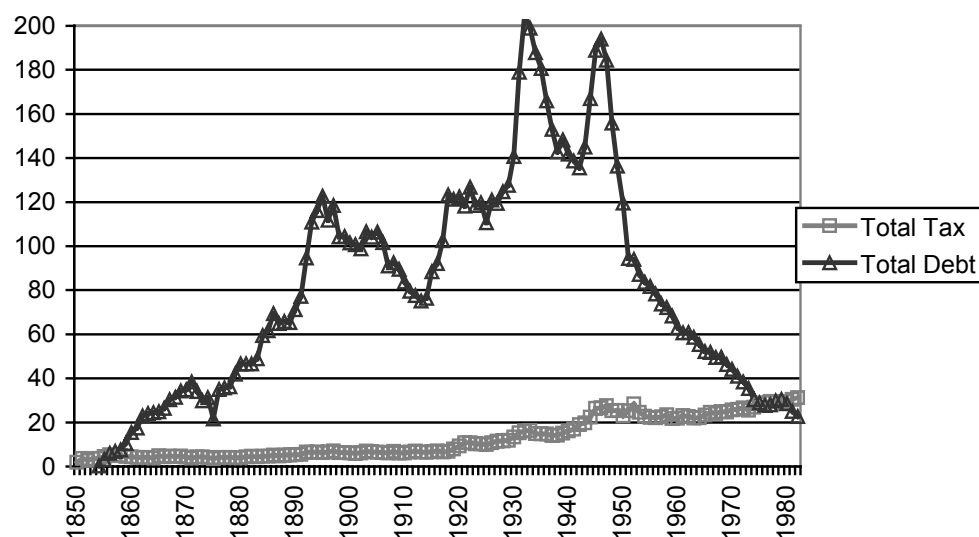
Argentine Path Dependencies, 1884-1985



Sources: See Statistical Appendix, Table 4.26

Figure 4.27

Australian Path Dependencies, 1850-1982



Sources: See Statistical Appendix, Table 4.26

Figures 4.26 and 4.27 compare taxation and debt as a proportion of GDP over time. State credibility should positively correlate with an increasing ability to tax and issue public credit. The Figures show that there was considerable divergence from WWI in tax and public credit that accelerated from WWII onwards. Until WWI debt and taxation were at similar levels, with Argentina being more successful at lowering total public debt. From WWI the Australian state increased public debt remarkably, which was soon followed by an equally remarkable increase in extractive taxation powers from WWII. By 1982 Australian federal taxation alone exceeded total public debt relative to GDP, indicating a very high level of credibility. Australia created a powerful positive path dependency of credibility and public credit over the postwar period. In contrast the extractive taxation power of the Argentine state remained low and constant, while public debt was small and declining until the 1960s. The Argentine state has not been able to raise a comparable level of debt as the Australian state since the late nineteenth century. In the 1970s Argentine public debt increased but fiscal institutions remained weak. This soon ended in default, despite the low ratio of public debt to GDP. The rise in Australian public debt due to the World Wars became an opportunity for initiating extensive further development of Australian fiscal institutions and public credit. This was a path that Argentina did not follow, and Argentine public credit appears lower in

the late twentieth century than it was in the late nineteenth century, reflecting a remarkable decline in state credibility.

Conclusion

This chapter attempted to deal with the links between public credit, public goods, and state credibility. The postwar period emerges as the key period of divergence by all indications. State credibility from a fiscal institutional perspective (as was seen in the previous chapter) declined markedly in Argentina from the mid 1950s, while it markedly increased in Australia. Public credit followed a similar path, stagnating in Argentina in the postwar period. Not only did Argentine public credit remain small and insignificant, but it decreased in quality as unconsolidated debt became highly significant. This was in complete contrast to Australia where public credit grew dramatically, increasing in quality as it shifted to the less vulnerable domestic capital market. As for public goods provision, Argentina moved to monopolise and control many of the most important sectors of the economy and public goods via state enterprises. Yet the Argentine state had little experience of providing public goods directly, and was not very good at it. A particular problem was chaotic and non-transparent public financing, especially in state enterprises. This also stands in contrast to Australia where the state had excelled at direct provision of public goods, but moved away from this model in the postwar period. Argentina's move to direct provision of public goods in the postwar period was not reflected in an increased capacity for borrowing and taxation, which ultimately meant a path dependency of seigniorage and declining state credibility.

The Argentine state's new role as a direct provider of public goods could have significantly increased public credit and credibility had the new role been well executed. The Australian state had long fulfilled such a role, and shown much ability to deliver. This had enabled the construction of credibility amongst taxpayers by providing them with desirable public goods that promoted development, as well as building public credit with foreign lenders through a reliable rate of return. An activist state role requires both bureaucratic skill and sound management of public finances to be successful. The previously limited role of the Argentine state meant it had little to no such skill legacies. The state was relatively small in scope and the majority of public

financial history was poor and chaotic. The danger of the state providing extensive public goods necessary for development on such a foundation was that the state would monopolise their provision and fail in delivery. Should the state fail to deliver the necessary public goods, it would do more to obstruct development than aid it. The postwar history of the Argentine state reveals such an obstruction. The Argentine state did not develop either the bureaucratic skill or the necessary financial management necessary to fulfil a crucial and self-assigned role.

All measurements above indicated that the postwar period was one of dramatic divergence between Argentina and Australia in terms of public credit, public goods, and state credibility. The roots of this divergence extend as far back as WWI, but did not really yield until after WWII. None of the measurements above indicate that Argentine public credit has ever been well developed. Possibly the period of greatest advance was the late nineteenth and early twentieth centuries, but even this needs to be qualified. The Bank of England's bailout of the Argentine state during the Baring Crisis was prompted considerably by moral hazard, i.e. self-interest on the part of British creditors played an indeterminately large role in their decision to bail out Argentina and prevent open default, likely much less than their faith in Argentine public credit. Nonetheless the Argentine state shortly did show a responsibility to public credit, one that was reinforced by a credible commitment to the gold standard. This dramatically increased Argentine public credit amongst external creditors, as witnessed by the convergence of interest rates with Australia, and partly explains the increase in British capital flows to Argentina in the early twentieth century. Argentina's anchorage to the gold standard meant a self imposed exclusion from the temptations of seigniorage. Yet the Argentine state proved unable to long resist this temptation once independent monetary policy was reintroduced from 1935. Australia did not allow itself the temptation, committing more or less to sterling until the 1970s. A necessary precursor for public credit is fiscal credibility, i.e. sufficient credibility to adjust fiscal revenue in accordance with needs. Argentina has yet to demonstrate the credibility and fiscal institutions that would be required to sustain public credit. This is especially evident in the historical incapacity to borrow significantly from an internally sourced capital market.

How does a state build public credit and credibility? The comparative histories of Argentina and Australia show that Australia has a rich history of public credit and

public goods provision, while Argentina neither developed public credit nor much of a capacity for delivering public goods. In the long term, it is important that public credit and credibility are built through the provision of public goods (i.e. taxpayers are provided with a return). War and ideology have served as opportunities to dramatically and suddenly build both credit and credibility in Australia and elsewhere, despite the undoubted squandering of resources in the battlefield. This is not to say that war in itself is necessary. Whether war and ideology build or destroy state credibility and fiscal institutions is largely through the opportunity they provide via public credit. In Australia the World Wars combined with an increasing nationalist ideology and a great increase in public credit, which taxpayers proved willing to fund. This resulted in a great increase in state credibility, but an increase built upon former successes in public goods provision. It was also convenient that the actual physical destruction of the war was very largely overseas. In Argentina the World Wars did not provide a similar opportunity. Nor did the Argentine state fully utilise the earlier opportunities to develop public credit provided by global capital markets prior to WWI, when it might have established itself as a significant borrower and provider of public goods like Australia did. British investment learned from its mistakes and largely avoided Argentine public credit, preferring direct investment. Only from 1922 to 1945 did Argentina begin to develop public credit alongside an ability to provide public goods, but this proved extraordinary and was reversed from Perón onwards. External credit markets once again provided Argentina with opportunities to build public credit from the 1970s. At this time Argentina and Australia both began to borrow externally again on a large scale. This quickly led to default in Argentina, along with the collapse of military dictatorship, and leaving behind few tangible investments. The potential opportunity to build state credibility was worse than wasted, as heavy foreign debt greatly helped undermine credibility further. The building of public credit and credibility are obstacles that still stand in the way of Argentina's long-term development.

Chapter Five: The Crux of Divergence, Income Taxation

‘there is a lack of agreement between those that determine public expenditure and those that pay for it. The State undertakes commitments ... and taxation isn’t always concomitant with the magnitude and quantity of plans assumed by the State.’ (Peire 1959), p.37

‘In sum, it is the LACK OF SOLIDARITY between the taxpayer and the treasury that is the cause of evasion. Without that indispensable bond, without an acceptance, not formal but REAL of joint responsibility, it will not be possible to tackle those actions needed to achieve the common good.’ (Peire 1959), p.41

‘For some time an apparently inexplicable transformation has been occurring in the general moral climate of the country [Argentina] ... in a single word, dissatisfaction.’ (López 1957), p.47

‘In Argentina legal and illegal tax evasion arose with extraordinary force with the beginning of the political war against the economy.’ (López 1957), p.54

‘The Argentine tax system has been managed regressively from a social point of view. Income tax, instead of continuing its growth as it has in the most advanced countries, has been declining in Argentina, and regressive forms of consumption tax have been increasing. Argentina is following the opposite evolution of those countries advancing most quickly in economic and social terms.’ (Prebisch 1956), p.19

Prime Minister Hughes – *‘the basis of true civic government rests upon taxation levied in proportion to the ability to pay.’* (Hansard), 11/12/1914, V.75, p.1639

[Italics and translations in quotations above are mine.]

This chapter delves further into a particularly important insight gained from the broad fiscal comparison in Chapter Three. The brief success and failure of Argentine income tax was identified as a crucial feature of postwar divergence. As the statements above indicate, important contemporary observers noticed this. Prebisch directly addresses the decline of Argentine income tax and the socially regressive consequences as early as 1956. López identifies a distinct change for the worse in the Argentine moral climate that increasingly justified tax evasion in 1957. Peire tackles the issue of evasion directly in 1959, which results from a ‘lack of solidarity between the taxpayer and the treasury’, impeding the achievement of the common good. Similarly Hughes sees progressive taxation as ‘the basis of true civic government’. Income taxation came to fulfil this role in Australia, but collapsed in Argentina. Income tax has been the only progressive tax in Argentina to earn significant revenue. As has been previously discussed, progressive direct taxation is the most potentially lucrative, socially just, and thereby desirable fiscal institution; but is also the most dependent upon state credibility. After a theoretical preamble this chapter is divided into four sections: the history of income taxation in Argentina and Australia; comparisons of the income tax experience; transforming income tax into a mass tax; and income taxation’s potential to deliver development. The comparative history of income taxation is an important part of the divergence story, and clearly shows the role that state credibility played.

Preamble on State Credibility and Income Tax Cooperation

The key experience in the postwar fiscal history of Argentina and Australia was the respective failure and success of income taxation. Argentina successfully, if belatedly, introduced income tax in 1932, which rapidly became a highly significant source of revenue. In the 1950s the Argentine income tax clearly began to fail, degenerating into an insignificant fiscal institution by the 1970s. Australia introduced a lucrative federal income tax in 1915 under the fiscal pressures of World War I (WWI), which became the most important fiscal resource from WWII.⁶⁵⁷ In the postwar period the federal income tax became the foundation of Australian fiscal institutions. Income tax also became the fiscal foundation of most developed societies in the postwar period, and has proven the

⁶⁵⁷ See Figures 3.8 and 5.1

most lucrative of all fiscal institutions. The rapid decline of Argentine income tax in the postwar period was peculiar, and was remarked upon at least as early as 1956.⁶⁵⁸ Yet the failure of Argentine income tax continued and has yet to be resurrected. Income taxation promises to be highly lucrative, but is also highly dependent upon state credibility due to the inherent dependence of income tax upon cooperation. Declining state credibility should make income tax increasingly difficult to sustain. A degeneration of income tax would then reinforce a decline in state credibility by reducing fiscal revenue and increasing the inclination to seigniorage. The different Australian and Argentine trajectories in income tax are an important proximate cause of postwar divergence in fiscal institutions, and, more importantly, wider divergence in development. Why did this difference emerge, and what does it tell of state credibility?

The viability of income tax should be a strong indicator of state credibility. Income tax requires a high level of cooperation from individuals to honestly divulge their incomes.⁶⁵⁹ At some point individuals make a decision of how much, if any, income tax they are willing to pay. This can be seen as a cost-benefit calculation, where the costs and benefits of paying are balanced against the costs and benefits of not paying, with the balance determined by both the risk of being caught and the justice of income tax. Similarly, Levi sees individual income tax compliance as dependent upon how compliant society is, and whether the tax contract observes existing norms of fairness, including delivery of promised collective goods.⁶⁶⁰ The justice of income taxation is akin to state credibility, and plays a determining role in the calculation. The decision to cooperate is not a simple calculation, which is evident in the real world where the level of deterrence alone does not explain the degree of tax compliance. For instance the majority of Australian taxpayers pay income tax despite a very low risk of being caught evading, and the practice of self-assessment and voluntary compliance.⁶⁶¹ This suggests other factors play an important role in individual decisions on income tax. The

⁶⁵⁸ Prebisch, R. (1956). Desarrollo Económico y Política Social. Mesa Redonda en la Universidad de Córdoba, Buenos Aires, Secretaría de Prensa de la Presidencia de la Nación., p.19. See other sources above and Secretaria del Consejo Nacional de Desarrollo, S. P. E. N. (1967). Estudios de Política Fiscal en la Argentina (Versión Preliminar), Republica Argentina, Presidencia de la Nación.

⁶⁵⁹ This is arguably less important today as developed states are more able to measure employees' incomes at their source and circumvent the need for individual cooperation to some extent. Nonetheless this still depends upon the willingness of people to work within the legal labor market as employees.

⁶⁶⁰ Levi, M. (1988). Of rule and revenue. Berkeley, University of California Press., pp.146, 159-160

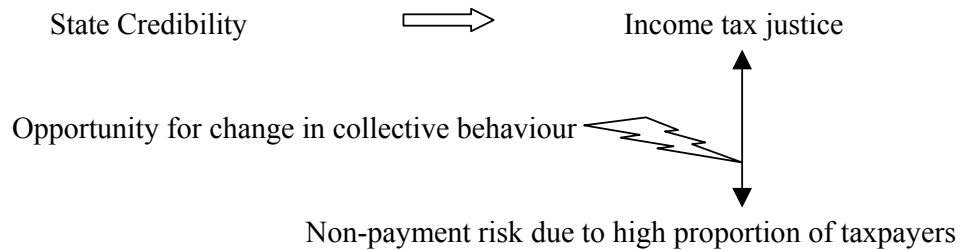
⁶⁶¹ Torgler, B. and K. Murphy (2004). "Tax Morale in Australia: What Factors Shape it and has it Changed over Time?" Manuscript re-submitted to Journal of Australian Taxation., pp.2-4

argument here is that the justice of income tax is a determining factor.⁶⁶² As Peire observes in Argentina in the late 1950s: ‘there is a lack of agreement between those that determine public expenditure and those that pay for it.’ Such a situation meant the justice of Argentine income tax was very low. The justice of income tax is analogous to state credibility, and ultimately determines both individual cooperation and the viability of income taxation.

State credibility and the justice of taxation determine the risk of not paying income tax in the long run. In the long run the chances of being caught and punished are determined by the proportion of people who feel that income tax is just and are willing to pay. If a large proportion is willing to pay, it is easier to find those who are not and vice versa. This is confused in the short run by the currently existing proportion that pays. In the short run it is possible for justice and risk to diverge. For example in a scenario of declining state credibility, a high proportion of taxpayers were willing to pay income tax but become less willing as credibility declines. In the short run most of these taxpayers will continue to pay due to the higher risk of being one of a few nonpayers, i.e. easier to detect. This acts to maintain income tax despite a decline in state credibility, and stems from the short run difficulty of coordinating individuals’ collective behaviour. This will remain true until an opportunity arises for a mass change in collective behaviour. Some examples are war, recession, and high inflation. Changes in state credibility may have to await opportunities for collective expression, but these inevitably occur in the long run. Path dependency thus gives currently credible states with lucrative income taxes a good deal of rope. Yet the Argentine example shows just how quickly and easily income tax can fail, via little more than inflation. The Australian example also shows that even a very well entrenched income tax can be seriously threatened by inflation.

⁶⁶² ‘humans are hard-wired not for logic but for detecting injustice. Trust, and the detection and punishment of injustice, lie at the heart of human society.’ Carr, G. (2005). The proper study of mankind - A survey of human evolution. *The Economist* 377., p.11

The process described above can be condensed into an ideogram:



I History of Income Taxation

Income tax has often proven a difficult fiscal institution to introduce. Britain was the first to achieve a significant income tax in 1799; taking advantage of the opportunity provided by war and national danger in 1796-99. This became permanent by the mid nineteenth century. England previously introduced a temporary income tax in 1660 to pay for war against France, which was preceded by income tax in the northern-Italian communes during the Renaissance.⁶⁶³ Prior to 1799 attempts at explicitly progressive taxation in Britain were strongly resisted despite proclamations of progressive intent by informed and politically important contemporary opinion.⁶⁶⁴ It was one thing to desire progressive taxation, but it was more difficult to actually introduce income tax. An emergency of war or fiscal rectitude could be of great assistance. Income tax quickly became important in Britain, and was the basis for Britain's status as the first 'fiscal state' in the early nineteenth century.⁶⁶⁵ This achievement likely played a significant role in Britain's exceptional early success in development. From the early nineteenth century Britain was a leader in income tax, sustaining a fiscal state, and in development. These processes were very likely interconnected. British income tax was so successful that it generated a movement for income tax elsewhere by the last quarter of the nineteenth century, and many nations began to adopt income tax from the early

⁶⁶³ Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster., p.337

⁶⁶⁴ O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review 41(1): 1-32., p.12-13, 17-22

⁶⁶⁵ A fiscal state is one capable of combining its tax flows with long-term borrowing. See: Daunton, M. J. (2001). Trusting Leviathan : the politics of taxation in Britain, 1799-1914. Cambridge, UK ; New York, NY, Cambridge University Press., p.4-5

1890s.⁶⁶⁶ The history of income taxation is short, and begins in Argentina and Australia in the late nineteenth and early twentieth centuries.

Argentina

There was early support for income taxation in Argentina, from at least the late nineteenth century. In line with contemporary international thought, income tax was increasingly seen as an essential fiscal institution. In 1894 a book was published on how Argentine federal fiscal institutions needed to be reformed, which finds that the contemporary fiscal trend was away from indirect to more progressive direct taxation. The book concludes that income tax should become the foundation of Argentine fiscal institutions.⁶⁶⁷ This was followed by another call for more progressive Argentine fiscal institutions in 1909, when Nicanor Sarmiento finds that ‘the state cannot demand from its citizens a sacrifice that they do not have’ and should tax those better able to pay. This would ‘respect the economic and personal integrity of individuals’. The only way of satisfying such ‘justice is with a *progressive tax over property and income*.’⁶⁶⁸ In 1914 the Socialist deputy Alfredo Palacios also called for reform. He finds Argentine fiscal institutions to be unscientific, regressive, responsive only to immediate revenue needs, and inconsiderate of individual circumstances.⁶⁶⁹ He highlights the regressive nature of fiscal institutions in their reliance on workers, as landowners went relatively untaxed. He also calls for more just and progressive fiscal institutions.⁶⁷⁰ In 1918 Ernesto Hueyo, an important Argentine banker, called for an income tax, noting that the ‘better organised nations’ had already introduced it. He argues that income tax is more in accord with democracy, more progressive, more socially just, and more elastic.⁶⁷¹ In the early twentieth century there were various calls for more progressive and direct

⁶⁶⁶ Some nations also began to develop income taxation from an early date: Holland in 1797, Austria in 1799, the duchy of Baden in 1808, and Russia in 1812; but the British income tax was the leading exemplar of success. Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster., pp.310, 337, 343

⁶⁶⁷ Quesada, E. (1894). Reorganización del Sistema Rentístico Federal - El Impuesto sobre la Renta. Reorganización del Sistema Rentístico Federal - El Impuesto sobre la Renta, Los salones del Ateneo, Arnoldo Moen., pp.26,31

⁶⁶⁸ The translation is mine, but the italics are from the original. Sarmiento, N. (1909). "El Impuesto Progresivo - Sobre la Propiedad y la Renta como base del Sistema Tributario." Anales de la Sociedad Científica Argentina LXVII(Primer semestre de 1909)., p.134

⁶⁶⁹ Palacios, A. L. (1915). Presupuesto y Sistema Impositivo - Discurso que pronunció Alfredo L. Palacios, el 21 de Noviembre de 1914 en la Cámara de Diputados, al discutirse en general el presupuesto de la nación para 1915. Buenos Aires., pp.12-15

⁶⁷⁰ Ibid., p.23-27

⁶⁷¹ Hueyo, E. (1918). "El Impuesto a la Renta." Revista de Economía Argentina Tomo I., p.331-333

taxation in Argentina, especially an income tax that would be more just and befitting of democracy. Support for such a progressive income tax has long historical roots in Argentina.

The need for income tax as part of an overall reform of fiscal institutions was clear and obvious by the early 1920s. By this time income tax was the single most important tax in France, Germany, Sweden, Great Britain, and the US.⁶⁷² Finance Minister Molina and President Alvear made an important attempt to introduce income tax as part of wider fiscal reform in 1924. Just previously, in 1923, an important conference was held in Buenos Aires on Argentine public finances by Gaston Jèze, which was openly attended by both Molina and Alvear. Jèze argues that a principal cause of Argentina's constant budget deficits was the insufficient ability to raise revenue. Furthermore Argentine fiscal institutions were: 1) inelastic in their almost exclusive dependence upon consumption taxes; 2) unjust for a democracy, if not 'antidemocratic' due to their highly regressive nature; 3) incoherent, disorganised, and unplanned.⁶⁷³ He calls for a complete 'recasting' of Argentine fiscal institutions to be based upon three principles: 'democratic social justice' (seen as essential in all modern democracies to avoid political breakdown), productivity, and elasticity (to address chronic deficits).⁶⁷⁴ Jèze argues that introducing an income tax is the single largest necessary reform in Argentina (alongside an inheritance tax), and would neatly address all three principles. He found it extraordinary that Argentina had managed to achieve such a high level of development in spite of a clear incapacity to formulate balanced budgets. Rather than a 'program of government', the Argentine budget was nothing more than a 'bureaucratic forecast' of revenue and expenditure.⁶⁷⁵ Introducing income tax would be a major step towards embedding balanced budgets and improving government. The influence of Jèze's 1923 conference on Molina's 1924 attempt to introduce an income tax was likely large. Molina saw income taxation as part of a larger fiscal reform that would address 'the

⁶⁷² Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster., pp.451-452

⁶⁷³ Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., p.80-83

⁶⁷⁴ Ibid., pp.83-85

⁶⁷⁵ Ibid., p.52

deficiency of our taxation system, which has changed little since colonial times.⁶⁷⁶ He saw Argentine fiscal institutions as ‘incompatible with the normal development of our country’ due to their reliance upon indirect customs taxation.⁶⁷⁷ For Molina, as for Jèze, income taxation promised to be socially just (attenuating social conflict and enabling greater state social action), productive, and elastic (balancing the national budget).⁶⁷⁸ Income tax was to be a just tax that would strengthen democracy and public finances.

During the 1920s the budget was an object of contention between the less democratically successful Conservatives and the more successful Radicals (the Radical party dominated the federal state from 1916-30). The Conservatives and their allies increasingly saw the Radicals as fiscally irresponsible, which was a major reason for the 1930 military coup. From 1923 to 1927 it became impossible to agree on a new budget, which meant a continual extension of the previous year’s budget. The strained relationship between the Executive and the Legislature in the 1920s meant that the 1923 budget remained the standard, with only slight modifications, until 1931.⁶⁷⁹ This made fiscal reform such as income taxation much harder to achieve, as reforms were attached to the annual budget law to be presented by the President on May 1. The lack of an annually elaborated budget meant the Executive evaded Legislative control, permitting an increase in public expenditure.⁶⁸⁰ The deadlock of the 1920s not only prevented democratic fiscal reform, but also led many Argentines to perceive their state institutions (and perhaps democracy) as relatively backward. For instance: ‘In the most advanced nations, the budget is the primary concern of governments and parliaments, constituting the most serious political and economic act.’⁶⁸¹ As Argentina clearly failed on this account, it was by inference a less advanced nation. Budgetary deadlock helped establish the cause against democracy in Argentina, making the pre-democratic past appear as a time when public finances were better managed. As the Argentine income tax came into being, it was observed that Argentina was following in the footsteps of

⁶⁷⁶ Molina, V. M. M. d. H. d. I. N. and M. T. P. Alvear (1924). Mensajes y Proyectos de Legislación Impositiva y Bancaria, Ministerio de Hacienda de la Nación, Remitidos por el P E al H Congreso de la Nación, Para ser considerados en el periodo de 1924. Buenos Aires, G Kraft., p.13

⁶⁷⁷ Ibid., p.13

⁶⁷⁸ Ibid., p.15-16

⁶⁷⁹ Sánchez Román, J. A. (2004). "Chapter 2: Economic Elites, Regional Cleavages, and the Introduction of the Income Tax in Argentina." Unpublished., p.6-8

⁶⁸⁰ Ibid., p.9

⁶⁸¹ Avellaneda, N. A. s. o. P. N. A., 1874-80) (1928). Discurso de Presentación por el Académico Doctor Pedro Olaechea y Alcorta. Conferencia de Nuevo Académico Doctor Nicolas A Avellaneda en el acto de su recepción, Buenos Aires, Academia Nacional de Ciencias Económicas., p.19-20

more progressive countries such as New Zealand.⁶⁸² Ironically, it was only able to do so once democratic institutions were subjugated.

It would have been preferable for Argentine state credibility and democracy to introduce income tax via a democratic process, such as Molina's 1924 attempt. By not doing so, income tax and justice were more open to question. Why then did Molina's democratic attempt to introduce income tax fail? Was it due to elite opposition, typically the reason for difficulties elsewhere? Failure appears to have been largely due to Molina's overzealous reform package. Molina mistakenly coupled the introduction of income tax to a sweeping reform of fiscal-federalism, entailing the elimination of provincial taxes on production and trade to further unify the national market.⁶⁸³ These provincial taxes were forbidden in the Constitution, but had been re-introduced in the wake of the 1890s depression when the interior provinces faced financial difficulties.⁶⁸⁴ It was unwise to couple the introduction of income tax to the more contentious issue of fiscal federalism. Had income taxation alone been attempted, it could well have succeeded. Some provinces had no choice but to oppose Molina's reform due to their dependence on internal taxation.⁶⁸⁵ Not only that, but the federal government was controlled by the Radicals, while the Interior provinces were controlled by the Conservatives. Molina's reform would have increased the power of the federal government, and thereby the Radicals, which guaranteed the opposition of the Conservatives. The main obstacle to the 1924 income tax proposal was not the various elites, but the active opposition of the Interior provinces to the reform of fiscal federalism.⁶⁸⁶ In fact landowners were potentially in favour of it, as it could have reduced the larger threat of land taxation.⁶⁸⁷ Industrialists were more concerned with protectionism and social policies than income tax. Molina's 1924 reform also antagonised potential supporters. For example Hueyo, previously an open supporter of income taxation in 1918, openly opposed Molina's

⁶⁸² Bottini, E. B. (1931). *Distribución del Impuesto*. Conferencia de Extensión Universitaria, Pronunciada el 6 de Agosto de 1930 en la Sociedad "Luz", bajo el patrocinio de la Facultad de Ciencias Económicas, Buenos Aires., p.4

⁶⁸³ Sánchez Román, J. A. (2004). "Chapter 2: Economic Elites, Regional Cleavages, and the Introduction of the Income Tax in Argentina." *Unpublished*, p.11

⁶⁸⁴ *Ibid.*, pp.18-21

⁶⁸⁵ Internal taxation comprised almost 90% of Mendoza's revenues, and almost 40% of Tucuman's revenues. *Ibid.*, p.22

⁶⁸⁶ *Ibid.*, p.2

⁶⁸⁷ *Ibid.*, pp.14-16

proposal.⁶⁸⁸ The introduction of income tax was likely needlessly delayed by tying income tax to wider reform of fiscal-federalism; at a time when the potential revenues could have greatly improved public finances and thereby the credibility of the new democracy. Poor public finances were seen as democracy's greatest fault. Failure meant fiscal institutions continued on the unsteady course begun in WWI, which was largely due to a lack of revenue, not excessive expenditure. A 1927 US government study of 'Latin American Budgets' found that Argentine public expenditure was 'not excessive', and that chronic budget deficits were caused by a failure to address the budget.⁶⁸⁹ Had income tax been introduced in 1924, poor public finances might have been ameliorated, removing a major reason for the 1930 military coup.

Income taxation was introduced in 1932 unattached to a greater reform of fiscal-federalism. Argentina was a relatively late starter as many developed states introduced income tax during WWI. Even within Latin America, Brazil and Mexico introduced income tax in 1924 and 1925 respectively, despite their much greater potential for elite opposition.⁶⁹⁰ The 1932 income tax overcame the constitutional obstacle of article 67, which stated that direct taxation was a provincial power and could not be levied by the federal state unless it was temporary and due to an emergency.⁶⁹¹ Congress avoided the need for considering constitutional reform by simply introducing income taxation as an emergency temporary device valid for five years.⁶⁹² Income tax nonetheless became permanent, even if it is now pervasively evaded.⁶⁹³ The reform of fiscal federalism, a separate issue, was later achieved in 1935 when the Provinces renounced internal taxation in exchange for the federal state's assumption of their debts.⁶⁹⁴

Unlike the proposed income tax of 1924, the income tax of 1932 was not advocated on grounds of social justice, but to increase revenue and shore up public finances. Enrique

⁶⁸⁸ Hueyo, E. (1925). "Impuesto a la Renta - Critica al Proyecto del Ministro Molina." Revista de Economía Argentina **Tomo 14**(No. 79-80), p.43-44,49

⁶⁸⁹ Corliss, J. C. (1927). Latin American Budgets, Part 1: Argentina, Uruguay, Paraguay, and Brazil. Trade Information Bulletin No. 497, Bureau of Foreign and Domestic Commerce, United States Department of Commerce., p.1-2

⁶⁹⁰ Sánchez Román, J. A. (2004). "Chapter 2: Economic Elites, Regional Cleavages, and the Introduction of the Income Tax in Argentina." Unpublished., p.1

⁶⁹¹ Ibid., p.21

⁶⁹² Ibid., pp.35-37

⁶⁹³ Britain overcame a similar obstacle as it has to renew income taxation annually, and has done so continuously from 1842.

⁶⁹⁴ Sánchez Román, J. A. (2004). "Chapter 2: Economic Elites, Regional Cleavages, and the Introduction of the Income Tax in Argentina." Unpublished., pp.38-39

Uriburu, Minister of Finance in 1932, often declared that the income tax was a necessity. Roberto Ortiz, Minister of Finance in 1936, also stated that the main reason for the income tax was to raise much needed revenue, as the state found itself unable to reduce expenditure as quickly as revenue declined.⁶⁹⁵ The 1932 income tax was somewhat less progressive than the income tax envisaged by Molina.⁶⁹⁶ Nonetheless the existence of progressive brackets meant social justice was an implicit goal. The 1932 income tax was not explicitly addressed to social justice as Molina's 1924 income tax was. A 1932 observation on the introduction of income tax finds that:

‘It is the little pleasing work of our present government to have to re-establish the equilibrium of public finances and our national economy, a very difficult job ... We must recognise that an unbalanced budget is the worst evil that can afflict public finances. ... In order to achieve a balanced budget, the provisional government has implemented the income tax, that is the tax that has most contributed to the organisation of public finances.’ (Ramm Doman 1932), pp.202-3

This portrays income tax as an evil made necessary by previous fiscal profligacy, not a means to achieve greater social justice. Likewise, a 1935 Ministry of Finance publication explains that in the early 1930s ‘The most important thing was to clean up the public finances. ... The new taxes were undoubtedly heavy. But unfortunately they were necessary.’⁶⁹⁷ The final introduction of income tax had little to do with ideas of social justice, and was painted as a necessary revenue raising exercise.

A more positive justification for the new income tax was the increased role of the state. The new income tax was also validated by a large program of new public works, and increased attention to the agricultural sector.⁶⁹⁸ This broadly concurs with the general theory of this thesis: that the state needs to be accountable to citizens/ taxpayers to achieve the common good necessary for development. Unfortunately the 1930s were undemocratic. The potential lack of fit at this time between desired public goods (expressed democratically) and those actually delivered may be evident in the state's focus upon the traditional agricultural sector rather than the increasingly important

⁶⁹⁵ Ortiz, R. M. M. o. F., Argentina) (1936). Determined Policy of Sound Finance. The Daily Telegraph. London., p.4

⁶⁹⁶ Sánchez Román, J. A. (2004). "Chapter 2: Economic Elites, Regional Cleavages, and the Introduction of the Income Tax in Argentina." Unpublished., pp.31-2

⁶⁹⁷ Nación, M. d. H. d. I. (1935). La Rebaja de Impuestos. Buenos Aires., p.8

⁶⁹⁸ Ibid., p.13

cities. A democratic polity would likely have focussed more upon urban public goods, as Argentina was highly urbanised. Perón's later attack upon the agricultural elites, widely perceived as the power behind the 1930s regime, could be interpreted as resentful democratic retribution. Nonetheless the regime at least perceived the need to provide a return on taxation through the provision of public goods:

‘The Executive Power believes that after demanding such an extraordinary sacrifice from the nation's citizens [i.e. income taxation], it is equitable and fitting to return to the private economy, to whatever degree possible, the resources that are no longer indispensable to the nation.’ (Nación 1935), p.14

Government in the 1930s was driven by a strong desire to make the Argentine state more credible, but the rural focus of public goods suggests the lack of democracy allowed it to be out of touch. A rural focus worked well in the late nineteenth century, but was outdated by the 1930s, as the burgeoning urban and industrial expansion begun in the 1920s required a shift in emphasis. This occurred in Australia during the interwar period, when there was a switch from rural to urban public goods driven by democracy.⁶⁹⁹ The 1930s regime thereby fomented later social conflict when democracy returned under Perón. Nonetheless the role of the state increased substantially at this time, successfully fostering much development.⁷⁰⁰

The Peronist regime of 1946-55 greatly increased the historical level of state expenditure.⁷⁰¹ Total state expenditure increased by 70% in 1946 alone, but revenues hardly increased, resulting in an enormous increase in the budget deficit. This was concealed by indirect financing, i.e. seigniorage.⁷⁰² Perón's regime also began the discreditable habit of booking a large amount of expenditure outside the formal budget, amounting at times to around 50% of total expenditure.⁷⁰³ The bulk of this outside expenditure supported a policy of import substitution, being spent on IAPI (Argentine Institute of Trade Promotion), the Banco Hipotecario Nacional (National Mortgage

⁶⁹⁹ This is explored in more depth in previous chapters.

⁷⁰⁰ Rodríguez, C. J. (1940). "La Experiencia Financiera Argentina - El Crecimiento de los Gastos Públicos." *Revista de Economía Argentina* **Tomo 39**(N° 262-3), p.155

⁷⁰¹ Reutz, T. (1991). "Ilusiones Fiscales, dimensión y método de financiamiento del déficit fiscal del gobierno, 1928-1972." *Ciclos (año 1) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires* **1**(1), p.120

⁷⁰² See Chapter Four.

⁷⁰³ Reutz, T. (1991). "Ilusiones Fiscales, dimensión y método de financiamiento del déficit fiscal del gobierno, 1928-1972." *Ciclos (año 1) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires* **1**(1), p.120

Bank), and the state rail system. The Peronist regime largely reversed the 1930s achievements in public finance. Public accounting had been widely reorganised from 1933-38 to ensure that all state expenditure was within a single budget, and to eliminate unconsolidated (floating) debt.⁷⁰⁴ As the quality of public finances declined from 1946 onwards, so did the justice of taxation, as there was an increasing lack of solidarity between taxpayers and state expenditure.

The Peronist regime did mark the return of democracy, which meant the role of income tax shifted sharply back to the earlier aim of social justice. Income tax became an explicit tool for income redistribution alongside a then proven role of raising revenue. In 1950 the Ministry of Finance declared that tax was no longer simply to collect revenue but also to actively redistribute income.⁷⁰⁵ The income tax had always passively redistributed income, being a progressive tax paid only by the wealthy, but this was no longer deemed sufficient. The income tax was made more progressive, and new income taxes on extra profits and extraordinary profits were introduced. This was thought to be necessary in order to ‘destroy’ the situation of economic privilege that had governed the country.⁷⁰⁶ Perón converted income taxation into an aggressive tool for income redistribution, defying the wealthy few who actually paid it. The harsh language of the Ministry of Finance likely undermined the justice of income tax; just as increasingly shaky public finances undermined overall credibility. The irony of a faltering income tax was that the overall fiscal regime became more regressive. Prebisch observes in 1956 that Argentine fiscal institutions were becoming more regressive, in stark contrast to other developed countries and earlier Argentine experience.⁷⁰⁷ Incompetent management of public finance appears to have played a large role in this. Seigniorage became the chosen instrument of the Peronist regime to fund an increase in social justice, but undermined the objective in the process.

‘The excessive and disorderly intervention of the State has seriously disturbed the economy in detriment to its efficiency and, together with inflation, has generated sources of extraordinary benefits that contrast with desired social policy. The intervention of the State is certainly indispensable to accelerate the

⁷⁰⁴ Ibid., p.121

⁷⁰⁵ Nación, M. d. H. d. I. (1950). La Coordinación Económica, Financiera y Administrativa como fundamento de la Prosperidad Nacional., p.21

⁷⁰⁶ Ibid., pp.29-30

⁷⁰⁷ Prebisch, R. (1956). Desarrollo Económico y Política Social. Mesa Redonda en la Universidad de Córdoba, Buenos Aires, Secretaría de Prensa de la Presidencia de la Nación., pp.19,51

rhythm of development and promote its social meaning.’ (Prebisch 1956), pp.33-34

There was nothing necessarily wrong with increased state intervention according to Prebisch, except how this intervention was financed. Instead of unjustly forcing contributions via inflation tax, the Argentine state needed to foster credibility and consent with taxpayers to finance desired expenditure.

As seen in previous chapters, a massive decline in Argentine fiscal institutions began during the Peronist regime of 1946-55. In 1956 Federico Pinedo (a former Minister of Finance) pointed out a considerable increase in tax evasion in this period. One indicator was business, which declared a net income of 69% of total net income in 1942. This declined suspiciously to a mere 41% by 1955.⁷⁰⁸ Either relative business income declined massively as a proportion of the economy, or tax evasion increased enormously. Pinedo warned that income tax needed to shift from a tax on the wealthy to a mass tax, and that further attempts to increase the burden on the wealthy would not increase revenue. Increased revenues could only come from the taxation of middle and small income earners. Inflation meant this had occurred unintentionally via bracket creep, which pushed constant real wages into higher nominal brackets over time. Yet bracket creep was also seen as the primary reason for an intense increase in evasion begun in the 1950s.⁷⁰⁹ By 1960 one estimate found that half of all income tax was evaded.⁷¹⁰ A more general reason cited for the extraordinary increase in evasion was the political war against the economy from 1946-55.⁷¹¹ After Perón the state floundered in an undemocratic setting to normalise and re-establish taxation through ‘blanqueos’, amnesties to reincorporate capital back into the legal fiscal system beginning in 1956. These efforts were undermined by repeated use, acting to increase evasion by entrenching expectations of future blanqueos. In 1958 the Secretary of Finance revealed that 70% of those taxpayers inspected were found to be evading tax.⁷¹² In 1959 income

⁷⁰⁸ Pinedo, F. (1956). *El Fatal Estatismo*. Buenos Aires, Guillermo Kraft Ltda., p.88

⁷⁰⁹ TECHINT (1963). "Sistema Impositivo y la Presion Tributaria." *Boletín TECHINT* 134: 13-56., p.47-53 ; & Secretaria del Consejo Nacional de Desarrollo, S. P. E. N. (1967). *Estudios de Política Fiscal en la Argentina (Versión Preliminar)*, Republica Argentina, Presidencia de la Nación., Vol. 1, pp.10-13

⁷¹⁰ Secretaria del Consejo Nacional de Desarrollo, S. P. E. N. (1967). *Estudios de Política Fiscal en la Argentina (Versión Preliminar)*, Republica Argentina, Presidencia de la Nación., Vol. 5, p.19

⁷¹¹ López, A. T. (1957). "Las sistemas fiscales como generadores de deshonestidad." *Revista de Ciencias Económicas* 62., p.54

⁷¹² Peire, J. J. (1959). *Evasión Impositiva*. Buenos Aires, Talleres Gráficos "Fanetti", p.11

tax evasion was estimated as being larger than the fiscal deficit.⁷¹³ Another indication of how extensive evasion became was the breakdown in the parallel logic between GDP (an expression of the sum of individual incomes) and income tax in 1952.⁷¹⁴ Tax evasion was part of a notable change in the overall moral climate, attributed to the dissatisfaction with inflation.⁷¹⁵ The Argentine experience of evasion at this time was unusual. In the early 1960s income tax evasion was not a major problem in other high-income countries.⁷¹⁶ Even the tool of collecting income tax at its source, a means of reducing evasion elsewhere, was apparently a means for evasion in Argentina.⁷¹⁷ In sum the decrease in income tax justice in the early postwar period quickly found collective expression in widespread and severe tax evasion.

Argentine income tax evasion was attributed by one government source in the 1960s to three causes: 1) the lack of sufficient means to efficiently police evasion; 2) instead of evaders being punished, they were awarded with various opportunities for amnesty in the numerous “blanqueos”, which led to expectations of non-punishment; and 3) the inefficiency of state expenditure in some sectors served as a widely publicised justification for evasion.⁷¹⁸ Of these three reasons, the last is the most fundamental and convincing, dealing with the underlying issue of state credibility. Poor public expenditure is a clear, just and obvious reason to evade tax. In order to build credibility, and thereby cooperation in tax, a state must act like a firm and provide public goods. As for the first two reasons, there can never be sufficient means to efficiently police evasion, and the blanqueos were a symptom not a cause of evasion (even if they helped entrench evasion). Yet the last reason was barely studied in the report. Peire more explicitly attributes the primary cause of tax evasion to something akin to low state credibility.⁷¹⁹ The ‘taxpayer and the treasury’ came to be at odds in Argentina, the former spending what the other would not volunteer, with the deficit between them being settled in seigniorage. By the mid 1950s Argentina already demonstrated that

⁷¹³ Secretaría del Consejo Nacional de Desarrollo, S. P. E. N. (1967). Estudios de Política Fiscal en la Argentina (Versión Preliminar), Republica Argentina, Presidencia de la Nación., Vol. 1, p.13-14

⁷¹⁴ Peire, J. J. (1959). Evasión Impositiva. Buenos Aires, Talleres Gráficos "Fanetti", p.13

⁷¹⁵ López, A. T. (1957). "Las sistemas fiscales como generadores de deshonestidad." Revista de Ciencias Económicas 62., p.47-48

⁷¹⁶ Secretaría del Consejo Nacional de Desarrollo, S. P. E. N. (1967). Estudios de Política Fiscal en la Argentina (Versión Preliminar), Republica Argentina, Presidencia de la Nación., Vol. 5, p.8

⁷¹⁷ Ibid., Vol. 5, p.15

⁷¹⁸ Ibid., Vol. 5, pp.15-16

⁷¹⁹ Peire, J. J. (1959). Evasión Impositiva. Buenos Aires, Talleres Gráficos "Fanetti", p.41

more complex fiscal institutions such as progressive income tax required cooperation stemming from state credibility. Some understood the essence of the problem, but they were paid little heed. Public finances continued to be grossly mismanaged, and taxpayers continued to be unwilling to fund public finances.

Australia

The origins of Australian income tax extend back to the gold boom of the mid nineteenth century. The surge in migration caused by the gold boom almost immediately coincided with increasing popular demands for more progressive taxation, including new taxes on land, income, and wealth.⁷²⁰ Taxation became a popular and contentious issue, as evidenced by riots against the gold license fee paid by prospectors that eventually led to its repeal. Yet in the short run the gold rushes led to greater public expenditure and an immediate need for increased revenue, which was obtained through further regressive indirect taxation. The first direct taxes, death duties, were introduced in 1851, but were relatively insignificant in terms of revenue.⁷²¹ The push for greater democracy begun with the gold rushes meant that established ideas about taxation and the state's role were challenged from the mid nineteenth century onwards. Before federation in 1901, this had led to progressive direct taxes on income and land in most colonies.⁷²² This mirrored a similar movement in England, where accumulated wealth became an obvious target for taxation as democracy broadened. In the late nineteenth century most Australian colonies progressively discriminated against property income (versus income from 'personal exertion') with higher taxation rates, and some also adopted varying tax rates on incomes, land or estates.

Progressive and direct taxation was introduced in the Australian colonies in the latter half of the nineteenth century as a result of the broadening of democracy begun with the gold rushes. The obvious economic, and inequitably distributed, resource in nineteenth century Australia was land, which led to the promotion of land taxation from the 1840s. Land taxation could be considered a rough form of income taxation in the nineteenth century Australian context, as land ownership clearly correlated with the ability to

⁷²⁰ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.7-9

⁷²¹ These were abolished by the early 1980s. Ibid., pp.16-17, 78

⁷²² Ibid., p.14-15

produce wealth. Ineffective land policies allowed highly concentrated land tenure to continue for much of the nineteenth century, and most of the best public land passed to private freehold by the 1870s.⁷²³ The pastoralists' inequitably large land holdings caused great public unrest. Land taxation was very popular, and was seen as a way to redress such inequity. Land taxes were among the first taxes put forward by the popularly elected assemblies from the 1870s. All the Australian colonies (States after 1901) introduced land taxation between 1877 and 1915. This was driven by democracy but also by the need for greater revenues, as revenues from land sales and customs duties were declining.⁷²⁴ Yet the original aim of colonial land taxes was development, not revenue, as taxation was meant to 'unlock the land' for agricultural development by the smallholder. They were also specially designed not to discourage wealth creation and accumulation, levying tax only on the original unimproved value of the land rather than current capital value. The new federal state also introduced a land tax in 1910, which was the first to tax the extensive pastoral and grazing lands held by crown lease in western NSW, Queensland, the Northern Territory and northern Western Australia.⁷²⁵ The federal land tax successfully encouraged subdivision and more intensive production, but may not have redistributed wealth (one of its intentions). It also raised much revenue, but was abolished in 1952 to compensate the States for their loss of income tax in 1942. As the Australian economy developed over the twentieth century, with new prosperities in industry and mining as well as from land, Australian wealth increasingly took the form of assets other than land.⁷²⁶ By the 1970s land taxation had clearly become partial and discriminatory, and was long superseded by income taxation.

Australia's first income taxes were introduced by the individual colonies in response to financial and budgetary crises. Tasmania and South Australia introduced income taxes in 1880 and 1884 respectively, followed by most of the other colonies during the 1890s depression. This was in line with international norms, as income taxation became increasingly widely adopted from the early 1890s.⁷²⁷ In order to overcome the objections of local elites, the budgetary threat had to be substantial (usually around 6-

⁷²³ Ibid., p.18-19

⁷²⁴ Ibid., p.19-20

⁷²⁵ Ibid., p.43-44

⁷²⁶ Ibid., pp.76-78

⁷²⁷ Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster., p.310

7% of output) before income tax could be introduced.⁷²⁸ By 1907 all Australian colonies/States had introduced income tax. Only the relatively less developed colonies, such as Queensland and Western Australia, were able to maintain a traditional dependence upon indirect taxation until after federation. This suggests that income tax was an important to continuing development as the economy became more complex. The greater resources generated by income taxation were necessary to foster broader collective action. New South Wales managed to delay introducing direct taxation until 1895 by selling crown lands. Victoria initially found itself unable to introduce income tax due to the strong opposition of pastoralists, turning instead to heavy excise taxes. These regressive taxes were sold to the popular masses as protectionism, popularly seen as an employment policy by the early labour movement.⁷²⁹ Yet their primary purpose was to raise revenue. By 1895 Victoria also had to resort to income tax. Income taxation was established in the key Australian colonies by the late nineteenth century.

A federal income tax was introduced in 1915 and soon came to monopolise income taxation. In contrast to earlier reactions against federal land and estate taxes, federal income tax was widely accepted due to the heavy financial pressures of WWI.⁷³⁰ The federal income tax was designed not only to raise revenue, but also to be progressive and redistribute income. It was the first Australian income tax to have continuously rising marginal rates and, initially, only taxed the wealthy. The federal income tax levied property income at a higher rate than personal exertion income (ended in 1953), and used all available means to be progressive. Prime-Minister William Hughes stated in 1914 that progressive taxation was ‘the basis of true civic government’.⁷³¹ The federal income tax embodied that goal, aiming to achieve a more just society. Another MP, Mr. Finlayson, remarked in 1916 that the federal income tax was ‘a fair, reasonable, and proper method of taxation ... incomes are, after all, the surest index to what people are able to pay by way of taxation.’⁷³² Ideological support for progressive taxation was widely accepted. Opposition emerged, but was unsuccessful in checking the progressive intent. Dr. Earle Page, federal Treasurer and founder of the Australian Country Party, saw federal income tax as merely a war-time revenue raiser that needed

⁷²⁸ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., pp.24-25

⁷²⁹ Ibid., p.9-10

⁷³⁰ Ibid., p.45

⁷³¹ Hansard Australian Parliamentary Debates, Parliament of Australia., 11/12/1914, p.1639, Vol. 75

⁷³² Ibid., 8/12/1916, p.9627, Vol. 80

to be discarded as soon as possible: ‘The federal income tax was imposed to meet war necessities. ... The Government is anxious that this form of direct taxation be ... evacuated ... at the earliest possible moment.’⁷³³ Despite his position as Treasurer, Earle Page was unsuccessful in renouncing federal income tax due to continuing financial pressures. His comments suggest there was a significant minority that were antagonistic towards income tax. Income tax quickly proved desirable for elasticity, as the experience of WWI proved the danger of dependence on indirect customs duties in the absence of trade. This strengthened the movement to direct taxation. As one MP, Mr. Anstey, put it ‘The Government is existing precariously upon revenue derived from Customs. It is living in a house of cards that may collapse at any moment.’⁷³⁴ From 1915 onwards the balance turned increasingly against indirect taxation and towards direct taxation.⁷³⁵

The federal income tax barely touched wage and salary earners in the late 1920s. In 1928 only incomes above £250 were subject to income tax, when the living wage was below £52.⁷³⁶ Special wage taxes were introduced in the 1930s to fund the greater cost of public unemployment insurance, which meant wage and salary earners became used to paying direct taxes on income by the late 1930s. World War II furthered this process by officially entrenching the taxation of lower incomes, as income tax moved from an elite to a mass tax. The war meant that the federal state needed far more revenue, and an attempt was made to formalise the taxation of lower incomes in 1940 by lowering the exemption to £150, much nearer the living wage. This was strongly opposed and eventually led to a compromise where the exemption was lowered to £200.⁷³⁷ Such were the financial pressures of war that the exemption soon dropped to £105 by 1943, when the living wage was estimated at £60. From 1942 income tax became virtually universal at substantial rates for all income levels.⁷³⁸ The 1930s Depression and WWII were the opportunities whereby income tax was transformed from a tax on the wealthy

⁷³³ ‘The federal income tax was imposed to meet war necessities. ... The Government is anxious that this form of direct taxation be alleviated, and the field of income tax should be evacuated by the Commonwealth at the earliest possible moment.’ Ibid., 31/7/1924, p.2722, Vol. 107

⁷³⁴ Ibid., 6/8/1924, p.2858, Vol. 108

⁷³⁵ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.16

⁷³⁶ Ibid., p.52-53 The living wage was defined in the 1907 Harvester judgement as a wage that guaranteed workers a standard of living that was reasonable for “a human being in a civilised community”.

⁷³⁷ Ibid., p.53-54

⁷³⁸ Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin., p.338

into a mass tax. The Liberal Treasurer in 1940, Mr. Spender, found that income taxation:

‘was originally designed to produce a moderate revenue by taxing higher incomes with considerable severity while falling lightly on middle incomes and exempting lower incomes altogether. It is unfortunately necessary now to widen the field so as to obtain a substantial contribution from middle incomes. ... All that it [Australia] asks is that burdens imposed shall be equably shared, according to its democratic ideals.’ (Hansard), 2/5/1940, Vol. 163, pp.479-81

Income taxation came to be supported by all political parties, as long as it was ‘equably shared’, i.e. became a mass tax. This was sold as being part of ‘democratic ideals’. The move to a mass tax was also built on a strengthening of Australian nationalist ideology during WWII. For instance:

Mr. Fadden (Assistant Treasurer) – ‘they [defence and war expenditures] are productive of ultimate immunity from conquest. Hence all classes are required to understand that the Government is taxing them for their own good, for the support of public safety, for the honour of Australia, and for the stupendously important purpose of financing the cause of the Allies in a war that has to be fought to a finish, if life is to be worth living.’ (Hansard), 9/5/1940, V.163, p.662

The move to a mass tax was also an opportunity to change the administration of income tax and begin collecting at the source, which made income tax more easily enforceable on the much larger population on lower incomes:

‘To make the [federal income] tax an efficient and equitable war-time instrument it is clear the field must be broadened into incomes under £400, which account for 70 per cent of the total personal incomes in Australia. ... In the case of wage and salary earners arrangements will be made for taxes to be collected at the source since regular periodical contributions avoid the hardship of lump sum payments.’ (Hansard), 21/11/1940, Vol.165, pp.86-8

The new tax collection system was called pay-as-you-earn (PAYE) and facilitated the move to a mass tax, beginning to withhold income tax on wage and salary incomes from 1944.⁷³⁹

⁷³⁹ A number of States had previously run similar systems for their own income taxes. Taxation, C. o. (1915-60). Annual Report of the Commissioner of Taxation, Parliament of the Commonwealth of Australia., 23rd Annual Report, 1942, p.12

World War II provided an opportunity not only for moving income tax from an elite to a mass tax, but also for much needed fiscal-federal reform. The introduction of a federal income tax on top of already existing State income taxes complicated Australian fiscal institutions from a fiscal-federal perspective. A labyrinth of income taxation (upon dividend, company, and personal incomes) emerged in Australia from 1915, with all levels of government taxing incomes.⁷⁴⁰ By 1942 Australia had 26 separate income taxes. These varied to a large degree in principle, and burdened taxpayers unequally.⁷⁴¹ Some rationalisation of Australian fiscal-federal relations was necessary, but it was not until WWII that change became possible. Attempts at synchronising income tax in the fiscal-federal sphere began shortly after federal income tax was introduced, with many attempts between 1916 and 1942.⁷⁴² The most important attempt at tax synchronization previous to WWII was the Uniform Income Tax Act in 1937, but was unsuccessful.⁷⁴³ The federal state clearly expressed a desire to monopolise income tax as early as 1923.⁷⁴⁴ World War II gave the federal state the opportunity to successfully monopolise income tax on the tenuous constitutional grounds of defence and grants powers.⁷⁴⁵

The federal state determined that a large increase in revenues was required due to WWII, and much of this would have to come from income tax, but the ability to do so was seriously limited by State income taxes. The federal state felt obliged to limit its income tax to the highest rate imposed by any State, which meant a large proportion of incomes remained inaccessible to federal income tax.⁷⁴⁶ As a result the federal state imposed itself as the sole income taxation authority in 1942, ending the States' ability to

⁷⁴⁰ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.28, 44

⁷⁴¹ Taxation, C. o. (1915-60). Annual Report of the Commissioner of Taxation, Parliament of the Commonwealth of Australia., 23rd Annual Report, 1942, p.10

⁷⁴² Parliament of the Commonwealth of Australia, Second Report of the Royal Commission on Taxation, 1934, p.51

⁷⁴³ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.49

⁷⁴⁴ Prime Minister Bruce in 1923 said: 'the simplest is that the Commonwealth should take over the whole work of collecting income taxation and that the Commonwealth Act should be the only taxation Act. The objection to that proposal is that we cannot do it under the Constitution, and the States would never agree to it in any circumstances.', Parliament of the Commonwealth of Australia, Second Report of the Royal Commission on Taxation, 1934, p.53

⁷⁴⁵ Smith, J. "Progressivity of the Commonwealth Personal Income Tax, 1917-1997." The Australian Economic Review 34(3): 263-278., p.264

⁷⁴⁶ Taxation, C. o. (1915-60). Annual Report of the Commissioner of Taxation, Parliament of the Commonwealth of Australia., 23rd Annual Report, 1942, p.10

levy income tax. The States challenged this on constitutional grounds but were ultimately unsuccessful in the High Court.⁷⁴⁷ This defeat quickly led to the States' acquiescence as there was widespread support for tax simplification. The legislation became permanent despite being originally limited to the length of the war plus one financial year.⁷⁴⁸ The move to exclusive federal income tax marked a major reform of fiscal-federal relations, as well as allowing for increased progressivity. The long process of fiscal federal reform of income tax, from 1915-42, is an example of slow but ultimately successful democracy. Federal income tax originally complicated fiscal federal relations, but eventually led to fiscal federal reform in the federal state's favour. In the meantime federal income tax stabilised federal fiscal institutions with significant and stable new revenue.

Income tax was increased in 1943, and as the war came to an end the government wanted to lock in this increase. As a result the increase was renamed as a 'Social Services Contribution' in 1945, in anticipation of postwar pressure to reduce income tax. At the end of WWII there was widespread discontent among working people with income tax.⁷⁴⁹ The federal state desired to maintain high expenditure in order to pay for postwar reconstruction and welfare spending, rather than reduce taxation. The public's distaste for income taxation's transition from an elite to a mass tax was compensated by the provision of many desired public goods in the postwar period. For example a quarter of income taxation was allocated to a new National Welfare Fund for future expenditure on social welfare.⁷⁵⁰ This funded widows' pensions (introduced in 1942), unemployment benefits (introduced in 1944), and child endowments. These increased the justice of income taxation by providing widely desired public goods, easing the transition to a mass tax. By the early 1960s the principle of mass taxation was well accepted, and the separated social services contribution was reincorporated back into the income tax. The 'Social Services Contribution' was always part of the income tax, being a separate tax in name only. This gave the state some breathing space to justify the 1943 income tax increase with greater public goods. The burden of income tax on

⁷⁴⁷ Ibid., 23rd Annual Report, 1942, p.12

⁷⁴⁸ Ibid., 23rd Annual Report, 1942, p.11

⁷⁴⁹ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., pp.54-55

⁷⁵⁰ Ibid., pp.54-55

low and middle-income earners was not severe in the 1960s, and was generally seen as a fair price to pay for benefits received.

The redistributive role of income tax slowly evolved in the postwar period. The original progressive structure in the 1950s slowly diminished as the ability to earn revenue slowly increased with bracket creep. This bracket creep was driven by low and persistent inflation in combination with a lack of adjustment in income tax brackets. This greatly helped entrench income taxation in the postwar period as a mass tax, as opposed to the pre-1942 identity as a 'class tax'.⁷⁵¹ Most industrialized nations followed a similar postwar trajectory.⁷⁵² The crucial aspect of this positive bracket creep, as opposed to the destructive effects in Argentina, was that bracket creep occurred slowly. The effects were fairly imperceptible as inflation was low due to an avoidance of seigniorage. Australian income tax brackets were not adjusted from 1950-51 until the latter 1970s.⁷⁵³ This meant income tax became much less progressive over time and revenues greatly increased. By the 1970s bracket creep became a problem as inflation greatly accelerated. Much like in Argentina, this more rapid bracket creep spawned widespread evasion. Bracket creep became openly acknowledged and tax brackets were revised. The 29 brackets from 1950-51 were reduced to 14 in 1974-75, to 7 in 1975-76, and to 3 in 1978-79.⁷⁵⁴ By the 1970s many people had been pushed into much higher nominal brackets than their real incomes justified. Increased inflation from the late 1960s pushed up the real burden of income taxation and coincided with increasing unemployment in the 1970s.⁷⁵⁵ Such evident injustice quickly led to widespread evasion, reducing progressivity and tax justice even further. Evasion became increasingly common, especially amongst higher income earners.⁷⁵⁶ Evasion combined with income tax concessions to compromise income tax as a means for redistribution. By the 1980s the Australian tax system was widely perceived as economically

⁷⁵¹ Smith, J. "Progressivity of the Commonwealth Personal Income Tax, 1917-1997." The Australian Economic Review 34(3): 263-278., p.273

⁷⁵² Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster.

⁷⁵³ Although the maximum tax rate was reduced, declining from 75% to 70% in 1950-51, and again in 1953-54 to 66.7%.

⁷⁵⁴ Alchin, T. M. (1983). "Intertemporal Comparisons of Tax Progressivity: 1950-51 to 1979-80." Australian Economic Papers 22(40)., p.97

⁷⁵⁵ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.55

⁷⁵⁶ Smith, J. "Progressivity of the Commonwealth Personal Income Tax, 1917-1997." The Australian Economic Review 34(3): 263-278., pp.273-275

destructive to production, consumption, saving and investment.⁷⁵⁷ Postwar Australian income tax policy was one of neglect in the face of bracket creep, which substantially reduced progressivity and eventually acceptability. Inflation led to a similar, if less disastrous, process as that which occurred in Argentina, by reducing income taxation justice. As Australian income taxation had become more entrenched as a mass tax by this time, it was more resilient. The Australian federal state also came to realise the injustice and implement significant reform to correct the situation, which did not occur in Argentina.

The justice of Australian income tax greatly declined during the 1970s as evasion became increasingly normal.⁷⁵⁸ More rapid inflation eroded tax morale, promoting evasion by pushing average wages into the top marginal tax brackets. This coincided with a more socially conflictive political environment during the Whitlam government of 1972-75, which was the first postwar Labor government to win a federal election, launching a large and long awaited program of extensive social reform. The social conflict generated was so extensive that the Governor-General sacked the Prime Minister and his government in 1975, despite the probable lack of constitutional power to do so. Tax avoidance began to threaten the Australian income tax in the 1960s, and was facilitated by incentives to stimulate investment or support particular industries, especially by court interpretations that created large gaps in company taxation. This greatly increased in the 1970s, when inflation combined with the ambitious social reforms of the Whitlam Government and rising tax burdens.⁷⁵⁹ A failed attempt was made to index income taxation to inflation in 1976. This was followed by a Royal Commission in the late 1970s, which found that tax avoidance schemes had spread to the most respected members of society. New legislation in 1980 began to close the most obvious tax loopholes, but the income tax base continued to decline.⁷⁶⁰ Australian income tax appeared on the brink of entering a negative path dependency much as Argentina had. Income tax began an impressive recovery from 1985 as a result of the

⁷⁵⁷ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.97

⁷⁵⁸ Levi, M. (1988). Of rule and revenue. Berkeley, University of California Press., pp.145-7

⁷⁵⁹ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., pp.99-102. See also Levi, M. (1988). Of rule and revenue. Berkeley, University of California Press.

⁷⁶⁰ Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University., p.109-110

‘National Taxation Summit’. This led to extensive reforms, including the introduction of capital gains and fringe benefits tax; an increase in the rate of company taxation to the top personal tax rate; a decrease in personal income tax rates; and the end of various industry concessions.⁷⁶¹ These reforms were strongly opposed by the business community but reversed the considerable damage to income tax that occurred from the 1960s to the early 1980s.

Inflation seriously damaged Australian income tax from the late 1960s to the mid 1980s. Unlike Argentina, Australia repaired income tax through significant reform and by ending high inflation. Australia thus avoided entering a negative path dependency as Argentina did. Ingenious ways of evading tax are no longer the popular dinner party topic as they were in the 1970s and 1980s. More exact evidence for income taxation’s recovery is found in a study of Australian tax morale, which compares tax morale in 1981 and 1995. In 1981 Australian tax morale was well below the OECD average, but by 1995 morale was slightly above the roughly equal OECD average.⁷⁶² The Australian state managed to dodge the bullet that eventually sank the fiscal viability of the Argentine state, but the obstacles to doing so were lower. Social conflict was much lower in Australia than in Argentina (no military coups have ever occurred in Australia), and the onset of inflation, while destructive, was after a long period of success that saw income tax entrenched as a mass tax. This long period of success meant income tax was more difficult to dislodge and that Australian fiscal institutions were more clearly dependent on it. It was clear that income taxation could not be allowed to die, and that the survival of income tax was crucial to sustaining the (beneficial) state. Another large and important difference is that Australia largely avoided seigniorage as a major source of revenue, as at least some of the high inflation of the 1960s and 1970s was due to external events. Australia managed to avoid opting for a negative path dependency centred on seigniorage, as Argentina did in the postwar period.

II Comparisons of the Income Tax Experience

As seen in Chapter Three, indirect taxation declined in importance as a source of revenue in Argentina and Australia until the mid twentieth century, as both sought more

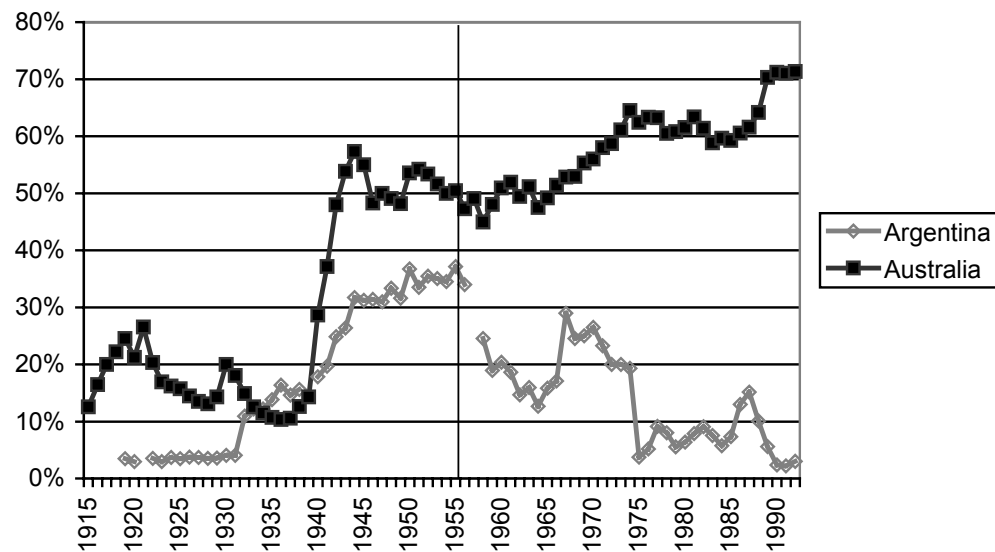
⁷⁶¹ Ibid., p.111-114

⁷⁶² Torgler, B. and K. Murphy (2004). "Tax Morale in Australia: What Factors Shape it and has it Changed over Time?" Manuscript re-submitted to Journal of Australian Taxation, p.18-21

equitable, stable and substantial sources of revenue from direct taxation in order to finance their states' ability to play a significant and sustainable economic role.⁷⁶³ This was part of a global movement in developed countries. For instance in the 1920s indirect taxation provided about 35% of tax revenue in Britain, 50-60% in France and Germany, and 70% in Sweden (similar to nineteenth century fiscal norms).⁷⁶⁴ Direct taxation is more difficult to collect than indirect taxation because of an inherent reliance on cooperation. Hobson observes that a state's ability to collect direct taxation (especially income tax) relative to indirect taxation is a good indicator of state strength.⁷⁶⁵ This idea, particularly in reference to the experience of income tax, is explored here. Income tax as a measure of state strength is easily expanded to include state credibility. A state's ability to collect income tax indicates state strength, as this ability reflects the underlying faith of society in the state. A society that has faith in the state should cooperate with income tax. The proportion of income tax to revenue should be a broad measure of state credibility.

Figure 5.1

Income Taxation, 1915-92



Notes & Sources: Argentine data is 'Income and Wealth taxes' and is derived from (Mitchell 2003). Australian data is derived from (Vamplew 1987) and (Mitchell 2003).

⁷⁶³ See Figures 3.5, 3.6, 3.7, & 3.8 and discussion on indirect and direct taxation in Chapter Three.

⁷⁶⁴ Webber, C. and A. B. Wildavsky (1986). *A history of taxation and expenditure in the Western world*. New York, Simon and Schuster., p.452

⁷⁶⁵ Hobson, J. M. (1997). *The wealth of states : a comparative sociology of international economic and political change*. Cambridge ; New York, Cambridge University Press., p.234

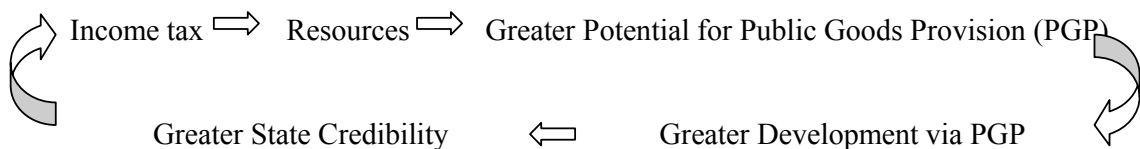
The proportion of income taxation to revenue should positively correlate with state credibility. The comparison between Argentina and Australia shows remarkable convergence in income tax as a proportion of federal revenue until 1955, with striking divergence thereafter. In fact there is a brief period in the mid-1930s when the Argentine fiscal base is more dependent on income tax than the Australian. Argentine income tax was successful, as a proportion of federal state revenue, for at least twenty years, from 1932 until the mid 1950s. Using income tax as an indicator of state credibility, Australian credibility grew substantially from WWI onwards. In Argentina the initial success of income taxation reflected a fairly high achievement of credibility (at least amongst the wealthy elite paying income tax), despite a dearth of democracy. By the mid 1940s Argentine income tax largely reached a peak of success in terms of revenue, and began to openly fail from the mid 1950s. Argentine income tax experienced the first serious decline in the mid 1950s, but remained a significant source of revenue until the 1970s when there was a more or less permanent collapse. Both the 1950s and the 1970s were periods of very high inflation. If the foregoing discussion on credibility and income tax holds, the failure of Argentine income tax from the mid 1950s was caused and likely preceded by a failure in state credibility. This observation can be repeated for the final failure of Argentine income tax in the mid 1970s. The opportunity for collective change and evasion in both instances was high inflation. A change to a negative path dependency should have been preceded by a decline in state credibility, followed by an opportunity for a change in collective action. The opportunity in the late 1940s/early 1950s was an aggressive increase in income tax rates that combined with high inflation, and in the mid 1970s due to a very large increase in inflation. These opportunities greatly and rapidly increased the opportunities and justifications for evasion. The timing suggests a major failing in state credibility occurred sometime between the mid 1940s and mid 1950s. Argentine income tax has now long been an insignificant fiscal institution. In contrast the Australian federal income tax has remained the most important fiscal institution.

III Entrenching Income Tax as a Mass Tax

An important idea illustrated in Chapter Three is that the expansion of democracy should promote a shift in the weight of taxation from indirect taxation (paid by a poorer

majority) to direct taxation (paid initially by a wealthier minority). Income tax has been a popular means for achieving such a shift. If the wealthier minority is reasonably willing to pay the initial income tax, the increased resources of the state should provide an opportunity to provide more public goods. If the state seizes this opportunity to provide greater public goods that promote development, and thereby state credibility, the state will reinforce the process. Development will increase the overall wealth of society, enabling a greater proportion of people to afford income tax. This process could transform income tax from an elite tax on the wealthy few into a mass tax, one paid by a wealthier average, which would also entrench income tax. Income tax would move from being a relatively fragile institution paid by a few into a more permanent one paid by many. As the proportion of society that pays income tax increases, it becomes more difficult to coordinate collective action against income tax. Initially the successful introduction of income taxation typically depends on acceptance by a wealthy minority, but if the increased resources made available by income tax foster greater development, income tax should slowly become more widespread and less progressive. This scenario is confused by high inflation and can easily be frustrated, for instance if the state provides poor quality public goods or excessive collective goods that hinder and/or fail to foster development.⁷⁶⁶

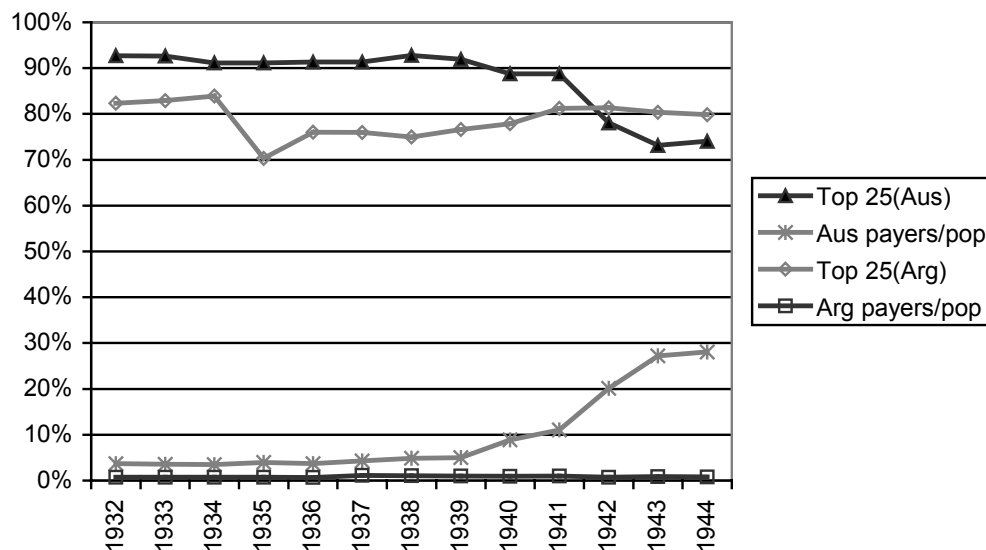
The ideogram below outlines the potential for income tax to encourage a positive path dependency of credibility and development:



⁷⁶⁶ See previous chapters for further discussion.

Figure 5.2

Wealthier minority vs. Poorer majority?, 1932-44



Sources: See Statistical Appendix, Table 5.2

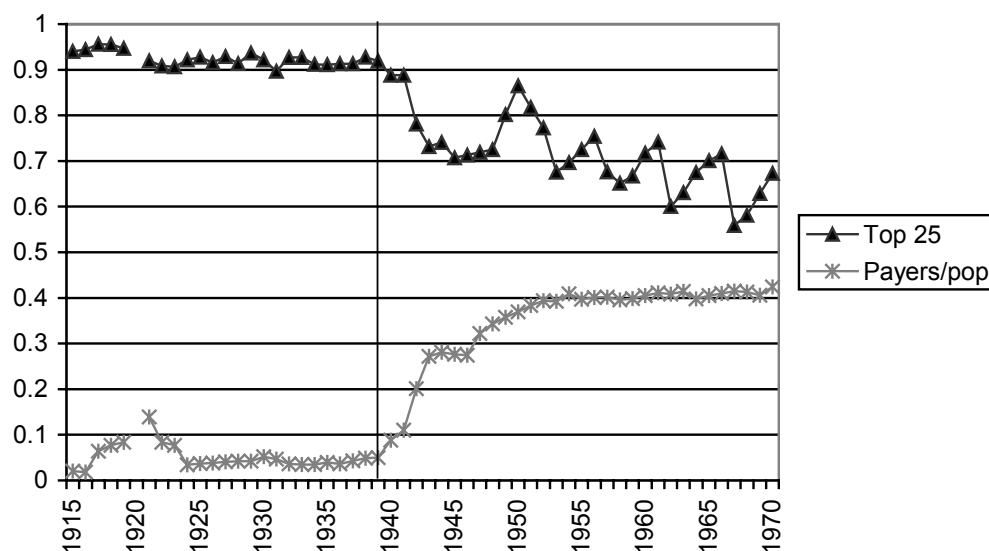
Figure 5.2 compares the Argentine and Australian experiences of income tax from 1932-44. It looks at the proportion of income tax paid by the highest earning quarter of income taxpayers (as a proportion of the income taxpayer population). The period is highly significant. At this time the Argentine income tax was most successful, and the Australian income tax began to transit from an elite to a mass tax. What is striking from the comparison is the high dependence of income tax on a wealthy minority in both countries. Both Australian and Argentine income taxes were elite taxes for much of this period, as the top earning quarter of the income taxpayer population paid the vast majority of income tax. Australia's greater dependence is lessened somewhat by the somewhat larger proportion of the population that paid income taxation by this time. The average Argentine proportion of the population that paid income tax was only 0.85% from 1932-44. This compares to an Australian average of 4.05% prior to WWII (from 1932-39), but the Australian income tax was almost 20 years older. Few people were paying income taxation in Argentina and Australia prior to WWII, and of those few, an elite quarter paid the vast bulk (70-90%) of it. Income tax was then a fragile

institution in Argentina and Australia, dependent upon a small group of wealthy people, despite an increasing dependence upon income tax for revenue.

The other striking feature of the comparison is that the Argentina is relatively static, while Australia evidences the beginning of dramatic change. With the commencement of WWII Australian income tax began a permanent shift from an elite to a mass tax. This change occurred too quickly to be due to greater development alone, enabled by a larger state capacity for public goods provision. Rather the state used WWII as an opportunity, via nationalism and national emergency, to demand a greater sacrifice in taxation. The external threat of war to the masses enabled their better cooperation with the state for the benefit of increased security. There was an impressive leap in the participation of income taxpayers as a proportion of the total population, from about 4% to almost a third of the population near the war's end. This shift proved permanent. The move to mass income tax was later solidified by greater public goods provision and development in the postwar period. The great increase in the income taxpayer population was mirrored in a relative decline in the burden upon the wealthy elite, presumably because this elite was already paying much of what it was willing to bear. The important development in Australian income tax in the postwar period was the successful consolidation as a mass tax, evident in Figure 5.3 below. In contrast Argentine income taxation remained a fragile elite tax, never entrenching itself as a mass tax.

Figure 5.3

Elite to Mass Income Tax - Australia 1915-70



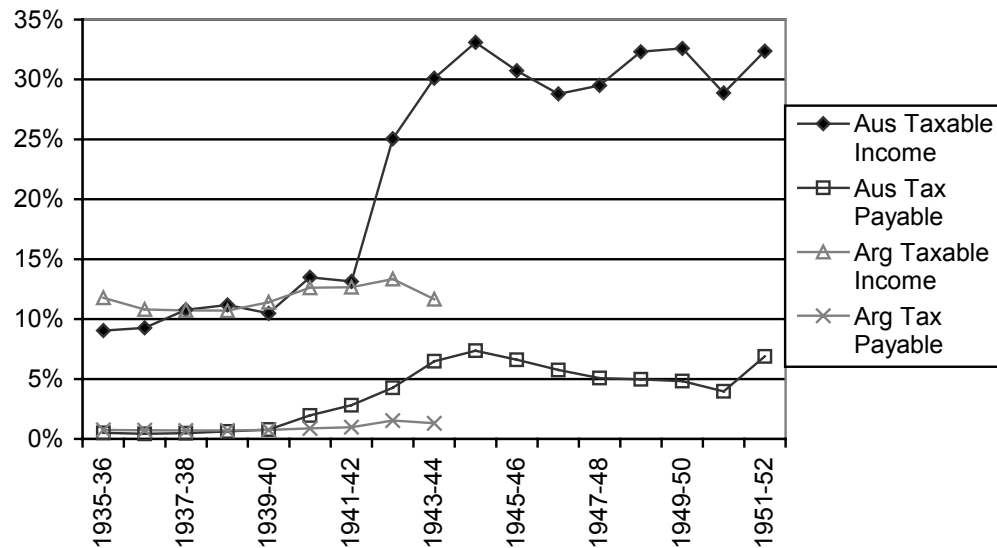
Sources: See Statistical Appendix, Table 5.2

Figure 5.3 expands the Australian data from 1932-44 to 1915-70. It confirms that the shift to mass taxation began in WWII and was consolidated in the postwar period. The proportion of Australian income taxpayers continued to gradually increase, stabilising around 40% of the postwar population from the mid 1950s. The trend in the burden of income tax also continually shifted away from the elite top earning quarter of the population. This trend continued even after the proportion of income taxpayers to total population stabilised. Australian income tax thus successfully transited from an elite to a mass tax, which became less progressive over time. This was as an indication of success, at least prior to the emergence of rapid bracket creep and increasing evasion in the 1970s. Mass taxation meant the income tax became entrenched, i.e. more difficult to counter collectively, as well as becoming Australia's fiscal institution par excellence. The Australian state became utterly dependent upon it. In order for income tax to be continually successful, the Australian state must have used the opportunity presented by the increased fiscal revenues reasonably well. This would have maintained the justice of income taxation. In contrast the Argentine experience shows an opposite trajectory, as the increased resources provided by income tax were not used effectively to provide public goods that delivered development. In Australia the delivery of postwar

development (or at least the ability of the state to not impede it) lifted all real incomes substantially over the postwar period, reinforcing the ability of the mass to pay income tax.

Figure 5.4

Elite to Mass Tax measured by GDP, 1935-52

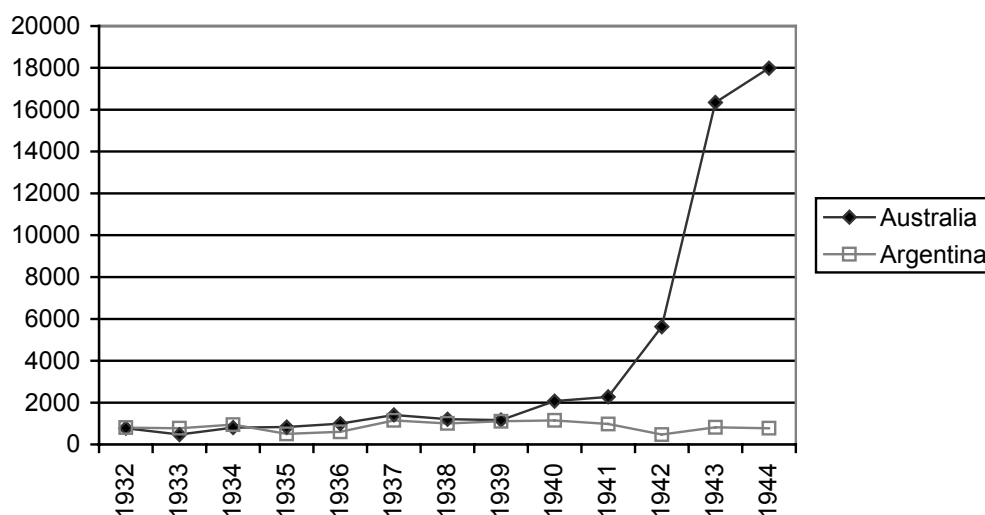


Sources: See Statistical Appendix, Table 5.4

Figure 5.4 compares Australian and Argentine income taxation from the perspective of GDP. This also shows the similarity in Argentine and Australian income tax prior to WWII, as well as capturing the shift in Australian income tax from an elite to a mass tax. Australia and Argentina were remarkably similar in the amount of income that was subject to income tax relative to GDP prior to WWII, at around 10-13%. They were also similar in the amount of income tax that was paid as a proportion of GDP, at around 1%. World War II resulted in a large, dramatic and sustained divergence, when Australia increased both the amount of income that was subject to income tax relative to GDP, and the amount of income tax that was paid relative to GDP. The War led to dramatic and sustained changes in both, reflecting the shift from an elite to a mass tax that occurred in the early 1940s. This further substantiates the story.

Figure 5.5

**How few? - Low Barriers to Collective Action -
Dependence upon Elites (#s adjusted to Australia)**



Sources: (Nacion 1935-1945),(Maddison 2003); (Taxation 1915-60), (Maddison 2003)

Figure 5.5 gives an idea of how dependent elite income tax was on the wealthy few. As an elite tax, income tax was exposed to fairly easy rebellion by the wealthy elites that paid the bulk of it. Figure 5.5 compares the number of elite individuals who paid the top quarter of income tax. This shows just how vulnerable Argentine and Australian income taxes were prior to WWII, dependent on the cooperation of surprisingly few individuals. After adjusting Argentine figures to Australia's relative population size for the sake of comparison, the graph shows that the number of elite individuals was roughly similar in terms of total population prior to WWII. Unlike Australia, Argentine income tax retained a dependence on the wealthy few. The average number of such elite individuals was only 1694 from 1932-44, and the majority of them lived in the city of Buenos Aires and likely socialised together.⁷⁶⁷ The only region of Argentina to ever pay a significant share of income taxation was the federal capital, the city of Buenos Aires.⁷⁶⁸ The boundaries to the collective action of the Argentine elite in regards to income tax were not high. If there was a reduction in the perceived justice of income tax, it would not

⁷⁶⁷ This is the actual, not the adjusted number.

⁷⁶⁸ The city of Buenos Aires was the source of 69-79% of income taxation from 1934-40. Calculated from Memoria 1940, Nacion, M. d. H. d. I. (1935-1945). "Memorias, Direccion General del Impuesto a los Reditos.", p.23

have been difficult for a change in path dependency from positive to negative to occur. Low barriers to collective action amongst the elite ceased to be true in Australia from WWII, as the bulk of the income tax burden spread to a much larger number of individuals coupled with greater administrative powers by collecting at source. Such a large number of disparate individuals was much more difficult to coordinate. The move to a mass tax greatly increased the barriers to concerting collective action amongst income taxpayers, entrenching income taxation and allowing a positive path dependency to take a stronger hold. In Argentina the aggressively anti-elite and socially conflictive democratic populism of Perón may have destroyed the elite's willingness to pay income tax, engendering a silent but eventually powerful rebellion against the state, one that may have emanated from the country clubs of Buenos Aires.

IV Delivery of Development and Entrenchment of Income Taxation

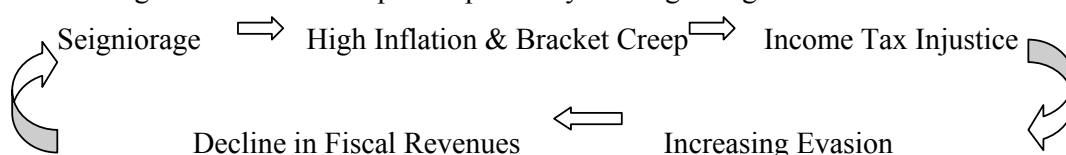
Did income tax allow the state to deliver greater development, or at least not impede development by preventing a scramble for resources leading to seigniorage? There are indications that income tax was an important variable in a positive cycle of economic growth and development. To truly entrench income tax as a fiscal institution and sustain a shift to mass taxation, there should also be some delivery of development. This will not only increase the perception of income tax as just, encouraging the necessary cooperation, but will also mean more people can afford income tax. Increased development, especially if spurred by the provision of desired public goods, should increase tax morale and state credibility.

The best way of increasing the proportion of income taxpayers must surely be to slowly expand the income tax base by raising incomes per capita as a result of development. If this is the case, a low level of inflation derived from increasing demand for resources could be useful to slowly spread income tax via 'bracket creep'. Bracket creep has been a convenient means for expanding the income tax base, as income tax brackets are adjusted more slowly than inflation. People are slowly pushed into higher income tax brackets as their nominal wages increase. This is fine as long as inflation is low and largely driven by increasing demand from development, which would imply that increasing nominal wages partly reflect increasing real wages. Bracket creep removes the need for constant political settlements to increase income tax rates, but is a double-

edged sword. Bracket creep can either help the process of entrenching income taxation or destroy income tax by spawning widespread evasion if it occurs too quickly with little development.

Inflation due to discreditable seigniorage can drive rapid bracket creep that should undermine the justice of income tax and encourage non-cooperation. This is a major threat to income tax, as bracket creep can push people very quickly into higher income tax brackets, the injustice of which is obvious, confronting, and widespread. Rapid bracket creep without a concurrent adjustment in income tax brackets can easily increase income tax beyond the ability of people to pay. This facilitates the coordination of collective action for evasion; a process that could open a vicious path dependency of lower fiscal revenues that drive increased seigniorage. As collective action to evade income tax succeeds, the state is further deprived the state of substantial resources. Rapid inflation due to seigniorage is thus an opportunity to switch from a positive to a negative path dependency.

Encouragement of a vicious path dependency via seigniorage:

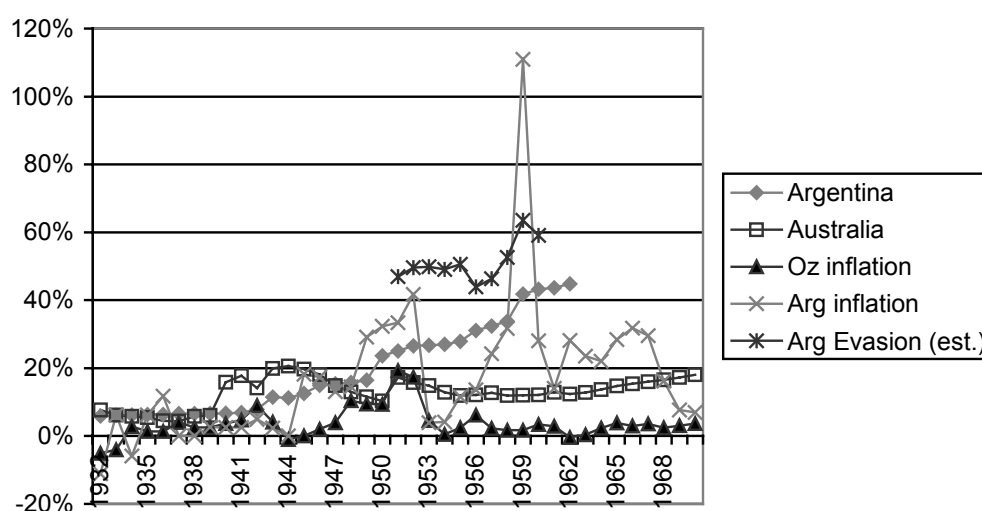


Bracket creep helped entrench income tax in Australia until the late 1960s, early 1970s when it began to prompt increasing evasion. In Argentina bracket creep destroyed income tax in two blows, one with the high inflation of Peronism in 1946-55, and the other with the hyperinflation of the 1970s. Ultimately bracket creep is limited in the ability to raise income tax revenues by the rate of the highest income tax bracket. Once inflation has pushed everyone into that bracket, no further revenue benefits can be derived from bracket creep. In fact if such a point is reached, disregarding the encouragement of evasion, inflation results in declining revenues due to the ‘Tanzi effect’. This reduces real income tax revenues via the delay between assessment and collection, as the real value of money declines so rapidly during periods of high and hyperinflation. Income tax typically has the longest lags between assessment and payment. Taxpayers rationally choose to delay payment as long as possible, as their assessed payments are fixed in nominal terms while their real values constantly decline.

The Tanzi effect came into effect in Argentina during the very high inflation of the 1970s, accelerating income tax's final demise. Inflation can thus act to reduce the justice of income taxation due to overly rapid bracket creep, encouraging evasion, and finally undermine the capacity of income tax to collect revenue as inflation becomes very high.

Figure 5.6

Average Income Tax Rates, Inflation, & Evasion, 1932-70



Sources: See Statistical Appendix, Table 5.6

The effects of bracket creep upon average income tax rates and evasion can be seen above. The average income tax rate (the proportion of total income tax to total taxable income) is an indication of bracket creep. As people are pushed into higher income tax brackets the average income tax rate increases. This can also occur via legislation. Figure 5.6 actually underestimates the average Argentine income tax rate from 1945 onwards, by using an unweighted average of tax rates according to each bracket rather than total income tax/total taxable income. Nonetheless Figure 5.6 shows that prior to WWII, average Argentine and Australian rates were similar. With WWII, Australian average income tax rates increased dramatically to around 20%, and then declined somewhat in the postwar period while maintaining a substantial part of the previous gain. This was not due to bracket creep but to democratically endorsed legislation. After a slow decline, there was persistent but slow growth in average Australian income tax

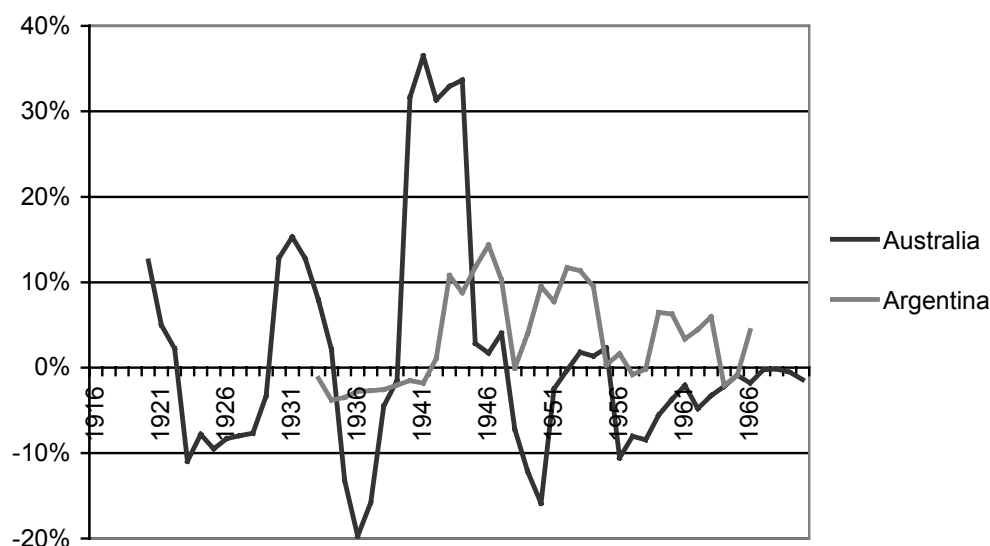
rates from the 1960s onwards with bracket creep. The large changes in the average Australian income tax rate were due to legislation in this period, except perhaps in the late 1940s/ early 1950s when relatively high inflation corresponded with an increase in the average income tax rate. These largely democratic origins of increases in Australian income tax suggest credibility, being enacted by elected representatives. Argentina serves as a dramatic contrast, where average income tax and inflation rates increased dramatically during the Peronist government of 1946-55, surpassing the Australian average at least as early as 1947 and continuing to increase thereafter. The rapid rise in the average Argentine income tax rate was largely driven by inflation due to seigniorage, which should have undermined the justice of income taxation. By the 1950s income tax evasion (see the estimated percentage of total income not declared in Figure 5.6) was quite high, increasing even further with the surge of inflation in the late 1950s. This estimate corresponds to the contemporary literature that describes a recent and massive increase in tax evasion and fraud.⁷⁶⁹ As López puts it: 'legal and illegal tax evasion arose with extraordinary force with the beginning of the political war against the economy.'⁷⁷⁰ Argentine income tax entered a negative path dependency of increasing non-cooperation and declining state credibility early in the postwar period.

⁷⁶⁹ Pinedo, F. (1956). *El Fatal Estatismo*. Buenos Aires, Guillermo Kraft Ltda., p.88; López, A. T. (1957). "Las sistemas fiscales como generadores de deshonestidad." *Revista de Ciencias Económicas* **62**., p.54; Peire, J. J. (1959). *Evasión Impositiva*. Buenos Aires, Talleres Gráficos "Fanetti"; TECHINT (1963). "Sistema Impositivo y la Presion Tributaria." *Boletin TECHINT* **134**: 13-56., p.53; Secretaria del Consejo Nacional de Desarrollo, S. P. E. N. (1967). *Estudios de Política Fiscal en la Argentina (Versión Preliminar)*, Republica Argentina, Presidencia de la Nación.

⁷⁷⁰ López, A. T. (1957). "Las sistemas fiscales como generadores de deshonestidad." *Revista de Ciencias Económicas* **62**., p.54

Figure 5.7

Balance between average Income Tax and GDP growth rates, 1916-70



Note: The above lines are five year moving averages.

Sources: See Statistical Appendix, Table 5.7

Figure 5.7 substantiates an answer to the question of this section: Did income tax allow the state to deliver development, or at least not impede development? It compares the growth in average income tax rates with GDP growth. To assess whether the growth in income tax is beneficial or destructive, account needs to be taken of how fast the real economy is growing. Real incomes can only grow as fast as the economy, and usually less so.⁷⁷¹ If income tax rates are growing faster than the real economy, they will eventually be perceived as unjust and reduce tax morale. Is the burden of income tax compensated by growth in real incomes, thus helping entrench income tax? A state that successfully encourages development should be able to offset tax increases at least to the extent that it can offer growth in real individual incomes via development. In an ideal world the efficiency gains might be such that growth in income tax is negative when balanced against growth in real individual incomes. Figure 5.7 finds this was largely the case in both Argentina and Australia prior to WWII, when the average growth in income tax rates was less than the average growth in real GDP, asides from a brief period in the early 1930s in Australia. Making the large assumption that much of

⁷⁷¹ The assumption that individual incomes grew as quickly as real GDP is unlikely in reality, as there would be some lag effect and not all growth would be evenly distributed.

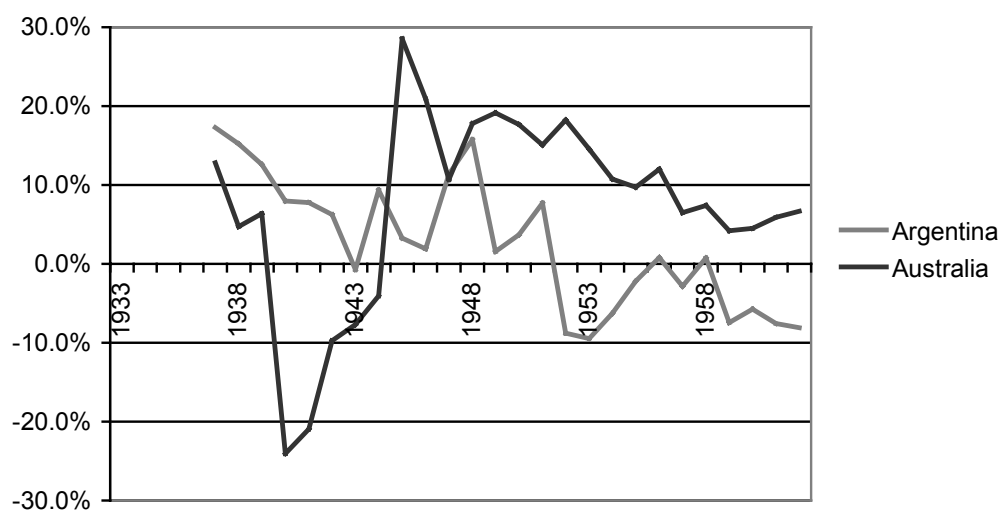
this economic growth was enabled by the increased resources available to the state from income tax, income tax was not only important to development, but the cost/benefit calculation of income tax was also largely in favour of income taxpayers. In Australia WWII resulted in an episode of much greater growth in income tax rates than GDP, but this was due to legislation and was followed by an even more positive trend than previously. The Australian postwar experience is one where individual incomes may have grown faster than income tax. In Argentina WWII marks a watershed where income taxation begins to grow persistently faster than the economy, contrasting strongly with Australia. Australian state credibility should thus have been increasing in the postwar period, as the state increased income tax but also fostered and/or delivered the growth and development necessary to pay for it. The opposite was the case in Argentina, where state credibility should have been declining. The Argentine graph also implies that the fall in state credibility began as early as the mid 1940s.

Or Disentrenchment and Tax Evasion?

A comparison of changes in income tax rates and revenues is made below. Legislation and bracket creep led to generally increasing rates of income tax in Argentina and Australia, averaging about 10% and 5% respectively from 1933-62. This should have led to increasing income tax revenue (all other things being equal). If this did not occur, tax evasion is strongly suggested. What was the actual effect of growth in income tax rates on income tax revenues?

Figure 5.8

**Balance between growth in Income Tax Revenue (+) and
Average Rates (-), 1933-62**

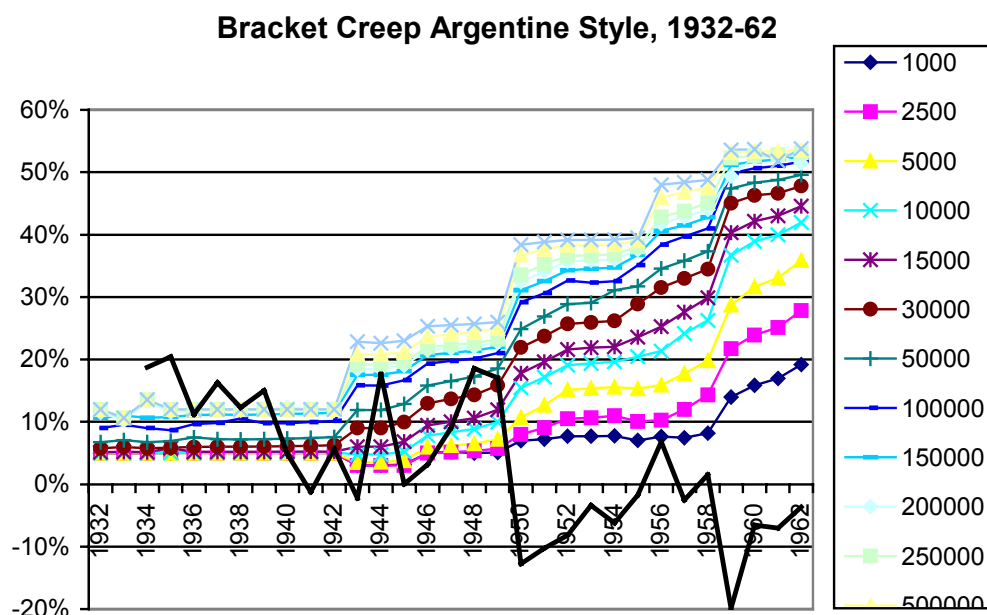


Note: The above lines are five year moving averages.

Sources: See Statistical Appendix, Table 5.8

In a healthy fiscal environment the balance above should be positive, or at least neutral. It is generally desirable that income tax revenue grows faster than income tax rates (i.e. the balance is positive), as this implies that there is increasing capacity to pay and low evasion. This is because income tax revenue is growing with the economy and/or responding well to changes in income tax rates. If the balance is negative, income tax rates are growing faster than income tax revenue. This suggests either income as a whole is declining due to recession, and/or tax evasion is increasing (more likely over time). A negative balance in spite of increasing average income tax rates due to bracket creep suggests that income tax is increasingly illegitimate. The comparison suggests the late 1940s and early 1950s as a crucial juncture in Argentina, as income taxation became more prone to evasion thereafter. This fits well with the foregoing, and gives a specific turning point. In contrast Australia shows a positive balance throughout, asides from the late 1930s/ early 1940s due to legislation. Apart from this episode the Australian balance is positive, suggesting a healthy postwar fiscal environment and a positive path dependency with development.

Figure 5.9



Note: The descending 'Balance' line is a three-year moving average of the Argentine data from Figure 5.8

Sources: Asides from the 'Balance' line, the data is taken directly from (TECHINT 1963), p.50

Figure 5.9 charts the effects of bracket creep on real (1932) Argentine incomes over time, using tax brackets from 1,000 to 1,000,000 pesos of income. It shows how income tax rates (as a proportion of net taxable income) increased over time in constant terms alongside the Argentine balance between income tax revenue and average rates from Figure 5.8 (the black line, using a three year moving average instead of a five year moving average). Initially income tax rates remained in a range of roughly 5-12% from 1932-42, a period when income tax was widely accepted and became an important Argentine fiscal institution. The story changes thereafter. Three periods then emerge: 1) from 1943-49 when rates increased dramatically at first, then slowly increased over time, ranging from 3-26%; 2) from 1950-55 when there was another dramatic increase, followed by relative stability, ranging from 7-40%; and 3) from 1956 onwards when there were further and more regular annual increases, with rates ranging from 8-54%. When compared to the Argentine balance from Figure 5.8, the crucial juncture appears to be the dramatic increase in rates of 1950.⁷⁷² This led to a sudden and persistent rise in evasion, which was only briefly reversed with Perón's fall in the mid 1950s. The

⁷⁷² Figure 5.9 uses a three-year moving average rather than a 5 year moving average to more precisely date the change.

dramatic increase appears to be the result of the Peronist government's intention to convert income tax into 'the axis of the taxation system', especially as an aggressive tool for income redistribution.⁷⁷³ For instance:

'The point of view of the government of General Perón from 1946 has been to achieve greater justice ... for which it has been necessary to destroy the situation of economic privilege that governed the country'. (Nación 1950), p.29

The dramatic increase of 1950 achieved exactly the opposite by undermining the justice of income tax, increasing evasion, and thereby moving the Argentine fiscal system solidly back on a regressive path. Income tax rates were increased but new forms of income tax were added to capture previously untaxed forms of 'accidental' income, including occasional earnings and extraordinary benefits. Between 1942 and 1955, income tax rates were increased 18 times.⁷⁷⁴ These measures were initially successful in increasing income tax revenue, but quickly failed thereafter as evasion became widespread. Income tax was rejected by its payers, who were often the explicitly targeted scapegoats of the Peronist government. Their rejection of more aggressive income tax under a hostile government is hardly difficult to imagine. Nonetheless the Australian experience shows that such mistakes are not necessarily intractable, and later governments failed to recognise the situation, and worsened it by increasing rates further. The turning point for Argentine income tax was the late 1940s, from which the Argentine fiscal system never recovered.

Conclusion

The different experiences of income tax emerge as a crucial juncture in the history of Argentine and Australian fiscal institutions and development. Argentina made a brief and successful attempt to establish progressive income tax, but this began to fail with the long period of high social conflict and inflation embarked upon from the mid twentieth century. The final decline of income tax was completed in the mid 1970s with the resurgence of very high inflation. The failure of income tax, from having been one of Argentina's most important fiscal institutions in the mid twentieth century, was

⁷⁷³ Nación, M. d. H. d. I. (1950). La Coordinación Económica, Financiera y Administrativa como fundamento de la Prosperidad Nacional., p.30

⁷⁷⁴ Sales taxes were increased 56 times during this period! Blanco, E. A. M. d. H. d. I. N. (1956). La Política Presupuestaria, La Deuda Publica y La Economía Nacional. Conferencia dictada en la Escuela Superior de Guerra., p.24

almost total by the hyperinflation of the late 1980s. Few Argentines bothered to pay income tax in the late twentieth century. Australia on the other hand succeeded in transforming and entrenching income tax as a mass tax, one that the state had long been utterly dependent upon by the late twentieth century. Nonetheless the Australian income tax story was not an unqualified success, as a long and substantial period of evasion emerged from the late 1960s to the early 1980s. This was successfully reversed by the mid 1990s due to the large tax reforms of the mid 1980s.

What does the experience of income tax tell of divergent development? It strongly indicates the different experiences of state credibility and thereby institutional capacities to positively influence development. Looking back to the initial quotes of this chapter, a great disparity emerged in Argentina from the 1950s between those that allocated state expenditure and those that paid for it. This was largely due to a failure of credibility. As the Argentine state greatly increased its economic role and expenditure, taxpayers were increasingly unwilling to fund it. Rather than taking steps to either convince Argentine taxpayers to pay (perhaps via democratic engagement and incorporation; and more desirable public goods and less collective goods) or reducing expenditure, the Argentine state chose the “easy” short-term political option of seigniorage. Seigniorage forced society to fund public expenditure, but with ultimately disastrous effects. Seigniorage only makes sense in the very short-run, being politically cheap and non-confrontational. Over the long run seigniorage exacerbates the decline of state credibility by undermining its foundations, such as income tax. No postwar Argentine government truly grasped the underlying fiscal expression of the political problem, which would have entailed considerable reform of fiscal institutions and an adjustment in state expenditure. This may have been due to a lack of understanding of the essential problem, one that appears yet to be grasped today. The lack of action was also due to increasing political instability that was partly a result of the negative path dependency Argentina was set upon from the mid twentieth century. As Argentine income tax was not transformed into a mass tax, failure was much easier and quicker when problems of credibility arose. The Argentine state became an increasing impediment to development, driven by an inability to legitimately fund itself, by a ‘lack of solidarity’ between state and society. Argentine institutions failed to encourage solidarity between state and society, an important expression of which was the level of income tax evasion. The comparison of income taxation clearly demonstrates the differing experiences of state

credibility, and the importance income tax revenues had upon the ability of institutions to positively influence development. Divergence in income taxation closely parallels divergence in development in the Argentine-Australian example, from approximately 1950 onwards. The breakdown of Argentine state credibility and income tax was incredibly expensive, and the Argentine state has yet to be reconstructed on credible fiscal bases. The failure of Argentine income tax shows how quickly a successful fiscal institution can fail, via little more than inflation. The rapid decline of Argentine fiscal institutions and development is a warning of how fast things can go wrong.

Conclusion

‘The *fiscal revenues* of all the [Australian] colonies is much greater than that of the Empire of Brazil, whose income doesn’t reach 100 million patacones, in spite of its more extensive, fertile and watered lands, and a population four times greater. *Is the difference due to character or institutions?*’ (Newton and Llerena 1882), Vol. 6, p.350

‘*Bad governments have always had bad finances.* This has delayed national progress, and squandered and misappropriated national revenues, while neglecting the need for their enlargement; nevertheless the country [Argentina], pushed by its own destiny, has grown by its own energy, carried out its historical ends, and become the first nation of South America. But *so much more could have been achieved with good governments and good finances.*’ (Rodríguez 1940), p.123

‘*Those countries that are well administered,* that know where they are going and have a methodical order to their public finances, *enjoy a credit that nations who march to the randomness of events, without calculations or precautions for the future, lack.*’ (Mexia 1913), p.170

‘*the [Argentine] Republic does not have the finances that reflect its national economy.* There is a profound and radical opposition and contrast between Argentina’s economic “prosperity” and the chaos of its public finances.’ (Jèze 1923), p.19

‘Hereby it is manifest that during the time men live without a common power to keep them all in awe, they are in that condition which is called war; ... In such condition there is no place for industry, because the fruit thereof is uncertain: ... and which is worst of all, continual fear, ... and the life of man, solitary, poor, nasty, brutish, and short.’ (Hobbes 2004), p.91

[Italics and translations in quotations above are mine.]

State Credibility

The particular conclusion the thesis draws from the Argentine-Australian comparison is that the construction of state credibility, expressed primarily through fiscal institutions, explains divergence. State credibility is an imprecise concept, but fiscal and monetary institutions, as well as public goods provision are measurable manifestations of it. The most fundamental of these are fiscal institutions. Legitimate fiscal institutions are necessary to support stable money and monetary institutions, and are also necessary to enable effective public goods provision. They facilitate a solvent state potentially capable of collective action. If fiscal institutions are to maintain their capacity to earn revenue, they generally need to provide society with a return, i.e. public goods. States that are embedded within their societies, that represent and attempt to foster them via public goods provision, should eventually encourage societies that are more capable of development regardless of initial geography.

The thesis finds that the most fundamental variable within fiscal institutions is direct and progressive taxation, especially income tax. Income tax is particularly important in explaining divergence, as it has the largest impact upon the state's capacity to deliver the necessary public goods without creating perverse economic incentives (e.g. inflation tax). Income tax has long been the most potentially lucrative source of fiscal revenue, upon which the solvency of many developed states depend. Yet direct taxation is particularly sensitive to state credibility, as it requires an exceptionally high level of voluntary cooperation. Compulsion alone is of very limited utility in regard to direct taxation. Indeed less credible and weak states are far more dependent upon indirect than on direct taxation.⁷⁷⁵ State credibility is crucial to the establishment of consensual, progressive, and lucrative direct taxation.

The 1929 Perspective

Did contemporary observers identify the potential for divergence before it occurred from the mid twentieth century? Looking forward to the unknown from the year 1929, around the peak of convergence, which country, Argentina or Australia, appeared to

⁷⁷⁵ Hobson, J. M. (1997). The wealth of states : a comparative sociology of international economic and political change. Cambridge ; New York, Cambridge University Press., p.19

have a brighter future? What were the views on state credibility and fiscal institutions at this time? Imagining the perspective of 1929 without the knowledge of what was to come, but only what went before, could the dramatic future divergence of Argentina and Australia have been predicted? Argentina was then proud of the recent past and confident of a bright future, albeit with seemingly short-term political problems. Argentina had vigorously joined the developed world, and had widely been seen as a developed country since the late nineteenth century.⁷⁷⁶ The progressive achievements of the early twentieth century were proudly displayed in the buildings and layout of central Buenos Aires; reflecting confidence, modernity and a widely held belief in progress. In 1929 Argentina was near the peak of a half-century wave of development and transformation. A prediction of future demise would have been brave. Australia in contrast appeared prematurely aged for a new settler economy in 1929, having achieved little meaningful growth since the 1890s depression, almost as long a period as Argentina's boom. British lenders were concerned over the Australian state's future viability as a borrower. By World War II, the pessimistic view of the future was such that Australia decided it must either 'populate or perish'. A prediction of Australian postwar success may have been as equally brave as a prediction of Argentina's future problems. An historian comparing Argentina and Australia in 1929 might easily have been more confident in a brighter Argentine future.

Yet important early twentieth century observers of Argentine fiscal institutions predicted grave future problems. The call for substantial fiscal reform in Argentina went back at least as far as 1894, when there was an insistence to reorganise Argentine fiscal institutions on the basis of income taxation, though this was not achieved until 1932.⁷⁷⁷ In 1913 an important former Minister of Public Works predicted future developmental problems if Argentina did not learn how to budget beyond immediate revenues and expenditures, so as to enable the public goods necessary for continued development.⁷⁷⁸ The public works the state managed to execute by 1913 were well below what was

⁷⁷⁶ Mulhall, M. G. and E. T. Mulhall (1892). Handbook of the river Plate. Buenos Ayres, London, M.G. and E. T. Mulhall: K. Paul, Trench & co., p.65; Mulhall, M. G. (1899). The dictionary of statistics. London,, G. Routledge and Sons., p.589

⁷⁷⁷ Quesada, E. (1894). Reorganización del Sistema Rentístico Federal - El Impuesto sobre la Renta. Reorganización del Sistema Rentístico Federal - El Impuesto sobre la Renta, Los salones del Ateneo, Arnoldo Moen., p.31

⁷⁷⁸ Mexía, E. R. (1913). Un Plan de Obras Públicas y de Finanzas. Buenos Aires, Librería Nacional., p.175

required to continue Argentina's progress. The Argentine state lacked a plan of investment in public works, such as ports and railways funded by public debt. Public investment was unplanned and financed haphazardly via annual budgets. To safeguard future development, it was necessary to separate an investment plan in public goods from the annual budget.⁷⁷⁹ This separated investment would have been financed by long-term public debt rather than directly from annual revenues. Until at least 1913 Argentine public administration functioned despite serious errors, but only due to a combination of underlying economic success and the minor importance of public works directly undertaken.⁷⁸⁰ Argentine institutions consolidated sufficiently in the late nineteenth century to prompt development, but required further sophistication to maintain development, and this was evident to inside observers at least as early as 1913. The Argentine state already suffered grave underlying fiscal problems, evident in widespread fiscal and administrative incapacity and incompetence, and a need to develop greater capacities. It was marching 'to the randomness of events'.⁷⁸¹ Consolidated under a powerful oligarchy and at a height of economic success in 1913, the Argentine state had yet to develop the institutions necessary to manage significant economic intervention that became increasingly important after WWII.

The most prescient predictor of a dire Argentine future if fiscal institutions were not quickly reformed was Gaston Jèze. He was considered the French expert on public finance. His reputation clearly preceded him when he gave a conference in Buenos Aires in 1923 that was personally attended by President Alvear and Finance Minister Molina. In 1924 Finance Minister Molina made the most significant attempt to introduce income taxation prior to its successful introduction in 1932, and this attempt incorporated many of Jèze's ideas. Jèze found it extraordinary that Argentina had managed to achieve so much development despite a clear incapacity to formulate balanced budgets. Rather than a 'programme of government', the Argentine budget was nothing more than a 'bureaucratic forecast' of revenue and expenditure.⁷⁸² Jèze argued that all Argentina's fiscal problems stemmed from an inability to form a budget reflecting a 'programme of government'. He noticed the 'profound and radical

⁷⁷⁹ Ibid., pp.20-25

⁷⁸⁰ Ibid., p.27

⁷⁸¹ Ibid., p.170

⁷⁸² Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., p.52

opposition and contrast between Argentina's economic "prosperity" and the chaos of public finances', predicting that the resulting chronic deficit would 'disturb long term economic prosperity'.⁷⁸³ This brave prediction followed from the cool logic of state credibility and fiscal institutions. The deficit could only seriously be overcome through a policy of fiscal reorganisation, of which income tax was the most necessary reform.⁷⁸⁴ The necessary fiscal recasting should be guided by democratic ideas of 'social justice', best exemplified by progressive income taxation. This concern with social justice closely corresponded to state credibility. Jèze confidently predicts that Argentina would experience serious political tremors and social disturbance if it continued to ignore fiscal social justice.⁷⁸⁵ Shortly thereafter the Argentine state found it impossible to agree on a budget for the remainder of the 1920s. This was followed by the 1930 military coup and the decline of democracy, fulfilling much of Jèze's worst predictions. Substantial fiscal reform in a democratic setting and upon the basis of social justice was never achieved. Argentina's underlying fiscal problem, and the potent threat to future development, was identifiable and perceptible at the height of economic success.

In Australia the 1920s were also a time of grim fiscal warnings for the future. British investors began to caution investors against Australia's long-term fiscal viability, arguing that Australian public borrowing was unsustainable.⁷⁸⁶ Indeed Australia was less able to borrow externally from WWI onwards, and had to develop a more internal market for public debt as its borrowing needs continued to increase.⁷⁸⁷ Members of Parliament in the 1920s extensively discussed the impending fiscal dangers of excessive war borrowing coupled with insufficient taxation and growth. The fiscal squeeze of WWI quickly led to a federal income tax, which eventually monopolized the field of income tax and became the fiscal foundation of the Australian federal state from WWII. Nonetheless the federal income tax did not become the primary source of revenue until WWII. In the meantime WWI had to be primarily financed through borrowing, leaving a large and difficult debt burden through the interwar period. Australian public debt reached levels of more than twice GDP at this time, which combined with the experience of depression in the 1930s. More substantial revenue had to be found, and

⁷⁸³ Ibid., pp.19-23

⁷⁸⁴ Ibid., p.79

⁷⁸⁵ Ibid., p.81-83

⁷⁸⁶ For instance Cooke, S. R. and E. H. Davenport (1926). Australian Finance, Dedicated to the Imperial Conference 1926, Pelican Press. See Chapter Four for discussion.

⁷⁸⁷ See Chapter Four.

federal income tax was the obvious path. As the debt burden was still very large by WWII, borrowing was ruled out as the primary source of funds, resulting in a fiscal revolution of sorts. The Australian federal state centralized substantial revenue powers that allowed for the eventual elimination of the debt carried from WWI. Ultimately the fiscal challenges posed by the World Wars in terms of expenditure were deftly exploited as opportunities to greatly expand the federal state's fiscal range and revenue. Yet how did Australia survive the fiscal challenges of the interwar period and avoid fiscal collapse? The answer is that high levels of state credibility enabled Australia to borrow very large amounts relative to the underlying economy. Both Australian lenders and taxpayers ultimately retained their faith in the Australian state. The virtuous cycle of citizens' faith in the state, reciprocated in credible fiscal management, was tested in the interwar period and emerged much stronger through the reforms of WWII. Australia's postwar economic recovery was underwritten by the interwar construction of even stronger and more credible fiscal institutions.

Nonetheless the Australian postwar period was not one of unlimited success in fiscal and economic development. The gap in relative GDP per capita that opened at the end of the nineteenth century has long persisted. Australia's success was to maintain its relative position in GDP per capita despite declining terms of trade and considerable population growth. Yet the significant success of Australian fiscal reforms during WWII also meant fiscal institutions were allowed to stagnate without reform for much too long, to a point where they threatened continued development from the 1970s. The increasingly dire fiscal situation began to be addressed in the mid 1970s as Australia teetered on the edge of a major break in state credibility that was increasingly reflected in extensive tax evasion and avoidance. Yet Australia managed to confront the need to address fiscal issues and state credibility, restoring a more virtuous cycle from the mid 1980s onwards. Once again: How did Australia avoid fiscal collapse? Beyond credibility two factors greatly helped: 1) the federal state had so long been dependent upon income tax by the 1970s that the failure of income tax was more clearly equivalent to the demise of the state; and 2) the successful transformation of income tax into a mass tax during WWII meant it was more resilient. Had the 1985 fiscal reform been postponed to 1995, the gloomy predictions of an Argentine future for Australia might

have been more prescient.⁷⁸⁸ Yet the counterfactual did not occur. Despite widespread lack of faith in the federal state evidenced in tax evasion, Australians retained and regained their confidence in the federal state, which was eventually reciprocated sufficiently to restore a virtuous cycle of credibility, taxation, public goods, and development. The Australian experience of the 1970s and early 1980s suggests that a virtuous cycle does not necessarily maintain itself. Thus it is potentially critical to the continued success of developed countries that the importance of the links between fiscal institutions, state credibility and public goods provision is appreciated.

Geography and Institutions

Newton and Llerena's opening quotation neatly frames the debate over what determines development and divergence. In 1882 they compare the fiscal achievements of Australia and Brazil, asking how Australian fiscal institutions were so much stronger despite Brazil's far richer factor endowments. Why had Brazil failed to translate these rich factor endowments into more substantial fiscal revenue and development? They wonder if this difference was 'due to character or institutions?' They answer that the difference was due to institutions, not character or what might be labeled culture today.⁷⁸⁹ Geography was not the determining cause as Brazilian factor endowments in agriculture, population, and water were so clearly superior to those of Australia. Newton and Llerena were Argentines, or bonarenses, who travelled the world on behalf of the Buenos Aires' provincial government. The purpose of their trip was to find models for future Argentine development, for which they looked to the then most advanced agricultural centres: England, the US, and Australia.⁷⁹⁰ Australia was easily their favourite, and was the focus of study in five of ten volumes. Their question and answer identifies similar elements to those identified in this thesis: institutions (especially fiscal) and geography (particularly factor endowments). The debate amongst which

⁷⁸⁸ For instance Duncan, T. and J. Fogarty (1984). Australia and Argentina : on parallel paths. Carlton Vic, Melbourne University Press. See also relevant chapter on the demise of Australian income taxation in Levi, M. (1988). Of rule and revenue. Berkeley, University of California Press.

⁷⁸⁹ 'Only with good and progressive governments, such as we [Argentina] and Brazil have today, will we be able to approach the degree of freedom, skill and culture that they [Anglo-Saxon and Germanic races] display. ... This inferiority is not due to race or character.' Newton, R. and J. Llerena (1882). Viajes y Estudios de la Comisión Argentina sobre la Agricultura, Ganadería, Organización y Economía Rural en Inglaterra, Estados-Unidos y Australia, Comisionados por el Exmo. Gobierno de Buenos Aires., Vol. 5, pp.322-4. This is part of the opening quote of the thesis.

⁷⁹⁰ Ibid., Vol. 1, p.5

elements are most responsible for development and divergence in these terms is at least as old as 1882.

This thesis compares Argentina and Australia on similar terms. What is the relationship between geography and institutions, and how does it account for divergence? Which is more responsible for success in development and why? This thesis answers that institutions are primarily responsible for success or divergence in development, and that the primary institutions responsible are fiscal institutions. Fiscal institutions engender development via state credibility. Geography's long-term impact is limited to how it affects fiscal institutions and state credibility. In the Argentine-Australian comparison these effects were small. Geography could have influenced fiscal institutions through an over-concentration of land tenure and the natural resource curse.

Over-concentration of land tenure has been suggested as the primary reason for Argentina's long-term institutional failure, as it led to an economic and political elite whose interests and inequality generated conflict that ultimately derailed development. As discussed in Chapter One, Engerman and Sokoloff argue that factor endowments are the fundamental causation of development as they determine institutions through their production function, e.g. slave plantations lead to dictatorial institutions, whereas small farms lead to democracy.⁷⁹¹ They propose that North American development was more successful due to factor endowments that encouraged small farms. Argentina largely shared the same North American factor endowments, but this did not result in small, family-sized farms. In order to repair this apparent self-contradiction, they argue that Argentina's response of inequitable land tenure was unique and thereby encouraged the wrong institutions. This argument is insufficient as it conflicts with Australian experience. Australia had highly concentrated and inequitable land tenure, but still managed to achieve successful democratic institutions that contained social conflict and engendered substantial development. A link from concentrated land tenure to fiscal institutions might be established by arguing that overly concentrated land tenure created an insuperable degree of inequality, such that direct and progressive direct taxation could not be generated. Yet both Argentina and Australia created substantial and

⁷⁹¹ Engerman, S. L. and K. L. Sokoloff (2002). "Factor Endowments, Inequality, and Paths of Development among New World Economies." National Bureau of Economic Research Working Paper 9259.

successful progressive income taxes in the first half of the twentieth century initially paid by wealthy elites.⁷⁹² The fiscal problem that drove postwar divergence arose thereafter. As Argentina and Australia had similarly concentrated and inequitable land tenure, but experienced divergence nonetheless, land tenure cannot be the answer. In fact causation could easily run the opposite way, with land concentration resulting from the failure of fiscal institutions. As fiscal institutions fail they tend to create inflation, and the primary means of protecting wealth from inflation is to buy hard assets such as land.⁷⁹³ A poor institutional environment may mean that land is the only domestic commodity that holds value.

The second means for geography to potentially impact fiscal institutions is via wealthy factor endowments that a small group can capture and control, thereby encouraging poor institutions, i.e. the natural resource curse. It could be argued along these lines that Argentina's sheer wealth of factor endowments overly concentrated wealth (similar to land tenure above), but may also have meant that less capable institutions were required for development (the permutation of the natural resource curse explored here). In contrast Australia's limited endowments may have necessitated a stronger state more capable of acting collectively sooner. Australia's early development required an appropriate institutional environment as the primary factor endowment was usually poor pasture land. This was a comparative advantage only because of abundance. Excluding Antarctica, Australia is the world's driest continent with some of the world's oldest and poorest soils. The Australian state and its colonial antecedents were the leading investors in public goods such as railways, but also in scientific research to overcome problems related to low soil fertility, persistent drought, and a variety of plagues.⁷⁹⁴ It was able to play such a role due to high state credibility, reflected in solid fiscal institutions. In comparison Argentine endowments were so evidently rich that little collective action was required for development, beyond the establishment of order. Trade flourished once credible order was established, which perhaps resulted in a deceptively easy achievement of fiscal institutions (trade was then the basis of fiscal institutions). Trade in Australia had initially required greater collective action, and was

⁷⁹² See Chapter Five for further discussion.

⁷⁹³ An historical example may be the fall of the Roman Empire. Inflation initially drove land concentration from the second century AD. Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster., pp.155-156

⁷⁹⁴ See Chapters Two and Four for further discussion.

thus more of an institutional achievement. As staple exports declined in Argentina and Australia with changing international circumstances in the early twentieth century, so did fiscal institutions based on trade. This meant both polities then had to develop more difficult fiscal institutions.

World War I initiated a long period when factor endowments in staple exports were suddenly less capable of delivering fiscal revenue and development. This new context meant institutions became more important to successful development. The achievement of public order alone no longer sufficed, and capacity to act collectively was increasingly important. Australia's relatively poor endowments had previously required the development of institutions with significant capacities for collective action. Australia thus had an institutional head start over many developed countries, not only Argentina. Fiscal dependence on indirect taxation on trade was common amongst developed nations until WWI. Argentine institutions may have been more limited in scope than in Australia, but were nonetheless strong and credible during the gold standard period. The gold standard required strong and credible fiscal institutions to guarantee the commitment to gold. Monetary institutions are ultimately an extension of fiscal institutions. Since Argentina maintained a credible commitment to gold until the 1930s, when the gold standard finally disappeared, Argentine fiscal and monetary institutions must have been fairly credible. In fact Argentina was considered 'more orthodox than the core' itself in the commitment to the gold standard from 1914-27.⁷⁹⁵ Argentina succeeded in establishing a "good housekeeping seal of approval." Geography may have influenced the under-development of fiscal institutions to the extent that Argentina was cursed by an over-abundance of factor endowments that made development relatively easy, i.e. development did not require institutions more sophisticated than those that could provide a basic level of order. Yet Argentina experienced almost half a century of development within a stable public order, which provided a large window of opportunity to develop broader, more capable institutions; an opportunity that remained open until at least the military coup of 1930. Argentina's failure to develop more capable institutions was not simply determined by wealthy factor endowments.

⁷⁹⁵ Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press., pp.199-200

New research on the natural resource curse shows that causation does not run from wealthy endowments to institutions. The natural resource curse is less a curse of resources than of institutions, which explains why some resource rich countries such as Norway and Australia are so successful. If the quality of institutions is controlled for, the resource curse is only visible in countries with inferior institutions.⁷⁹⁶ In other words, institutions still determine success in development. Going one step further, the discovery of endowments often requires considerable investment, as is the case with minerals, oil and gas. Causation may well run from institutions to factor endowments, which are normally considered as geographically given. It may well be that Argentina is extremely well endowed in minerals, oil and gas, much better than is already known. Yet the institutional environment makes the considerable investment required to find these resources a fool's game. It should be recalled that the Australian mineral industry only became sustainably important after significant foreign investment in the 1960s and 1970s. Argentina's high institutional risks combine with good opportunities for discovering similar resources in other locations, so that those companies with the necessary expertise look elsewhere. It was only when Argentina's institutional environment improved with political consolidation in 1880, achieving public order, that development based on well-known, wealthy factor endowments could be pursued. As Argentina's institutional environment declined over the twentieth century, growth became increasingly difficult in spite of wealthy factor endowments.

In sum it is difficult to believe that fiscal institutions were significantly influenced by geography directly or indirectly. The Australian-Argentine comparison illustrates that geography is the more dependent variable. If a state can order its fiscal institutions and act collectively in society's interests, initial geography is of little importance. Institutions largely determine geography. What determines successful institutions? The key factor is collective action, particularly state credibility, i.e. a society's faith in the state to act collectively in the interests of society. State credibility enables fiscal institutions and the crucial provision of public goods, which are essential to development. Successful institutions depend upon the ability of a society to act together. The problem is bundling independently weak individuals and companies into something stronger. As discussed in Chapter One, Olson describes why such a process of achieving

⁷⁹⁶ Mehlum, H., K. Moene, et al. (2006). "Institutions and the Resource Curse." The Economic Journal 116(508): 1-20.

successful collective action is so difficult to achieve. The rational individual interest is not equivalent to the social or collective interest, and this is increasingly true as a group increases in size. This thesis extends the collective action problem from one of groups within society to society as a whole, via the concept of state credibility. State credibility is revealed through fiscal institutions, monetary institutions, public goods provision, and public credit. Of these fiscal institutions is the most explicit and important. Fiscal institutions plainly expose how state and society are bundled together, indeed if they are bundled together. Powerful fiscal institutions indicate capable collective action and a strong state embedded within society, and weak fiscal institutions indicate the opposite. The predominant type of fiscal institutions also reveals the strengths and weaknesses of the bonds between state and society. For instance a dependence upon indirect taxation usually reveals state weakness, whereas reliance upon progressive direct taxation shows a credible and lucrative state embedded within society.⁷⁹⁷ The study of fiscal institutions is essential to understanding actually existing underlying political economies.

How to explain convergence and divergence?

Institutions were essential to successful development in all periods in Argentina and Australia, but different demands were made upon them at different times and places. Initially Argentina only required a minimal state, one that could credibly provide order and control revenue and expenditure so as to sustain the gold standard. When circumstances changed in the interwar period, Argentina was somewhat unprepared, as were many other relatively developed countries (Australia was more extraordinary in this regard). Argentina had not previously constructed the necessary fiscal institutions for a large-scale increase in state activity, and it was increasingly difficult to do so after the 1930 military coup. Institutional stability came to an end just as demands for wider and deeper institutions greatly increased. These wider and deeper institutions were necessary to continue the provision of public goods, many of which were formerly provided by foreign investment under the gold standard, especially public works and public credit. Future public goods would have to be administered by the state and be more dependent upon internal funding. At first Argentina successfully managed this transition in the 1930s, but the lack of democratic credibility ultimately undermined

⁷⁹⁷ See discussions in Chapters Three and Five.

this. In contrast Australia had a long tradition of building deep and wide institutions to support development, which had been built in conjunction with democracy.

What determines development?

Institutions determine development, and are themselves determined by collective action, particularly state credibility. State credibility enables fiscal institutions and the crucial provision of public goods, which are essential to development. Fiscal institutions are expressed annually through the budget. The budget is the core of the state and institutions: 'The budget is a law in form, ... But in fact the budget is not a law. It is *a programme of government*.'⁷⁹⁸ Avellaneda also saw the importance of the budget, that it was the fulfillment of 'good administration', which was the 'truth of institutions', and 'the most serious act of political and economic life'.⁷⁹⁹ The budget concerns the conversion of 'financial resources into human purposes', but the limitations of revenue mean that the budget is a mechanism for making economic and political choices.⁸⁰⁰ It reflects the power and political economy behind the state. The largest part of the budget, the base, is protected from serious scrutiny and represents 'the pillars of society'. A comprehensive attack upon the budget is equivalent to a revolution, as it opens the social contract to renegotiation.⁸⁰¹ Fiscal institutions are thus the essence of the state and institutions. They clearly express how state and society are bundled together, and their capacity for collective action. Fiscal institutions are fundamental to development not only to the extent that development requires collective action, but also to the extent that an enfeebled state can obstruct development.

This thesis demonstrates that fiscal institutions are the base of a pyramid upon which the institutions necessary for development must be built. It is only when fiscal institutions are viable, that is capable of providing a balanced budget, that important

⁷⁹⁸ Italics and translation are mine. Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires., p.52

⁷⁹⁹ Avellaneda, N. A. s. o. P. N. A., 1874-80) (1928). Discurso de Presentación por el Académico Doctor Pedro Olaechea y Alcorta. Conferencia de Nuevo Académico Doctor Nicolas A Avellaneda en el acto de su recepción, Buenos Aires, Academia Nacional de Ciencias Económicas., pp.14, 19-20

⁸⁰⁰ Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster., p.18

⁸⁰¹ Ibid., p.31

public goods can be provided. These public goods include monetary institutions, such as a national money, independent monetary policy, and a lender of last resort. Without these it is very difficult for financial institutions to develop, which are necessary for the widespread affordability of capital (essential for pervasive entrepreneurship). Of course the state can only provide such extensive public goods (directly and/or via regulation of the market) if it has the necessary fiscal institutions to be strong and credible. A weak state will have difficulty providing public goods even via regulation. Weak states are likely too prone to corruption to regulate the efficient provision of public goods. Yet public goods are essential to development as they provide widespread positive externalities that will not be provided sufficiently by the private market alone. Credible fiscal institutions are the essential foundation of public goods, regardless of how they are provided.

Potential for Shifting the Focus of Development Efforts

Ultimately this thesis contributes to the large and ongoing debate over what determines development, suggesting that state credibility and fiscal institutions are the most useful means for engendering development. The concept of state credibility focuses on the most salient aspects of engendering collective action and capable institutions. Future research will expand the comparison to further substantiate these ideas. The construction of state credibility and fiscal institutions should be a primary focus for fostering development. This does not yet appear to be the main focus of any important efforts at revitalising development and living standards. Indeed the Washington Consensus points in the opposite direction, of minimising and marginalising the state. Getting state credibility and fiscal institutions right means that everything else necessary for development can follow, but prospects for development will remain extremely limited as long as they are missing. As resources are always limited, it is essential that efforts to produce development focus on the most salient elements. The vast majority of the world's population still live lives that are 'nasty, brutish, and short', without a credible 'common power to keep them all in awe'

Statistical Appendix

The following appendix is a mixture of primary and secondary data from selected Figures presented in the thesis. Figures that portray little manipulated data from readily available sources are generally not included. The order of the data follows the appearance of the Figures, with the number of each table corresponding to the number of the Figure.

Table 1.1 – Australian Exports, 1861-1985 (proportion of total exports)

Year	Wool	Gold/Mining	Wool + Agriculture + Pastoral
1861	27.01%	48.85%	51.15%
1862	27.62%	51.38%	48.62%
1863	24.35%	49.74%	50.26%
1864	32.11%	45.26%	54.74%
1865	32.49%	44.16%	55.84%
1866	35.79%	45.26%	54.74%
1867	39.67%	38.59%	61.41%
1868	40.09%	45.16%	54.84%
1869	35.82%	49.25%	50.75%
1870	35.00%	43.89%	56.11%
1871	41.47%	32.72%	67.28%
1872	42.22%	32.89%	67.11%
1873	41.67%	34.09%	65.91%
1874	47.47%	28.02%	71.98%
1875	48.40%	26.40%	73.60%
1876	52.34%	21.70%	78.30%
1877	52.81%	29.00%	71.00%
1878	52.10%	23.53%	76.47%
1879	56.13%	14.15%	85.85%
1880	51.65%	16.12%	83.88%
1881	48.00%	23.27%	76.73%
1882	50.55%	19.05%	80.95%
1883	55.81%	16.28%	83.72%
1884	57.49%	8.01%	91.99%
1885	50.19%	18.73%	81.27%
1886	58.06%	13.82%	86.18%
1887	64.10%	7.69%	92.31%
1888	54.67%	16.26%	83.74%
1889	58.78%	16.55%	83.45%
1890	54.61%	15.02%	84.98%
1891	56.11%	15.83%	84.17%
1892	58.08%	12.28%	87.72%
1893	50.30%	14.46%	85.54%
1894	46.73%	17.13%	82.87%
1895	46.43%	16.37%	83.63%
1896	46.67%	19.39%	80.61%

1897	35.45%	34.13%	65.87%
1898	34.83%	33.58%	66.42%
1899	36.42%	24.69%	75.31%
1900	28.48%	29.78%	70.22%
1901	31.87%	39.62%	54.93%
1902	30.75%	45.76%	50.85%
1903	30.63%	49.67%	44.42%
1904	31.03%	40.47%	54.63%
1905	36.60%	31.61%	62.66%
1906	34.09%	36.35%	58.67%
1907	41.40%	29.94%	65.76%
1908	36.88%	37.04%	57.65%
1909	40.61%	24.68%	70.06%
1910	40.11%	17.41%	77.58%
1911	34.25%	26.12%	69.16%
1912	34.74%	29.74%	64.87%
1913	35.02%	19.44%	75.50%
1915	38.04%	16.35%	76.25%
1916	37.19%	28.97%	64.48%
1917	30.00%	24.74%	69.05%
1918	31.25%	20.41%	70.54%
1919	40.38%	11.32%	78.11%
1920	34.92%	10.37%	80.84%
1921	26.74%	10.76%	81.33%
1922	38.87%	7.53%	86.72%
1923	49.74%	9.58%	85.19%
1924	48.36%	10.93%	83.30%
1925	39.84%	6.86%	88.86%
1926	43.44%	10.52%	84.67%
1927	42.35%	14.24%	81.47%
1928	48.25%	8.54%	86.50%
1929	44.48%	7.51%	87.94%
1930	29.85%	28.38%	67.05%
1931	31.34%	19.59%	75.71%
1932	30.34%	15.41%	80.53%
1933	30.74%	22.38%	73.99%
1934	47.11%	11.88%	83.66%
1935	35.57%	12.67%	81.36%
1936	39.18%	14.16%	80.15%
1937	39.46%	13.95%	80.11%
1938	30.60%	15.82%	77.86%
1939	31.44%	19.19%	74.39%
1940	34.03%	19.53%	73.40%
1941	25.60%	19.33%	67.16%
1942	34.75%	10.96%	65.55%

1943	36.07%	5.46%	70.11%
1944	32.14%	5.19%	71.37%
1945	32.59%	7.19%	73.35%
1946	36.10%	5.71%	71.43%
1947	41.61%	6.09%	73.19%
1948	37.03%	4.61%	79.55%
1949	43.07%	5.77%	81.67%
1950	51.44%	4.60%	85.62%
1951	64.89%	3.64%	88.77%
1952	49.05%	7.20%	79.15%
1953	47.75%	7.71%	81.73%
1954	50.90%	6.01%	82.02%
1955	46.94%	5.45%	82.05%
1956	44.41%	6.25%	78.68%
1957	50.10%	6.42%	77.82%
1958	46.86%	5.83%	76.16%
1959	38.16%	5.87%	76.18%
1960	42.44%	5.50%	77.13%
1961	37.01%	7.04%	74.57%
1962	35.77%	8.11%	75.18%
1963	36.22%	6.59%	75.11%
1964	35.39%	6.56%	76.30%
1965	31.44%	7.84%	72.00%
1966	30.03%	11.21%	67.83%
1967	27.66%	10.86%	65.42%
1968	24.52%	13.73%	60.07%
1969	24.71%	17.13%	55.21%
1970	19.33%	20.35%	50.51%
1971	13.01%	22.28%	46.52%
1972	12.39%	23.19%	46.97%
1973	19.45%	21.22%	52.15%
1974	17.34%	25.04%	48.62%
1975	8.95%	29.73%	41.88%
1976	10.42%	32.80%	41.62%
1977	12.99%	33.10%	41.89%
1978	9.93%	33.45%	38.93%
1979	11.11%	31.22%	40.32%
1980	8.77%	29.61%	41.79%
1981	9.99%	29.23%	40.38%
1982	9.75%	31.00%	36.71%
1983	8.71%	33.92%	32.27%
1984	8.37%	32.69%	31.76%
1985	8.20%	32.36%	32.23%

Note: The third column, Wool+Agricultural+Pastoral, is estimated prior to 1901 by adding wool to 'other' exports, which appears to have been primarily agricultural and pastoral exports. Pastoral exports are composed of meat and fish.
Derived from: (Vamplew 1987)

Table 1.2 – Proportions of Cultivated Land according to Holding Size (hectares) in Australia (1910-11) and Argentina (1914)

Land Area - Argentine Pampas		Land Area-Australia	
50 or less	1.98%	20.6-40.5	1.48%
51 to 100 hectares	3.84%	40.9-202.3	14.95%
101 to 500 hectares	23.62%	202.7-404.7	15.41%
501 to 1000 hectares	9.27%	405.1-2023.4	30.29%
1001 to 5000 hectares	27.46%	2023.8-4046.9	9.03%
5001 to 10000 hectares	15.52%	4047.3-8093.7	8.57%
10001 to 25000 hectares	10.78%	8094.1-20234.3	10.69%
25001 hectares and more	7.54%	>20234.3	9.59%

Derived from: (Argentina 1914), pp.3-7 & (Heaton 1925), pp.443-4

Table 1.3 – Proportions of Land Holdings according to Holding Size (hectares) in Australia (1910-11) and Argentina (1914)

Land Area - Argentine Pampas		Land Area-Australia	
50 or less	34.71%	20.6-40.5	16.26%
51 to 100 hectares	17.89%	40.9-202.3	49.80%
101 to 500 hectares	37.33%	202.7-404.7	18.31%
501 to 1000 hectares	4.76%	405.1-2023.4	13.60%
1001 to 5000 hectares	4.30%	2023.8-4046.9	1.11%
5001 to 10000 hectares	0.71%	4047.3-8093.7	0.53%
10001 to 25000 hectares	0.25%	8094.1-20234.3	0.30%
25001 hectares and more	0.06%	>20234.3	0.09%

Derived from: (Argentina 1914), pp.3-7 & (Heaton 1925), pp.443-4

Table 1.4 – Concentration of Land Ownership in Buenos Aires Province (hectares), 1836-1890

Year	Total Number of Holdings	Average Size (ha)	Median Size Upper limit	Median Size Lower limit
1836	270	6657	5000	3751
1864	869	2771	1750	1001
1890	1740	1376	1000	501

From: (Sabato 1990), p.57

Table 1.5 – Argentine Population and GDP per capita relative to Australia, 1870-2001

Year	Argentine Population relative to Australia	Argentine GDP per capita relative to Australia
1870	101%	40%
1871		
1872		
1873		

1874		
1875		
1876		
1877		
1878		
1879		
1880		
1881		
1882		
1883		
1884		
1885		
1886		
1887		
1888		
1889		
1890	109%	48%
1891		
1892		
1893		
1894		
1895		
1896		
1897		
1898		
1899		
1900	125%	69%
1901	128%	75%
1902	131%	71%
1903	135%	73%
1904	138%	74%
1905	141%	81%
1906	145%	78%
1907	148%	75%
1908	151%	78%
1909	154%	74%
1910	156%	73%
1911	158%	73%
1912	158%	77%
1913	159%	74%
1914	160%	66%
1915	162%	66%
1916	166%	63%
1917	169%	58%
1918	169%	71%
1919	167%	70%
1920	165%	73%

1921	166%	71%
1922	168%	72%
1923	170%	75%
1924	173%	75%
1925	174%	71%
1926	176%	72%
1927	177%	75%
1928	179%	79%
1929	181%	83%
1930	184%	87%
1931	186%	85%
1932	189%	77%
1933	190%	75%
1934	192%	76%
1935	194%	74%
1936	195%	71%
1937	197%	72%
1938	199%	69%
1939	201%	71%
1940	201%	67%
1941	203%	63%
1942	204%	57%
1943	206%	54%
1944	207%	62%
1945	208%	63%
1946	209%	71%
1947	210%	76%
1948	211%	75%
1949	211%	70%
1950	207%	67%
1951	206%	68%
1952	206%	64%
1953	206%	65%
1954	205%	64%
1955	204%	65%
1956	203%	65%
1957	202%	67%
1958	201%	69%
1959	200%	61%
1960	199%	63%
1961	198%	68%
1962	197%	63%
1963	196%	58%
1964	196%	60%
1965	195%	63%
1966	194%	62%
1967	193%	60%

1968	192%	59%
1969	191%	61%
1970	189%	61%
1971	188%	61%
1972	188%	62%
1973	188%	62%
1974	189%	64%
1975	189%	62%
1976	191%	59%
1977	192%	61%
1978	193%	57%
1979	193%	57%
1980	194%	57%
1981	193%	52%
1982	193%	50%
1983	194%	52%
1984	194%	50%
1985	194%	44%
1986	194%	46%
1987	195%	45%
1988	194%	42%
1989	194%	38%
1990	194%	38%
1991	194%	42%
1992	194%	44%
1993	195%	45%
1994	195%	46%
1995	195%	43%
1996	195%	43%
1997	195%	45%
1998	195%	45%
1999	195%	41%
2000	196%	40%
2001	196%	37%

Derived from: (Maddison 2003)

Table 1.9 – Exports/GDP in Argentina and Australia, 1900-96

Year	Argentina	Australia
1900		24%
1901		25%
1902		22%
1903		22%
1904		24%
1905		27%
1906		28%
1907		28%
1908		27%

1909		24%
1910		25%
1911		24%
1912		22%
1913	33%	21%
1914	36%	20%
1915	35%	17%
1916	33%	17%
1917	25%	24%
1918	30%	20%
1919	36%	20%
1920	38%	24%
1921	29%	19%
1922	34%	19%
1923	31%	17%
1924	36%	17%
1925	28%	20%
1926	30%	18%
1927	37%	17%
1928	32%	17%
1929	30%	18%
1930	23%	14%
1931	34%	16%
1932	32%	18%
1933	29%	18%
1934	27%	19%
1935	29%	17%
1936	26%	18%
1937	28%	21%
1938	19%	19%
1939	23%	17%
1940	19%	19%
1941	17%	18%
1942	17%	17%
1943	17%	15%
1944	17%	20%
1945	16%	19%
1946	17%	19%
1947	15%	21%
1948	12%	24%
1949	9%	26%
1950	12%	26%
1951	9%	31%
1952	7%	21%
1953	10%	23%

1954	11%	19%
1955	9%	18%
1956	10%	17%
1957	10%	19%
1958	10%	16%
1959	11%	15%
1960	10%	16%
1961	9%	15%
1962	12%	17%
1963	12%	16%
1964	10%	18%
1965	10%	16%
1966	11%	15%
1967	10%	15%
1968	10%	15%
1969	10%	15%
1970	10%	16%
1971	9%	15%
1972	9%	15%
1973	9%	17%
1974	9%	16%
1975	8%	16%
1976	10%	15%
1977	12%	15%
1978	13%	15%
1979	12%	15%
1980	10%	18%
1981	12%	16%
1982	12%	15%
1983	12%	15%
1984	12%	15%
1985	15%	16%
1986	12%	16%
1987	11%	17%
1988	14%	17%
1989	16%	16%
1990	19%	
1991	16%	
1992	15%	
1993	14%	
1994	15%	
1995	19%	
1996	20%	

Derived from: (Pinkstone, Meredith et al. 1992), p.393 & (Gerchunoff and Llach 1998), pp.463-5

Table 1.10 – Argentine & Australian Exports per capita in US\$, 1948-2002

Year	Argentine Exports per capita (US\$)	Australian Exports per capita (US\$)	Argentine Exports per capita as a % of Australia's
1948	100.1229	214.2078	47%
1949	62.48503	201.5241	31%
1950	68.65769	202.9055	34%
1951	66.79919	242.6382	28%
1952	38.50029	201.3174	19%
1953	61.74134	229.4578	27%
1954	55.2598	186.4342	30%
1955	49.06011	194.266	25%
1956	48.97108	202.428	24%
1957	49.70325	231.643	21%
1958	49.82354	169.1246	29%
1959	49.74781	199.5516	25%
1960	52.34769	199.4667	26%
1961	46.01778	225.0457	20%
1962	57.12621	219.7625	26%
1963	63.13681	256.2299	25%
1964	64.24371	273.3419	24%
1965	67.0194	263.7871	25%
1966	70.47281	273.0626	26%
1967	63.87164	294.0299	22%
1968	58.82075	292.651	20%
1969	68.31627	343.5919	20%
1970	73.99957	380.4871	19%
1971	71.46435	406.8356	18%
1972	78.37659	492.9068	16%
1973	129.6232	713.1315	18%
1974	153.3848	805.5915	19%
1975	113.6802	859.5662	13%
1976	147.9918	937.3703	16%
1977	210.3676	940.9479	22%
1978	234.6864	1007.07	23%
1979	282.1954	1293.527	22%
1980	285.5251	1506.212	19%
1981	320.5416	1456.756	22%
1982	263.2617	1429.304	18%
1983	266.4488	1326.109	20%
1984	271.5337	1500.549	18%
1985	277.0533	1445.123	19%
1986	222.8336	1420.81	16%
1987	203.8872	1650.045	12%
1988	288.7251	2028.103	14%
1989	298.5852	2231.316	13%
1990	379.7603	2353.898	16%
1991	363.2686	2442.836	15%
1992	366.1222	2464.852	15%

1993	387.3603	2426.087	16%
1994	456.3464	2663.784	17%
1995	603.0574	2938.905	21%
1996	675.9238	3295.505	21%
1997	738.8852	3396.912	22%
1998	731.372	2983.055	25%
1999	637.2525	2959.621	22%
2000	710.4922	3334.694	21%
2001	707.2508	3275.511	22%
2002	676.9087	3327.528	20%

Derived from: (International Monetary Fund)

Table 3.1a – Federal Revenue as a proportion of GDP, 1884-1982

Year	Argentina	Australia
1884	10.62%	
1885	10.77%	
1886	12.31%	
1887	13.58%	
1888	13.51%	
1889	17.51%	
1890	17.20%	
1891	5.09%	
1892	8.41%	
1893	10.36%	
1894	9.15%	
1895	8.22%	
1896	8.45%	
1897	10.49%	
1898	9.18%	
1899	11.72%	
1900	9.98%	
1901	8.17%	2.58%
1902	8.51%	5.61%
1903	8.09%	6.24%
1904	7.85%	5.73%
1905	6.90%	5.69%
1906	7.01%	5.47%
1907	7.37%	5.25%
1908	6.73%	6.18%
1909	6.30%	5.52%
1910	6.71%	5.50%
1911	6.71%	6.06%
1912	6.81%	6.17%
1913	6.53%	6.02%
1914	6.00%	5.55%
1915	4.85%	5.90%
1916	4.84%	7.00%
1917	5.41%	7.33%

1918	3.89%	7.54%
1919	5.17%	8.46%
1920	5.42%	9.13%
1921	5.44%	10.31%
1922	5.60%	10.24%
1923	6.10%	9.32%
1924	6.10%	9.15%
1925	7.22%	8.66%
1926	6.89%	9.33%
1927	6.75%	9.64%
1928	7.32%	9.36%
1929	7.22%	9.65%
1930	6.92%	10.86%
1931	7.98%	11.92%
1932	10.01%	13.04%
1933	8.57%	12.83%
1934	9.10%	12.03%
1935	9.11%	11.91%
1936	8.91%	11.52%
1937	8.33%	10.64%
1938	9.01%	10.62%
1939	8.75%	11.53%
1940	8.08%	12.46%
1941	7.09%	15.47%
1942	7.05%	18.55%
1943	6.86%	22.72%
1944	8.48%	25.98%
1945	8.02%	29.24%
1946	7.53%	29.36%
1947	9.05%	30.47%
1948	9.88%	27.42%
1949	9.81%	28.27%
1950	9.80%	25.11%
1951	9.86%	27.41%
1952	10.26%	30.86%
1953	9.13%	27.82%
1954	8.82%	25.03%
1955	7.37%	24.51%
1956	7.34%	24.13%
1957	6.86%	25.53%
1958	9.46%	25.19%
1959	8.97%	22.96%
1960	10.24%	23.12%
1961	12.08%	24.76%
1962	9.63%	24.25%
1963	8.79%	22.03%
1964	8.88%	22.21%

1965	8.90%	22.19%
1966	9.31%	23.51%
1967	8.05%	23.89%
1968	7.34%	24.84%
1969	7.11%	23.27%
1970	7.56%	23.48%
1971	6.62%	23.07%
1972	6.67%	22.89%
1973	5.43%	22.71%
1974	6.12%	23.08%
1975	11.19%	27.47%
1976	12.23%	28.06%
1977	14.09%	28.87%
1978	15.95%	29.51%
1979	16.42%	28.16%
1980	12.76%	27.01%
1981	12.31%	27.00%
1982	10.62%	27.34%

Sources: For Argentina the figures are derived from: 1884-1899, (Della Paolera and Taylor 2003); 1900-82, (OXLAD). For Australia the figures for Commonwealth Revenue are derived from (Vamplew 1987) and the figures for GDP from (Mitchell 2003).

Table 3.2 – Total Government Expenditure to GDP, 1884-1982

Year	Australia	Argentina
1884	18.58%	15.89%
1885	18.08%	16.40%
1886	19.66%	15.87%
1887	17.46%	17.12%
1888	17.01%	19.86%
1889	16.59%	25.77%
1890	19.65%	22.42%
1891	20.02%	8.76%
1892	21.78%	10.00%
1893	22.08%	10.63%
1894	21.09%	10.75%
1895	17.84%	10.41%
1896	19.87%	15.67%
1897	22.58%	12.50%
1898	20.73%	20.92%
1899	19.88%	12.41%
1900	20.10%	10.34%
1901	20.42%	8.65%
1902	21.21%	12.64%
1903	21.38%	10.79%
1904	19.54%	10.17%
1905	19.19%	13.59%
1906	18.06%	10.25%

1907	17.19%	9.14%
1908	18.60%	8.80%
1909	19.02%	11.68%
1910	19.22%	10.60%
1911	20.47%	10.60%
1912	22.34%	12.90%
1913	21.97%	11.12%
1914	22.38%	12.46%
1915	26.30%	11.56%
1916	27.84%	9.86%
1917	29.16%	9.11%
1918	29.21%	7.56%
1919	30.50%	7.20%
1920	31.09%	7.17%
1921	30.66%	9.80%
1922	29.25%	10.44%
1923	25.99%	10.11%
1924	26.62%	9.43%
1925	25.05%	9.78%
1926	28.13%	11.00%
1927	28.40%	13.57%
1928	29.69%	11.74%
1929	30.86%	12.71%
1930	32.86%	14.89%
1931	36.64%	15.46%
1932	35.35%	15.32%
1933	33.37%	16.11%
1934	31.73%	13.92%
1935	31.79%	14.34%
1936	30.85%	14.50%
1937	28.05%	14.06%
1938	27.59%	15.16%
1939	29.51%	16.14%
1940	32.06%	15.21%
1941	38.17%	14.57%
1942	45.94%	16.86%
1943	59.04%	18.12%
1944	59.15%	20.21%
1945	57.14%	20.46%
1946	49.13%	17.66%
1947	43.29%	17.87%
1948	38.17%	34.41%
1949	38.27%	27.69%
1950	37.20%	26.80%
1951	38.72%	25.53%
1952	45.30%	26.08%
1953	40.56%	26.92%

1954	37.89%	29.55%
1955	36.33%	27.26%
1956	35.73%	24.15%
1957	37.01%	20.00%
1958	36.83%	26.12%
1959	35.32%	22.61%
1960	34.44%	22.39%
1961	35.95%	24.96%
1962	36.44%	24.61%
1963	29.87%	22.50%
1964	30.48%	21.01%
1965	30.86%	19.60%
1966	32.63%	21.49%
1967	32.69%	22.27%
1968	33.70%	22.26%
1969	32.06%	21.52%
1970	32.37%	21.44%
1971	32.19%	20.58%
1972	32.89%	19.60%
1973	32.12%	21.16%
1974	32.19%	23.44%
1975	37.08%	23.35%
1976	37.88%	22.15%
1977	38.21%	21.92%
1978	39.61%	24.27%
1979	37.93%	22.06%
1980	37.66%	23.68%
1981	38.13%	
1982	38.70%	

Note: from 1884-1912 Argentine expenditure is federal expenditure not total state expenditure.

Sources: For Argentina the figures are derived from (Della Paolera and Taylor 2003).
For Australia the figures are derived from (Vamplew 1987)

Table 3.3 – Budget Deficits to GDP, 1884-1988

Year	Australia	Argentina
1884	6.07%	5.27%
1885	5.54%	5.63%
1886	6.67%	3.56%
1887	4.90%	3.54%
1888	3.75%	6.35%
1889	3.69%	8.26%
1890	6.21%	5.22%
1891	5.94%	3.67%
1892	4.97%	1.59%
1893	4.85%	0.27%
1894	2.93%	1.60%
1895	2.29%	2.20%

1896	2.86%	7.22%
1897	3.92%	2.01%
1898	4.24%	11.74%
1899	3.09%	0.69%
1900	3.37%	0.59%
1901	4.14%	-1.68%
1902	5.01%	3.04%
1903	4.27%	0.67%
1904	2.83%	0.32%
1905	1.78%	4.92%
1906	1.01%	1.57%
1907	0.69%	0.34%
1908	1.03%	0.11%
1909	2.50%	3.46%
1910	2.61%	2.81%
1911	3.44%	2.55%
1912	4.66%	4.56%
1913	5.10%	0.60%
1914	5.34%	4.30%
1915	9.60%	3.50%
1916	11.73%	2.40%
1917	13.76%	4.60%
1918	12.69%	0.70%
1919	13.58%	0.10%
1920	11.97%	-1.30%
1921	9.52%	1.30%
1922	6.89%	2.50%
1923	4.79%	0.00%
1924	5.17%	0.90%
1925	4.56%	-0.50%
1926	5.79%	3.40%
1927	5.57%	1.80%
1928	6.00%	0.30%
1929	5.12%	2.70%
1930	5.44%	3.70%
1931	6.45%	0.80%
1932	4.45%	4.90%
1933	2.13%	1.30%
1934	2.81%	1.40%
1935	3.16%	-1.00%
1936	2.76%	3.00%
1937	2.52%	4.00%
1938	2.32%	4.20%
1939	2.94%	5.00%
1940	5.22%	4.40%
1941	11.02%	7.60%
1942	17.47%	2.40%

1943	28.25%	1.90%
1944	25.99%	6.00%
1945	19.01%	4.40%
1946	11.50%	8.20%
1947	5.16%	11.60%
1948	3.35%	15.60%
1949	2.94%	11.70%
1950	5.35%	6.80%
1951	5.97%	5.20%
1952	7.99%	5.80%
1953	5.84%	10.00%
1954	5.68%	9.50%
1955	5.06%	8.30%
1956	5.03%	5.20%
1957	4.38%	6.30%
1958	4.41%	9.30%
1959	4.91%	2.70%
1960	4.09%	2.70%
1961	3.98%	3.60%
1962	4.60%	3.60%
1963	4.76%	4.10%
1964	5.12%	5.00%
1965	4.17%	3.50%
1966	4.71%	2.70%
1967	5.50%	3.40%
1968	5.56%	1.70%
1969	4.09%	0.90%
1970	3.47%	1.80%
1971	3.09%	3.10%
1972	3.07%	3.70%
1973	3.64%	7.60%
1974	2.78%	8.10%
1975	6.56%	16.10%
1976	6.53%	13.60%
1977	5.91%	8.30%
1978	7.12%	10.30%
1979	6.49%	8.30%
1980	5.11%	9.10%
1981	4.61%	16.80%
1982	4.17%	19.60%
1983		21.00%
1984		10.00%
1985		6.57%
1986		6.02%
1987		10.45%
1988		10.75%

Sources: For Argentina the figures are derived from: 1884-1912, (Vamplew 1987);
 1913-84 (Domenech, Cavallo et al. 1986); 1985-88 (Latinoamericanas 1991).
 For Australia the figures are derived from (Vamplew 1987)

Table 3.4 – Argentine Export Taxation as a proportion of Federal Revenue, 1864-1993

Year	
1864	27.62%
1865	28.53%
1866	25.81%
1867	19.41%
1868	18.11%
1869	20.12%
1870	12.49%
1871	15.25%
1872	12.67%
1873	10.86%
1874	12.47%
1875	12.21%
1876	19.02%
1877	16.87%
1878	13.13%
1879	13.25%
1880	17.82%
1881	17.51%
1882	14.47%
1883	10.96%
1884	9.06%
1885	6.02%
1886	4.26%
1887	2.77%
1888	0.00%
1889	0.00%
1890	0.00%
1891	0.00%
1892	7.75%
1893	5.69%
1894	7.97%
1895	6.77%
1896	5.50%
1897	5.07%
1898	4.54%
1899	3.60%
1900	2.92%
1901	4.72%
1902	4.05%
1903	3.15%
1904	2.65%
1905	2.43%

1906	0.00%
1907	0.00%
1908	0.00%
1909	0.00%
1910	0.00%
1911	0.00%
1912	0.00%
1913	0.00%
1914	0.00%
1915	0.00%
1916	0.00%
1917	0.00%
1918	15.54%
1919	16.96%
1920	18.27%
1921	8.99%
1922	4.04%
1923	4.65%
1924	6.59%
1925	7.17%
1926	0.00%
1927	0.00%
1928	3.90%
1929	2.45%
1930	1.46%
1931	0.36%
1932	0.25%
1933	0.00%
1934	0.00%
1935	0.00%
1936	0.00%
1937	0.00%
1938	0.00%
1939	0.00%
1940	0.00%
1941	0.00%
1942	0.00%
1943	0.00%
1944	0.00%
1945	0.00%
1946	0.00%
1947	0.00%
1948	0.00%
1949	0.00%
1950	0.00%
1951	0.00%
1952	0.00%

1953	0.00%
1954	0.00%
1955	0.00%
1956	13.34%
1957	8.39%
1958	1.22%
1959	10.49%
1960	6.34%
1961	4.77%
1962	3.79%
1963	15.16%
1964	12.58%
1965	2.80%
1966	3.25%
1967	9.06%
1968	9.33%
1969	6.46%
1970	6.18%
1971	6.69%
1972	10.46%
1973	15.45%
1974	7.63%
1975	8.22%
1976	12.37%
1977	4.87%
1978	1.97%
1979	1.89%
1980	1.43%
1981	0.99%
1982	3.44%
1983	9.24%
1984	7.57%
1985	10.29%
1986	5.34%
1987	1.54%
1988	1.29%
1989	14.76%
1990	8.57%
1991	2.10%
1992	0.17%
1993	0.06%

Derived and compiled from: 1864-89 (Cortés Conde 1989); 1890-1912 (Della Paolera 1988); 1913-80 (Della Paolera and Taylor 2003); 1981-93 (Veganzones and Winograd 1997)

Table 3.7 – Argentine Sources of Federal Revenue, 1864-1993

Year	Direct	Income	Indirect	Other	Customs
1864	1.89%	0.00%	82.69%	15.42%	
1865	1.82%	0.00%	94.25%	3.93%	
1866	2.34%	0.00%	107.72%	-10.06%	
1867	1.35%	0.00%	87.81%	10.84%	
1868	0.00%	0.00%	96.62%	3.38%	
1869	0.00%	0.00%	98.92%	1.08%	
1870	0.00%	0.00%	96.18%	3.82%	
1871	0.00%	0.00%	116.61%	-16.61%	
1872	0.00%	0.00%	84.78%	15.22%	
1873	0.00%	0.00%	84.90%	15.10%	
1874	0.00%	0.00%	82.59%	17.41%	
1875	0.00%	0.00%	75.17%	24.83%	
1876	0.00%	0.00%	93.21%	6.79%	
1877	0.00%	0.00%	100.02%	-0.02%	
1878	0.00%	0.00%	86.16%	13.84%	
1879	0.00%	0.00%	77.05%	22.95%	
1880	0.00%	0.00%	83.43%	16.57%	
1881	6.74%	0.00%	93.61%	-0.35%	
1882	3.36%	0.00%	84.18%	12.46%	
1883	3.04%	0.00%	77.36%	19.60%	
1884	2.91%	0.00%	80.47%	16.62%	
1885	3.55%	0.00%	70.82%	25.63%	
1886	3.43%	0.00%	69.56%	27.01%	
1887	2.96%	0.00%	59.35%	29.59%	
1888	3.17%	0.00%	60.31%	28.51%	53.74%
1889	2.74%	0.00%	45.63%	51.63%	40.59%
1890	13.15%	0.00%	72.33%	14.52%	65.07%
1891	11.39%	0.00%	72.19%	16.42%	62.78%
1892	5.95%	0.00%	93.96%	0.09%	79.53%
1893	6.09%	0.00%	93.66%	0.24%	78.19%
1894	6.74%	0.00%	92.52%	0.74%	75.92%
1895	6.32%	0.00%	89.35%	4.34%	71.46%
1896	6.66%	0.00%	90.40%	2.94%	66.92%
1897	5.94%	0.00%	79.45%	14.61%	53.97%
1898	6.73%	0.00%	84.13%	9.14%	54.94%
1899	5.61%	0.00%	75.30%	19.09%	42.56%
1900	6.90%	0.00%	87.20%	5.90%	49.20%
1901	6.89%	0.00%	85.70%	7.41%	48.29%
1902	6.49%	0.00%	79.24%	14.27%	44.34%
1903	6.18%	0.00%	82.75%	11.07%	47.32%
1904	6.15%	0.00%	86.00%	7.85%	51.17%
1905	6.62%	0.00%	83.74%	9.64%	50.97%
1906	6.16%	0.00%	86.54%	7.30%	52.97%
1907	6.57%	0.00%	87.32%	6.12%	52.83%
1908	6.53%	0.00%	84.93%	8.54%	53.78%
1909	6.77%	0.00%	88.79%	4.44%	54.53%

1910	6.22%	0.00%	89.97%	3.81%	57.17%
1911	6.61%	0.00%	88.39%	5.00%	57.01%
1912	6.72%	0.00%	86.09%	7.19%	55.95%
1913	7.55%	0.00%	86.24%	6.21%	56.89%
1914	4.00%	0.00%	85.65%	10.32%	54.70%
1915	4.26%	0.00%	83.85%	11.97%	47.13%
1916	4.24%	0.00%	84.49%	11.31%	50.23%
1917	4.61%	0.00%	82.70%	8.55%	45.93%
1918	4.44%	0.00%	85.79%	9.73%	68.80%
1919	3.57%	0.00%	85.60%	10.81%	70.97%
1920	3.14%	0.00%	89.15%	7.71%	79.73%
1921	3.40%	0.00%	83.40%	13.23%	62.23%
1922	3.58%	0.00%	88.54%	7.88%	61.45%
1923	3.11%	0.00%	90.45%	6.43%	64.63%
1924	3.98%	0.00%	88.04%	7.98%	68.56%
1925	3.87%	0.00%	90.88%	6.84%	71.13%
1926	4.15%	0.00%	88.12%	7.75%	61.91%
1927	4.04%	0.00%	86.27%	9.71%	60.01%
1928	3.88%	0.00%	88.97%	7.13%	65.41%
1929	3.94%	0.00%	87.26%	8.80%	61.91%
1930	4.55%	0.00%	86.68%	8.80%	58.24%
1931	4.38%	0.00%	77.29%	18.40%	47.68%
1932	27.48%	6.26%	72.23%	0.00%	39.49%
1933	27.80%	8.31%	72.20%	0.00%	40.09%
1934	28.18%	8.51%	71.82%	0.00%	38.67%
1935	27.79%	9.41%	72.21%	0.00%	35.05%
1936	27.67%	8.95%	71.90%	0.05%	32.81%
1937	25.10%	10.18%	74.38%	0.06%	36.22%
1938	27.65%	12.19%	71.86%	0.06%	33.26%
1939	29.19%	12.98%	70.39%	0.07%	29.13%
1940	31.03%	13.75%	68.65%	0.06%	25.32%
1941	32.59%	13.96%	67.10%	0.06%	20.67%
1942	36.96%	18.36%	62.79%	0.06%	16.83%
1943	42.41%	22.05%	56.81%	0.10%	10.24%
1944	47.52%	28.88%	51.59%	0.18%	7.85%
1945	53.98%	24.57%	45.24%	0.22%	6.91%
1946	53.21%	22.88%	45.84%	0.29%	10.80%
1947	62.27%	28.34%	36.92%	0.27%	12.56%
1948	65.07%	27.41%	32.94%	1.45%	8.86%
1949	64.15%	24.71%	34.16%	1.44%	4.20%
1950	64.69%	24.77%	34.73%	0.33%	2.89%
1951	60.31%	24.75%	39.23%	0.19%	4.77%
1952	63.54%	27.31%	36.18%	0.10%	2.88%
1953	62.56%	22.35%	36.39%	0.87%	1.57%
1954	62.91%	21.11%	36.77%	0.16%	2.00%
1955	63.03%	21.40%	36.04%	0.77%	2.42%
1956	65.10%	24.24%	33.96%	0.70%	2.45%

1957	59.81%	24.30%	38.20%	1.71%	2.71%
1958	60.66%	25.54%	36.80%	2.29%	2.92%
1959	62.38%	26.49%	35.51%	1.81%	5.33%
1960	60.25%	25.07%	38.05%	1.34%	3.26%
1961	59.62%	23.27%	39.26%	0.87%	2.70%
1962	49.38%	16.90%	47.67%	2.61%	11.71%
1963	46.49%	15.37%	50.64%	2.62%	13.39%
1964	51.51%	14.45%	47.30%	0.22%	16.25%
1965	52.88%	19.87%	46.72%	0.11%	14.38%
1966	51.19%	19.79%	48.34%	0.09%	11.25%
1967	53.54%	17.52%	45.63%	0.06%	14.88%
1968	50.10%	14.78%	49.45%	0.05%	13.03%
1969	49.22%	15.23%	50.28%	0.04%	12.89%
1970	48.58%	13.83%	45.68%	4.56%	11.03%
1971	51.06%	13.01%	46.81%	0.81%	11.83%
1972	47.73%	12.54%	50.08%	0.07%	16.62%
1973	53.59%	12.49%	44.06%	0.19%	13.15%
1974	47.71%	9.89%	46.39%	3.84%	9.85%
1975	46.28%	6.50%	48.82%	1.07%	10.66%
1976	46.04%	8.26%	51.07%	0.10%	15.03%
1977	40.71%	10.44%	51.21%	4.44%	8.29%
1978	43.38%	9.52%	52.99%	0.80%	5.96%
1979	44.30%	6.70%	52.63%	0.02%	6.95%
1980	43.69%	8.02%	53.65%	0.01%	8.12%
1981	30.05%	9.87%	68.46%	0.02%	9.39%
1982	29.98%	8.68%	68.68%	0.10%	9.48%
1983	28.93%	8.03%	68.58%	1.46%	14.43%
1984	31.20%	4.94%	66.17%	1.38%	12.13%
1985	35.77%	6.04%	61.65%	0.18%	15.11%
1986	37.71%	7.05%	60.33%	0.02%	11.87%
1987	40.24%	9.34%	54.52%	3.35%	9.78%
1988	40.21%	10.50%	56.44%	1.20%	7.90%
1989	38.17%	12.54%	58.30%	0.56%	18.53%
1990	39.39%	4.53%	57.95%	1.60%	11.16%
1991	38.57%	4.58%	57.76%	2.39%	5.45%
1992	38.87%	7.12%	58.45%	2.39%	5.50%
1993	41.68%	10.34%	55.40%	2.87%	5.79%

Figures are derived from: 1864-89 (Cortés Conde 1989); 1890-1913 (Della Paolera 1988); 1914-31 (Vazquez-Presedo 1971); 1932-93 (Veganzones and Winograd 1997)

Table 3.8 – Australian Sources of Taxation, 1850-1982

Year	Direct	Indirect	Other	Income Tax	Customs
1850	0.00%	74.41%	25.59%	0.00%	74.41%
1851	0.00%	90.32%	9.68%	0.00%	89.72%
1852	0.00%	93.69%	6.31%	0.00%	93.33%
1853	0.00%	95.13%	4.87%	0.00%	95.13%
1854	0.00%	87.88%	12.12%	0.00%	87.88%

1855	0.00%	87.73%	12.27%	0.00%	87.73%
1856	0.00%	89.77%	10.23%	0.00%	89.77%
1857	0.00%	92.44%	7.56%	0.00%	92.44%
1858	0.00%	91.13%	8.87%	0.00%	91.13%
1859	0.00%	90.37%	9.63%	0.00%	90.37%
1860	0.00%	90.05%	9.95%	0.00%	90.05%
1861	0.00%	89.17%	10.83%	0.00%	89.14%
1862	0.00%	88.93%	11.07%	0.00%	88.81%
1863	0.00%	88.49%	11.51%	0.00%	88.49%
1864	0.00%	89.65%	10.35%	0.00%	89.65%
1865	0.00%	84.66%	15.34%	0.00%	83.60%
1866	0.00%	83.35%	16.65%	0.00%	81.08%
1867	0.00%	85.28%	14.72%	0.00%	82.60%
1868	0.00%	85.02%	14.98%	0.00%	82.38%
1869	0.00%	85.02%	14.98%	0.00%	82.46%
1870	0.00%	84.02%	15.98%	0.00%	81.42%
1871	0.00%	81.08%	18.92%	0.00%	77.52%
1872	0.00%	85.97%	14.03%	0.00%	82.28%
1873	0.00%	87.07%	12.93%	0.00%	83.11%
1874	0.00%	85.86%	14.14%	0.00%	80.86%
1875	0.00%	82.07%	17.93%	0.00%	80.49%
1876	0.00%	83.36%	16.64%	0.00%	81.18%
1877	0.00%	82.60%	17.40%	0.00%	80.36%
1878	0.97%	82.04%	17.00%	0.00%	79.20%
1879	3.96%	78.82%	17.22%	0.00%	76.33%
1880	2.26%	79.27%	18.48%	0.13%	74.19%
1881	2.67%	79.94%	17.39%	0.18%	72.40%
1882	2.17%	81.56%	16.28%	0.14%	73.70%
1883	2.20%	80.75%	17.05%	0.14%	73.02%
1884	2.06%	80.49%	17.45%	0.12%	72.91%
1885	1.99%	80.43%	17.57%	0.12%	72.13%
1886	4.14%	78.94%	16.92%	0.11%	70.63%
1887	3.13%	79.09%	17.77%	0.13%	69.24%
1888	2.93%	79.84%	17.23%	0.13%	68.48%
1889	2.53%	80.30%	17.17%	0.42%	69.10%
1890	2.60%	79.41%	17.99%	0.48%	66.23%
1891	2.94%	78.58%	18.49%	0.82%	68.70%
1892	3.16%	78.97%	17.86%	1.08%	69.30%
1893	3.81%	76.40%	19.79%	1.43%	66.19%
1894	4.12%	76.46%	19.42%	1.40%	67.08%
1895	6.35%	73.52%	20.13%	3.45%	64.72%
1896	5.79%	76.64%	17.57%	3.50%	67.37%
1897	9.28%	73.35%	17.37%	5.86%	63.84%
1898	9.82%	73.23%	16.96%	4.46%	62.72%
1899	8.53%	74.49%	16.98%	4.55%	63.55%
1900	9.72%	73.36%	16.92%	5.25%	64.21%
1901	9.45%	73.37%	17.17%	5.38%	63.38%

1902	8.63%	74.92%	16.44%	4.83%	65.23%
1903	11.23%	73.53%	15.24%	7.46%	64.71%
1904	10.61%	72.82%	16.56%	7.09%	62.54%
1905	11.79%	71.22%	16.99%	7.70%	61.04%
1906	11.96%	71.02%	17.02%	8.08%	59.85%
1907	11.58%	70.17%	18.25%	8.04%	58.63%
1908	9.11%	73.23%	17.66%	6.73%	63.65%
1909	8.64%	71.87%	19.49%	6.64%	61.65%
1910	8.53%	72.78%	18.69%	6.79%	61.16%
1911	8.51%	74.11%	17.39%	6.45%	58.45%
1912	9.87%	73.83%	16.31%	7.73%	57.84%
1913	10.32%	72.54%	17.15%	8.12%	58.60%
1914	12.44%	69.58%	17.98%	10.38%	54.18%
1915	13.72%	70.40%	15.88%	11.59%	53.10%
1916	26.92%	64.78%	8.29%	22.50%	49.51%
1917	35.27%	63.66%	1.07%	29.14%	46.42%
1918	40.68%	52.99%	6.33%	35.32%	36.18%
1919	43.36%	53.08%	3.56%	38.75%	38.14%
1920	43.01%	51.60%	5.39%	37.60%	36.84%
1921	39.95%	54.57%	5.49%	35.55%	42.67%
1922	41.64%	49.29%	9.07%	37.01%	37.17%
1923	33.47%	55.20%	11.33%	29.34%	42.41%
1924	30.58%	57.44%	11.97%	26.53%	44.28%
1925	31.24%	57.33%	11.43%	26.76%	43.59%
1926	30.79%	57.74%	11.48%	26.38%	43.54%
1927	30.72%	58.08%	11.20%	26.45%	43.82%
1928	30.90%	57.14%	11.96%	25.08%	41.18%
1929	29.80%	57.08%	13.12%	24.97%	40.29%
1930	31.31%	56.25%	12.44%	25.03%	39.92%
1931	39.66%	47.49%	12.84%	34.50%	28.73%
1932	36.78%	51.44%	11.78%	32.09%	29.01%
1933	35.45%	54.34%	10.21%	30.03%	31.80%
1934	31.00%	57.14%	11.87%	27.19%	33.84%
1935	30.12%	59.03%	10.85%	27.47%	35.90%
1936	30.19%	58.50%	11.30%	27.78%	35.67%
1937	31.35%	57.75%	10.90%	28.98%	35.53%
1938	31.75%	57.80%	10.45%	29.62%	36.63%
1939	32.25%	56.25%	11.50%	30.15%	34.46%
1940	33.29%	54.93%	11.79%	31.37%	33.85%
1941	45.87%	52.24%	1.90%	43.33%	29.59%
1942	54.28%	44.34%	1.37%	48.33%	23.98%
1943	57.95%	41.04%	1.01%	52.45%	22.88%
1944	61.90%	37.19%	0.91%	56.98%	20.70%
1945	62.00%	33.25%	4.75%	57.73%	17.93%
1946	59.26%	36.61%	4.13%	55.05%	19.93%
1947	52.59%	40.31%	7.11%	48.28%	23.70%
1948	53.79%	40.12%	6.09%	49.25%	24.40%

1949	54.06%	38.18%	7.76%	49.67%	22.99%
1950	52.59%	40.42%	6.99%	47.79%	24.56%
1951	56.58%	32.99%	10.44%	52.65%	19.23%
1952	57.80%	37.05%	5.16%	53.36%	20.70%
1953	59.29%	35.03%	5.67%	54.86%	18.18%
1954	55.63%	39.07%	5.30%	51.28%	21.38%
1955	54.12%	40.85%	5.04%	49.78%	22.83%
1956	54.38%	40.53%	5.09%	49.90%	22.24%
1957	53.19%	41.05%	5.76%	48.46%	22.35%
1958	52.40%	41.42%	6.18%	47.70%	22.23%
1959	49.90%	43.30%	6.80%	45.08%	22.81%
1960	49.70%	43.77%	6.53%	44.86%	22.49%
1961	52.67%	41.03%	6.30%	47.86%	21.30%
1962	53.75%	39.37%	6.88%	48.82%	20.68%
1963	60.60%	38.03%	1.37%	45.69%	21.44%
1964	61.83%	36.86%	1.31%	47.36%	20.64%
1965	63.54%	35.20%	1.26%	49.90%	19.60%
1966	63.57%	35.18%	1.25%	50.33%	20.23%
1967	63.78%	34.96%	1.26%	50.28%	19.96%
1968	64.00%	34.76%	1.24%	50.59%	19.50%
1969	64.01%	34.72%	1.27%	50.95%	18.67%
1970	65.04%	33.75%	1.22%	52.75%	17.66%
1971	65.74%	33.18%	1.09%	53.94%	17.81%
1972	66.77%	32.05%	1.17%	54.37%	17.30%
1973	66.09%	32.60%	1.32%	53.49%	16.72%
1974	67.82%	31.03%	1.15%	55.27%	15.92%
1975	71.01%	28.04%	0.95%	57.74%	14.63%
1976	68.85%	29.97%	1.18%	55.96%	15.99%
1977	69.39%	29.53%	1.08%	56.79%	15.30%
1978	69.96%	29.01%	1.03%	57.41%	14.87%
1979	66.93%	32.02%	1.05%	54.72%	18.23%
1980	66.24%	32.46%	1.30%	54.83%	19.50%
1981	66.72%	31.97%	1.31%	55.99%	19.34%
1982	67.61%	30.96%	1.42%	57.05%	17.59%

Figures derived from (Vamplew 1987) & (Barnard 1985)

Table 3.9 – Directions of Argentine Expenditure (% of total), 1863-1993

Year	Largely Public Works	Debt Servicing	Security	Other	Administration
1863	11.11%	29.12%	50.12%	9.65%	
1864	11.37%	23.84%	55.03%	9.76%	
1865	7.62%	23.30%	62.69%	6.39%	
1866	6.79%	20.13%	67.42%	5.66%	
1867	6.14%	15.60%	72.66%	5.59%	
1868	12.61%	12.45%	69.78%	5.15%	
1869	12.63%	20.17%	59.66%	7.53%	
1870	9.38%	28.18%	54.90%	7.54%	
1871	10.99%	33.88%	48.18%	6.94%	
1872	9.50%	42.74%	41.68%	6.07%	

1873	12.84%	32.01%	49.44%	5.71%	
1874	22.75%	37.71%	31.62%	7.92%	
1875	29.16%	27.08%	35.64%	8.12%	
1876	16.46%	38.95%	34.88%	9.70%	
1877	15.13%	38.34%	36.90%	9.63%	
1878	19.19%	35.50%	27.40%	17.92%	
1879	14.33%	37.56%	33.84%	14.27%	
1880	18.37%	28.93%	44.55%	8.15%	
1881	26.56%	30.80%	30.63%	12.02%	
1882	26.36%	46.27%	13.62%	13.74%	
1883	44.59%	25.22%	19.38%	10.81%	
1884	43.82%	24.20%	14.77%	17.21%	
1885	47.06%	22.97%	15.01%	14.95%	
1886	39.34%	27.31%	16.24%	17.11%	
1887	33.67%	26.54%	13.43%	26.36%	
1888	46.43%	22.63%	12.22%	18.72%	
1889	57.58%	14.87%	9.48%	18.06%	
1890	53.59%	15.31%	10.88%	20.22%	
1891	35.69%	34.12%	14.70%	15.49%	
1892	27.27%	25.70%	18.59%	28.44%	
1893	30.86%	28.00%	23.02%	18.12%	
1894	25.72%	39.55%	19.43%	15.30%	
1895		31.97%	32.45%	35.59%	
1896		25.29%	35.46%	39.25%	
1897	35.09%	25.62%	21.75%	17.54%	
1898	20.99%	24.19%	36.93%	17.88%	
1899	23.54%	33.64%	22.68%	20.14%	
1900	31.67%	34.95%	19.18%	14.20%	
1901	28.90%	39.90%	16.97%	14.23%	
1902	22.35%	38.30%	27.38%	11.98%	
1903	26.54%	45.74%	14.20%	13.52%	
1904	35.42%	33.21%	17.07%	14.30%	
1905	36.70%	29.90%	17.11%	16.29%	
1906	44.03%	26.34%	12.12%	17.52%	
1907	39.66%	25.88%	13.94%	20.52%	
1908	39.76%	26.18%	14.26%	19.80%	
1909	47.96%	19.26%	16.61%	16.18%	
1910	45.87%	16.39%	21.45%	16.29%	
1911	43.38%	16.22%	22.87%	17.52%	
1912	42.33%	17.99%	18.60%	21.08%	
1913	42.15%	19.96%	16.83%	21.06%	
1914					
1915					
1916					
1917					
1918					
1919					

1920	44.28%	23.30%	37.93%	-13.22%	7.69%
1921					
1922					
1923					
1924					
1925					
1926					
1927	38.34%	21.20%	46.45%	-11.80%	5.69%
1928					
1929					
1930	49.81%	28.20%	38.87%	-22.60%	5.78%
1931					
1932					
1933					
1934					
1935					
1936					
1937					
1938					
1939					
1940	53.85%	19.80%	34.26%	-14.54%	5.79%
1941					
1942					
1943					
1944					
1945					
1946					
1947					
1948					
1949					
1950					
1951					
1952					
1953					
1954					
1955					
1956					
1957					
1958					
1959					
1960					
1961	28.12%	0.29%	9.57%	57.10%	4.93%
1962	27.08%	0.59%	10.12%	57.15%	5.06%
1963	28.13%	0.30%	9.48%	57.19%	4.89%
1964	31.91%	0.65%	9.54%	52.64%	5.26%
1965	32.86%	0.35%	9.89%	50.88%	6.01%
1966	34.43%	0.33%	10.49%	48.20%	6.56%

1967	35.44%	0.00%	10.13%	48.10%	6.33%
1968	36.83%	0.32%	10.48%	46.35%	6.03%
1969	36.72%	0.33%	10.82%	45.90%	6.23%
1970	35.41%	0.00%	10.49%	47.87%	6.23%
1971	36.33%	0.00%	10.00%	47.00%	6.67%
1972	33.57%	1.04%	10.49%	48.96%	5.94%
1973	36.62%	0.91%	10.15%	45.24%	7.08%
1974	41.10%	0.82%	9.32%	41.65%	7.12%
1975	38.96%	0.52%	10.13%	43.38%	7.01%
1976	31.75%	1.10%	11.14%	49.32%	6.69%
1977	32.65%	1.16%	11.76%	46.48%	7.94%
1978	35.03%	1.32%	10.96%	44.67%	8.02%
1979	36.90%	1.75%	11.61%	40.81%	8.93%
1980	56.33%	7.83%	12.03%	15.68%	9.10%
1981	57.43%	15.11%	11.74%	7.75%	9.28%
1982	50.97%	21.66%	12.90%	7.41%	8.07%
1983	51.69%	12.75%	11.51%	16.51%	8.49%
1984	56.41%	11.60%	8.79%	15.36%	8.89%
1985	59.29%	12.77%	8.12%	11.45%	9.68%
1986	61.47%	9.11%	8.94%	11.52%	10.38%
1987	61.11%	8.14%	8.37%	13.53%	10.23%
1988	58.55%	7.40%	8.64%	16.43%	10.42%
1989	58.61%	10.63%	9.04%	11.75%	11.56%
1990	66.61%	5.81%	7.76%	9.71%	12.13%
1991	68.09%	7.27%	8.37%	4.88%	13.67%
1992	70.04%	7.83%	8.25%	2.54%	13.41%
1993	72.94%	6.19%	7.43%	2.35%	13.14%

Note: The definition of 'Largely Public Goods' varies accordingly: from 1863-90 it is the Interior Ministry and Public Education. For 1891-1913 it is the expenditure of the Interior Ministry. From 1920 onwards it includes: education, health, social security, welfare, housing, employment, agriculture, public buildings, and infrastructure. Derived from the following sources: 1863-90 (Oszlak 2004); 1891-1913 (Della Paolera 1988); and 1920-93 (Veganzones and Winograd 1997)

Table 3.10 – Directions of Australian Expenditure (% of total), 1850-1982

Year	Largely Public Goods	Debt Servicing	Security	Other	Social
1850	27.51%	0.88%	19.05%	52.56%	6.53%
1851	30.73%	2.57%	15.32%	51.38%	7.14%
1852	23.05%	2.39%	15.31%	59.25%	3.07%
1853	44.81%	0.11%	21.33%	33.75%	4.09%
1854	41.08%	0.34%	17.10%	41.49%	4.78%
1855	39.76%	1.69%	16.78%	41.76%	4.72%
1856	51.29%	5.31%	15.57%	27.83%	6.86%
1857	54.81%	4.65%	18.95%	21.59%	7.17%
1858	53.32%	4.69%	20.28%	21.71%	8.26%
1859	60.59%	6.86%	17.30%	15.25%	6.80%
1860	62.65%	6.62%	15.47%	15.26%	5.76%
1861	56.27%	9.34%	17.53%	16.86%	7.48%

1862	55.99%	7.05%	16.38%	20.58%	7.57%
1863	53.68%	10.98%	15.78%	19.56%	8.85%
1864	50.37%	13.08%	14.59%	21.96%	7.87%
1865	51.39%	12.72%	13.66%	22.23%	7.50%
1866	51.94%	11.40%	13.15%	23.51%	8.76%
1867	52.40%	14.14%	12.47%	20.98%	8.24%
1868	48.75%	17.96%	12.90%	20.38%	9.23%
1869	47.67%	21.42%	12.59%	18.32%	8.94%
1870	45.80%	21.36%	12.46%	20.38%	9.41%
1871	44.51%	27.08%	12.20%	16.22%	8.22%
1872	44.48%	21.84%	12.60%	21.07%	9.07%
1873	50.67%	17.18%	12.20%	19.95%	9.70%
1874	52.58%	17.81%	10.44%	19.18%	10.97%
1875	60.00%	14.40%	9.86%	15.74%	11.67%
1876	56.24%	17.46%	9.34%	16.96%	11.56%
1877	58.06%	13.00%	9.59%	19.36%	12.00%
1878	60.18%	12.76%	10.00%	17.06%	11.57%
1879	64.59%	11.81%	9.93%	13.67%	10.65%
1880	65.80%	13.40%	9.40%	11.40%	10.40%
1881	64.80%	13.93%	8.31%	12.96%	10.66%
1882	65.09%	14.25%	8.28%	12.39%	10.35%
1883	68.38%	12.48%	7.87%	11.26%	9.67%
1884	66.82%	12.82%	8.06%	12.30%	9.79%
1885	66.92%	14.02%	8.08%	10.98%	9.12%
1886	64.84%	14.37%	8.82%	11.97%	8.93%
1887	63.84%	15.57%	8.34%	12.24%	9.33%
1888	63.13%	16.36%	8.58%	11.92%	8.90%
1889	63.02%	16.29%	8.11%	12.58%	9.18%
1890	65.49%	16.29%	7.37%	10.85%	8.64%
1891	65.67%	16.24%	7.46%	10.63%	9.08%
1892	60.88%	17.86%	8.49%	12.77%	9.52%
1893	55.35%	22.73%	8.22%	13.70%	10.32%
1894	53.42%	25.05%	8.50%	13.02%	10.11%
1895	52.17%	25.23%	8.43%	14.17%	10.56%
1896	54.13%	24.48%	8.03%	13.36%	10.39%
1897	56.66%	22.87%	7.38%	13.09%	10.12%
1898	59.74%	21.49%	7.41%	11.35%	9.64%
1899	57.67%	22.36%	7.77%	12.20%	9.75%
1900	58.49%	20.92%	8.68%	11.92%	10.05%
1901	58.96%	19.71%	8.77%	12.56%	9.73%
1902	63.02%	18.70%	7.30%	10.98%	10.63%
1903	62.46%	19.97%	6.72%	10.85%	11.15%
1904	58.81%	22.25%	7.25%	11.69%	11.41%
1905	56.68%	23.23%	7.66%	12.43%	11.96%
1906	56.42%	23.50%	7.61%	12.47%	11.80%
1907	53.13%	24.54%	5.39%	16.94%	11.20%
1908	55.82%	22.26%	7.65%	14.27%	11.12%

1909	58.35%	21.12%	6.45%	14.08%	11.26%
1910	59.06%	19.99%	6.82%	14.12%	11.75%
1911	59.53%	17.97%	9.74%	12.75%	10.93%
1912	62.46%	16.20%	8.84%	12.50%	10.53%
1913	64.14%	15.23%	7.90%	12.73%	10.86%
1914	66.49%	14.30%	7.47%	11.74%	11.21%
1915	54.72%	12.71%	20.98%	11.59%	9.79%
1916	43.58%	12.59%	34.58%	9.25%	7.98%
1917			40.32%		
1918			41.50%		
1919	30.74%	18.25%	43.29%	7.71%	7.44%
1920			27.82%		
1921	50.11%	19.24%	19.81%	10.85%	12.15%
1922	51.12%	22.59%	14.09%	12.20%	10.92%
1923	52.78%	25.13%	10.22%	11.87%	10.89%
1924	53.88%	27.65%	8.87%	9.60%	11.96%
1925	54.21%	27.04%	9.04%	9.72%	11.81%
1926	55.27%	25.14%	10.03%	9.57%	11.61%
1927	54.66%	24.08%	8.61%	12.64%	11.75%
1928	54.91%	24.28%	9.80%	11.01%	12.57%
1929	55.38%	26.48%	8.64%	9.50%	14.14%
1930	53.80%	28.10%	8.89%	9.21%	14.58%
1931	47.83%	33.62%	9.17%	9.38%	15.93%
1932	46.12%	35.29%	9.03%	9.56%	16.58%
1933	50.09%	32.34%	8.48%	9.08%	21.80%
1934	49.99%	30.96%	8.77%	10.28%	21.17%
1935	52.48%	28.71%	8.99%	9.82%	20.37%
1936	54.66%	27.24%	9.46%	8.65%	21.55%
1937	53.06%	26.80%	10.22%	9.91%	21.22%
1938	52.57%	25.68%	10.52%	11.23%	20.85%
1939	53.21%	24.95%	11.39%	10.45%	20.09%
1940	45.20%	21.30%	24.32%	9.17%	18.12%
1941	32.90%	15.65%	45.17%	6.28%	12.68%
1942	25.64%	11.86%	57.56%	4.94%	9.81%
1943	19.72%	8.95%	67.55%	3.78%	7.40%
1944	23.31%	9.95%	61.19%	5.56%	10.70%
1945	26.24%	12.61%	54.10%	7.04%	12.36%
1946	27.54%	14.70%	47.45%	10.31%	11.10%
1947	39.79%	16.45%	28.59%	15.17%	16.07%
1948	46.07%	16.09%	15.81%	22.03%	20.25%
1949	50.62%	14.18%	18.13%	17.06%	21.43%
1950	52.02%	12.72%	16.48%	18.78%	21.54%
1951	51.06%	9.32%	21.72%	17.90%	17.99%
1952	49.81%	7.78%	17.72%	24.69%	18.96%
1953	52.01%	8.42%	21.25%	18.33%	18.85%
1954	49.88%	8.71%	19.37%	22.04%	19.86%
1955	50.46%	8.67%	19.01%	21.86%	20.86%

1956	51.64%	8.85%	18.83%	20.67%	22.09%
1957	49.09%	8.38%	16.58%	25.95%	21.30%
1958	50.52%	8.52%	17.73%	23.23%	22.98%
1959	52.81%	8.55%	17.72%	20.91%	25.10%
1960	53.02%	8.70%	17.29%	20.99%	25.47%
1961	51.54%	8.28%	16.34%	23.84%	25.43%
1962	54.80%	8.56%	14.84%	21.81%	27.69%
1963	55.52%	9.03%	9.56%	25.89%	40.47%
1964	53.31%	8.67%	9.96%	28.06%	39.27%
1965	53.15%	8.25%	10.26%	28.34%	37.93%
1966	52.60%	7.79%	11.52%	28.08%	37.07%
1967	51.14%	7.53%	13.47%	27.86%	36.70%
1968	49.99%	7.25%	14.18%	28.59%	35.68%
1969	50.42%	7.49%	13.69%	28.39%	36.82%
1970	52.56%	7.72%	11.37%	28.35%	37.27%
1971	53.64%	7.70%	10.76%	27.90%	39.21%
1972	55.52%	7.30%	9.89%	27.30%	40.52%
1973	56.93%	7.27%	9.50%	26.29%	44.08%
1974	58.62%	6.38%	8.80%	26.19%	45.76%
1975	59.20%	5.48%	7.28%	28.04%	46.56%
1976	60.36%	5.15%	6.94%	27.54%	52.27%
1977	62.18%	9.33%	6.87%	21.61%	51.12%
1978	62.02%	9.93%	6.68%	21.36%	50.76%
1979	61.38%	10.61%	6.81%	21.20%	51.12%
1980	60.29%	10.80%	7.08%	21.83%	50.08%
1981	59.69%	11.04%	7.21%	22.06%	49.03%
1982	59.06%	11.26%	7.36%	22.32%	48.99%

Note: The definition of 'largely public goods' in Australia consists of the following categories: State Enterprise expenditures/capital outlays; social expenditure; primary industries, and other public works.

The above categories and figures are derived from (Barnard 1985).

Table 3.11 – Directions of Australian public capital expenditure, 1860-1975

Year	Mainly Rural/Primary Exporters	Mainly Urban	Not Discernible
1860	56.60%	18.92%	24.48%
1861	45.76%	20.35%	33.89%
1862	58.71%	17.91%	23.38%
1863	49.96%	21.57%	28.47%
1864	52.61%	14.37%	33.02%
1865	43.66%	18.15%	38.19%
1866	36.95%	26.85%	36.19%
1867	44.17%	33.59%	22.24%
1868	56.36%	24.42%	19.22%
1869	50.06%	22.42%	27.52%
1870	49.50%	23.82%	26.68%
1871	41.17%	23.02%	35.80%
1872	51.56%	17.43%	31.01%
1873	43.82%	24.56%	31.62%

1874	49.08%	23.98%	26.94%
1875	56.10%	18.38%	25.52%
1876	46.72%	25.10%	28.18%
1877	45.15%	25.97%	28.87%
1878	54.24%	20.86%	24.90%
1879	58.31%	19.02%	22.67%
1880	59.03%	17.77%	23.21%
1881	62.68%	18.77%	18.55%
1882	61.28%	19.03%	19.69%
1883	60.34%	21.87%	17.79%
1884	60.61%	18.06%	21.33%
1885	62.57%	18.99%	18.44%
1886	62.92%	21.34%	15.74%
1887	60.57%	17.54%	21.89%
1888	63.75%	18.14%	18.11%
1889	61.41%	21.41%	17.18%
1890	59.43%	22.05%	18.52%
1891	61.23%	18.66%	20.12%
1892	57.88%	20.52%	21.59%
1893	57.75%	20.59%	21.66%
1894	58.48%	19.56%	21.96%
1895	49.54%	25.26%	25.20%
1896	51.68%	24.30%	24.02%
1897	53.63%	24.65%	21.73%
1898	44.48%	27.40%	28.12%
1899	49.14%	25.72%	25.13%
1900	50.02%	28.03%	21.95%
1901	39.09%	32.91%	35.15%
1902	39.99%	29.07%	37.18%
1903	46.22%	22.25%	37.62%
1904	45.97%	26.60%	36.89%
1905	2.60%	27.93%	46.04%
1906	45.40%	25.88%	38.83%
1907	46.16%	26.44%	36.04%
1908	43.66%	30.83%	32.52%
1909	48.40%	29.17%	27.99%
1910	50.46%	27.82%	26.75%
1911	54.03%	25.94%	24.08%
1912	51.06%	27.69%	24.54%
1913	49.62%	31.02%	22.34%
1914	50.96%	28.64%	23.32%
1915	52.01%	26.84%	23.93%
1916	50.93%	25.97%	12.93%
1917	47.01%	27.59%	28.71%
1918	45.76%	28.28%	29.89%
1919	45.21%	29.54%	28.64%
1920	46.22%	36.47%	19.26%

1921	43.15%	39.51%	18.85%
1922	37.59%	40.27%	23.74%
1923	32.22%	44.15%	25.25%
1924	30.13%	41.25%	30.20%
1925	30.58%	39.28%	31.53%
1926	36.78%	29.64%	34.92%
1927	35.82%	29.75%	35.66%
1928	33.83%	31.41%	35.97%
1929	31.37%	32.14%	37.76%
1930	28.61%	32.16%	40.72%
1931	19.93%	42.81%	39.33%
1932	25.24%	34.81%	43.01%
1933	23.79%	32.82%	46.35%
1934	24.37%	34.74%	43.75%
1935	23.44%	37.71%	41.05%
1936	24.05%	38.11%	39.83%
1937	21.30%	40.98%	39.59%
1938	20.72%	43.15%	37.78%
1939	19.99%	40.78%	40.95%
1940	27.35%	28.86%	43.79%
1941	30.37%	28.62%	41.01%
1942	43.04%	21.61%	35.35%
1943	42.00%	23.11%	34.89%
1944	42.17%	22.06%	35.77%
1945	35.23%	25.95%	38.82%
1946	28.09%	35.91%	36.00%
1947	29.74%	37.33%	32.93%
1948	26.25%	39.06%	34.69%
1949	27.21%	43.66%	29.13%
1950	24.37%	48.84%	26.79%
1951	24.62%	51.39%	23.99%
1952	23.35%	53.07%	23.59%
1953	23.53%	51.90%	24.57%
1954	21.94%	51.84%	26.22%
1955	21.46%	49.99%	28.54%
1956	20.96%	49.84%	29.20%
1957	19.68%	49.83%	30.49%
1958	18.94%	49.59%	31.47%
1959	17.99%	49.96%	32.13%
1960	17.02%	48.21%	34.76%
1961	17.13%	49.39%	33.46%
1962	16.48%	49.56%	33.96%
1963	16.26%	50.23%	33.42%
1964	16.00%	49.73%	34.27%
1965	14.87%	50.71%	34.42%
1966	14.63%	42.76%	34.00%
1967	14.11%	51.31%	34.58%

1968	13.70%	50.12%	36.18%
1969	13.78%	50.95%	35.27%
1970	14.25%	49.98%	35.78%
1971	12.80%	50.82%	36.38%
1972	13.31%	48.41%	38.23%
1973	12.95%	50.94%	36.11%
1974	11.45%	52.02%	36.53%
1975	11.88%	54.86%	33.26%

Notes – The rural categories are: Railways; Ports, Harbours, and Sea Transport; Agriculture, Forestry, and Lands. The urban categories are: Commonwealth Broadcasting, Urban Transit, Housing, Electricity & Gas, Education, Water & Sewerage, Public Buildings, and Miscellaneous (predominantly public buildings and recreation). Not discernible includes: Posts and Telegraphs, Civil Aviation, Roads and Bridges, Health, and Defence.

The above categories and figures are derived from (Vamplew 1987).

Table 4.6 – Total Australian Public Revenue Sources, 1850-1962

Year	Taxation	State Enterprises	Land Revenue	All Other
1850	53.51%	0.90%	38.02%	7.57%
1851	39.32%	-0.62%	40.87%	20.44%
1852	31.63%	-0.92%	60.27%	9.02%
1853	33.13%	-1.84%	63.92%	4.80%
1854	42.27%	-11.68%	61.02%	8.39%
1855	62.50%	-19.82%	47.69%	9.63%
1856	73.87%	-30.91%	44.82%	12.22%
1857	65.99%	-23.76%	46.12%	11.65%
1858	71.63%	-27.96%	44.67%	11.66%
1859	92.82%	-70.05%	63.07%	14.16%
1860	128.85%	-135.60%	84.98%	21.77%
1861	74.13%	-40.64%	53.30%	13.20%
1862	73.74%	-45.94%	60.23%	11.97%
1863	75.47%	-39.18%	51.12%	12.60%
1864	61.22%	-25.39%	45.72%	18.44%
1865	54.79%	-17.57%	48.16%	14.62%
1866	63.25%	-28.33%	51.77%	13.31%
1867	76.43%	-35.72%	45.69%	13.60%
1868	69.66%	-27.24%	44.71%	12.87%
1869	63.43%	-16.13%	39.63%	13.07%
1870	64.53%	-17.55%	39.51%	13.51%
1871	64.56%	-16.30%	37.47%	14.27%
1872	58.03%	-7.41%	38.17%	11.22%
1873	64.07%	-13.59%	38.55%	10.97%
1874	62.69%	-16.69%	42.40%	11.60%
1875	60.28%	-31.11%	57.61%	13.22%
1876	52.14%	-20.95%	57.44%	11.37%
1877	47.12%	-14.53%	56.56%	10.85%
1878	58.37%	-25.11%	55.30%	11.43%
1879	77.06%	-55.84%	62.19%	16.58%

1880	80.42%	-62.22%	63.22%	18.58%
1881	69.49%	-46.75%	63.50%	13.76%
1882	67.42%	-37.95%	57.75%	12.78%
1883	121.71%	-111.40%	67.89%	21.81%
1884	114.56%	-98.54%	61.60%	22.37%
1885	107.53%	-86.26%	57.77%	20.95%
1886	129.21%	-105.39%	52.95%	23.23%
1887	94.47%	-58.82%	46.65%	17.70%
1888	80.87%	-31.81%	37.28%	13.66%
1889	83.79%	-30.94%	32.85%	14.30%
1890	119.92%	-88.96%	49.04%	19.99%
1891	102.27%	-58.62%	40.85%	15.51%
1892	78.80%	-18.98%	28.80%	11.38%
1893	61.31%	0.95%	27.48%	10.26%
1894	57.67%	5.81%	25.14%	11.38%
1895	60.48%	8.83%	20.69%	10.01%
1896	58.56%	8.62%	22.93%	9.89%
1897	61.38%	5.52%	23.20%	9.89%
1898	69.46%	-5.40%	25.03%	10.91%
1899	62.51%	5.68%	21.64%	10.17%
1900	64.38%	2.56%	22.28%	10.77%
1901	66.58%	-0.61%	21.69%	12.34%
1902	74.02%	-10.13%	21.48%	14.63%
1903	74.88%	-6.62%	18.63%	13.11%
1904	63.78%	6.78%	17.12%	12.33%
1905	56.67%	16.60%	15.11%	11.62%
1906	54.84%	20.04%	13.67%	11.45%
1907	55.20%	19.90%	13.59%	11.31%
1908	62.45%	12.19%	13.73%	11.64%
1909	66.96%	3.75%	16.11%	13.18%
1910	68.08%	2.12%	15.75%	14.05%
1911	72.14%	-2.85%	15.33%	15.39%
1912	85.24%	-19.72%	15.61%	18.87%
1913	93.76%	-32.28%	16.68%	21.84%
1914	100.05%	-41.93%	17.00%	24.88%
1915	99.32%	-41.03%	15.08%	26.64%
1916	91.59%	-26.58%	11.19%	23.80%
1917				
1918				
1919	71.77%	2.90%	6.27%	19.06%
1920				
1921	82.60%	-3.57%	6.03%	14.94%
1922	83.15%	-7.93%	5.90%	18.88%
1923	82.19%	-6.04%	5.47%	18.37%
1924	81.85%	-6.62%	5.43%	19.34%
1925	83.54%	-8.19%	5.27%	19.39%
1926	90.05%	-14.92%	5.55%	19.32%

1927	88.55%	-10.89%	4.98%	17.36%
1928	87.76%	-10.35%	5.02%	17.57%
1929	79.47%	-3.88%	4.55%	19.86%
1930	80.41%	-2.95%	3.94%	18.60%
1931	74.25%	4.04%	3.13%	18.58%
1932	70.65%	9.84%	2.97%	16.53%
1933	70.74%	11.37%	2.91%	14.97%
1934	70.53%	10.75%	3.02%	15.70%
1935	73.54%	8.39%	3.11%	14.96%
1936	75.36%	7.94%	3.04%	13.66%
1937	74.52%	8.85%	2.98%	13.66%
1938	75.44%	8.61%	2.86%	13.09%
1939	78.65%	6.49%	2.62%	12.24%
1940	80.71%	6.05%	2.36%	10.88%
1941	82.30%	6.29%	2.02%	9.38%
1942	83.89%	6.19%	1.57%	8.35%
1943	83.63%	7.12%	1.40%	7.85%
1944	85.97%	5.79%	1.32%	6.93%
1945	86.99%	4.46%	1.19%	7.36%
1946	89.86%	2.68%	1.12%	6.34%
1947	89.75%	-0.51%	1.12%	9.63%
1948	92.95%	-2.40%	1.27%	8.18%
1949	92.07%	-5.85%	1.13%	12.66%
1950	98.24%	-10.29%	1.23%	10.82%
1951	100.66%	-14.37%	0.96%	12.75%
1952	107.91%	-16.80%	1.28%	7.62%
1953	99.77%	-14.24%	1.31%	13.16%
1954	100.74%	-12.08%	1.22%	10.12%
1955	97.96%	-9.90%	1.17%	10.77%
1956	99.42%	-10.51%	1.23%	9.86%
1957	93.48%	-8.41%	1.18%	13.75%
1958	96.92%	-7.47%	1.13%	9.42%
1959	96.47%	-7.45%	0.98%	10.01%
1960	96.49%	-6.88%	0.98%	9.41%
1961	94.55%	-4.66%	0.91%	9.21%
1962	94.99%	-6.01%	0.94%	10.08%

Figures are derived from (Barnard 1985).

Table 4.8 – Total Public Debt per capita in US\$, 1883-1971

Year	Argentina	Australia
1883	43.93078	
1884	52.78163	
1885	37.28414	
1886	34.90788	
1887	34.52427	
1888	60.67348	
1889	39.1697	
1890	32.75288	

1891	62.97192	
1892	92.39677	
1893	78.15941	
1894	62.76097	
1895	68.22223	
1896	81.39573	
1897	82.85423	
1898	123.8327	
1899	117.0049	
1900	92.35941	
1901	85.5982	269.4988049
1902	83.73962	276.6189168
1903	80.13193	284.0552494
1904	78.25829	286.3332654
1905	69.87744	285.4768922
1906	66.11637	289.5402818
1907	69.11831	286.5518121
1908	62.37354	285.4962644
1909	67.24881	289.2132006
1910	64.02592	287.2809244
1911	71.61089	288.9122461
1912	68.41526	293.415009
1913	66.5769	300.9409882
1914	64.42275	328.8935491
1915	62.57526	357.4417447
1916	65.76841	436.3743048
1917	74.64118	505.2308215
1918	68.76114	613.8094667
1919	63.29897	579.251076
1920	47.87315	524.2824675
1921	45.77744	576.1015761
1922	51.27896	694.426955
1923	42.35016	718.761578
1924	58.04784	714.0815865
1925	68.84674	774.2812993
1926	70.17514	804.5850059
1927	82.73202	811.8258103
1928	98.7541	837.3796096
1929	102.5076	829.9697735
1930	89.77389	828.7869325
1931	69.57181	800.4698883
1932	71.1433	661.5927817
1933	87.22405	803.1360617
1934	81.95392	961.2845571
1935	70.9311	942.2567657
1936	84.14738	958.0091729
1937	85.47122	949.8258132

1938	71.49263	939.6272614
1939	76.8735	857.7786834
1940	86.5102	763.896592
1941	86.63949	843.1600632
1942	99.09375	950.5120201
1943	119.4839	1155.592625
1944	129.2438	1338.714747
1945	145.5412	1464.433384
1946	165.5319	1537.74718
1947	149.9455	1530.335034
1948	85.81255	1527.016953
1949	57.63581	1373.896113
1950	64.24852	1044.046809
1951	44.63543	1063.042751
1952	63.68127	1104.358278
1953	93.44648	1145.586063
1954	84.81696	1177.709222
1955	77.16285	1189.91348
1956	92.71403	1208.801487
1957	101.8117	1210.166882
1958	76.09875	1192.745784
1959	89.24588	1186.979505
1960	102.3588	1179.724444
1961	115.0528	1182.183053
1962	89.69612	1186.962885
1963	110.1901	961.0891282
1964	104.8971	982.4979385
1965	93.24769	1000.186725
1966	106.5091	1016.252207
1967	96.93437	1050.308431
1968	118.1454	1103.795283
1969	128.4969	1133.617724
1970	118.2452	1175.050293
1971	72.28232	1184.828565

Sources: For Argentina the figures are derived from: (Vizcaíno 1972), (Della Paolera and Taylor 2003), & (Mitchell 2003). For Australia the figures are derived from: (Vamplew 1987), (Mitchell 2003).

Table 4.9 – Total Public Debt to GDP, 1870-1982

Year	Australia	Argentina
1870	35%	
1871	38%	
1872	34%	
1873	30%	
1874	31%	
1875	22%	
1876	35%	
1877	36%	

1878	36%	
1879	42%	
1880	47%	
1881	47%	
1882	47%	
1883	49%	
1884	59%	43%
1885	62%	34%
1886	69%	29%
1887	65%	31%
1888	66%	50%
1889	65%	39%
1890	71%	33%
1891	77%	58%
1892	95%	76%
1893	111%	78%
1894	116%	68%
1895	123%	58%
1896	112%	66%
1897	118%	70%
1898	104%	80%
1899	104%	89%
1900	101%	66%
1901	101%	69%
1902	99%	61%
1903	107%	56%
1904	104%	49%
1905	106%	37%
1906	102%	33%
1907	91%	34%
1908	93%	31%
1909	89%	31%
1910	84%	27%
1911	79%	30%
1912	78%	28%
1913	75%	28%
1914	76%	31%
1915	88%	28%
1916	92%	26%
1917	102%	25%
1918	123%	19%
1919	121%	17%
1920	122%	15%
1921	118%	19%
1922	127%	19%
1923	118%	17%
1924	120%	17%

1925	111%	19%
1926	121%	22%
1927	119%	24%
1928	125%	28%
1929	128%	30%
1930	141%	36%
1931	179%	41%
1932	205%	44%
1933	199%	45%
1934	188%	38%
1935	181%	34%
1936	166%	35%
1937	153%	32%
1938	143%	36%
1939	148%	38%
1940	142%	40%
1941	139%	38%
1942	135%	39%
1943	145%	43%
1944	167%	42%
1945	189%	44%
1946	194%	38%
1947	184%	30%
1948	156%	27%
1949	136%	27%
1950	120%	27%
1951	94%	22%
1952	94%	23%
1953	87%	26%
1954	84%	29%
1955	82%	31%
1956	78%	29%
1957	74%	26%
1958	72%	26%
1959	68%	19%
1960	63%	17%
1961	61%	16%
1962	61%	17%
1963	59%	16%
1964	55%	16%
1965	52%	13%
1966	52%	13%
1967	49%	12%
1968	50%	13%
1969	46%	12%
1970	44%	17%
1971	41%	18%

1972	38%	22%
1973	35%	20%
1974	30%	20%
1975	29%	19%
1976	28%	19%
1977	28%	19%
1978	30%	24%
1979	30%	30%
1980	29%	37%
1981	25%	48%
1982	23%	60%

Sources: For Argentina the figures are derived from: (Vizcaino 1972), (Della Paolera and Taylor 2003), (Dornbusch and Pablo 1987), & (OXLAD). For Australia the figures are derived from (Vamplew 1987).

Table 4.10 – Debt Servicing as a proportion of Expenditure, 1863-1971

Year	Argentina (federal)	Australia (total)
1863	29%	11%
1864	24%	13%
1865	23%	13%
1866	20%	11%
1867	16%	14%
1868	12%	18%
1869	20%	21%
1870	28%	21%
1871	34%	27%
1872	43%	22%
1873	32%	17%
1874	38%	18%
1875	27%	14%
1876	39%	17%
1877	38%	13%
1878	36%	13%
1879	38%	12%
1880	29%	13%
1881	31%	14%
1882	46%	14%
1883	25%	12%
1884	24%	13%
1885	23%	14%
1886	27%	14%
1887	27%	16%
1888	23%	16%
1889	15%	16%
1890	15%	16%
1891	34%	16%
1892	26%	18%
1893	28%	23%

1894	40%	25%
1895	32%	25%
1896	25%	24%
1897	26%	23%
1898	24%	21%
1899	34%	22%
1900	35%	21%
1901	40%	18%
1902	38%	16%
1903	46%	18%
1904	33%	19%
1905	30%	20%
1906	26%	20%
1907	26%	19%
1908	26%	18%
1909	19%	17%
1910	16%	16%
1911	16%	14%
1912	18%	13%
1913	20%	13%
1914	20%	13%
1915	21%	13%
1916	23%	13%
1917	25%	14%
1918	28%	18%
1919	27%	17%
1920	23%	18%
1921	21%	18%
1922	19%	21%
1923	19%	22%
1924	19%	22%
1925	18%	22%
1926	20%	21%
1927	17%	21%
1928	21%	21%
1929	22%	21%
1930	21%	22%
1931	26%	25%
1932	34%	22%
1933	33%	22%
1934	25%	21%
1935	20%	20%
1936	17%	19%
1937	14%	19%
1938	13%	18%
1939	14%	17%
1940	19%	15%

1941	19%	12%
1942	17%	9%
1943	18%	7%
1944	13%	8%
1945	12%	9%
1946	10%	11%
1947	9%	12%
1948	6%	12%
1949	6%	10%
1950	7%	9%
1951	6%	7%
1952	7%	6%
1953	7%	6%
1954	7%	6%
1955	8%	7%
1956	7%	7%
1957	8%	7%
1958	5%	7%
1959	4%	7%
1960	4%	7%
1961	4%	7%
1962	5%	7%
1963	7%	8%
1964	8%	8%
1965	6%	7%
1966	6%	7%
1967	7%	7%
1968	8%	7%
1969	6%	7%
1970	7%	7%
1971	7%	6%

Sources: For Argentina the figures are derived from: 1863-90 (Oszlak 2004), 1890-1913 (Della Paolera 1988), 1914-71 (Vizcaíno 1972) & (Della Paolera and Taylor 2003). For Australia the figures are derived from (Vamplew 1987).

Table 4.11 – External Public Debt to Exports, 1900-71

Year	Argentina (federal)	Australia (total)
1900	286%	
1901	250%	248%
1902	236%	307%
1903	187%	311%
1904	157%	236%
1905	118%	209%
1906	129%	180%
1907	141%	149%
1908	108%	183%
1909	112%	168%
1910	120%	136%

1911	160%	141%
1912	109%	144%
1913	69%	135%
1914	69%	
1915	61%	211%
1916	63%	208%
1917	71%	167%
1918	47%	231%
1919	36%	161%
1920	35%	123%
1921	55%	125%
1922	55%	154%
1923	49%	172%
1924	43%	190%
1925	58%	148%
1926	66%	178%
1927	61%	195%
1928	71%	207%
1929	88%	207%
1930	141%	282%
1931	137%	259%
1932	165%	270%
1933	84%	262%
1934	89%	225%
1935	81%	247%
1936	76%	206%
1937	41%	172%
1938	70%	180%
1939	72%	210%
1940	75%	172%
1941	61%	183%
1942	52%	197%
1943	39%	226%
1944	22%	186%
1945	21%	179%
1946	3%	73%
1947	2%	41%
1948	1%	28%
1949	2%	21%
1950	1%	18%
1951	0%	11%
1952	0%	16%
1953	0%	13%
1954	0%	14%
1955	0%	16%
1956	0%	16%
1957	0%	12%

1958	0%	15%
1959	0%	16%
1960	0%	15%
1961	13%	15%
1962	7%	13%
1963	6%	28%
1964	5%	22%
1965	12%	24%
1966	9%	22%
1967	5%	21%
1968	9%	24%
1969	11%	24%
1970	13%	18%
1971	14%	17%

Sources: For Argentina the figures are derived from: (Vizcaíno 1972), (Della Paolera and Taylor 2003), & (OXLAD). For Australia the figures are derived from: (Pinkstone, Meredith et al. 1992) & (Vamplew 1987).

Table 4.12 – Real Government Bond Yields, 1900-72

Year	Australia	Argentina
1900	7.564444	
1901	-5.96233	
1902	-2.55298	
1903	5.51	
1904	9.912449	
1905	-0.33783	
1906	3.45	
1907	3.38	
1908	-2.68	
1909	3.66	
1910	1.859216	
1911	1.716923	
1912	-7.49075	
1913	4.85	
1914	0.860169	
1915	-10.2841	
1916	3.631429	
1917	-0.3038	
1918	-1.72667	
1919	-8.46	
1920	-7.31681	
1921	19.84136	
1922	10.11333	
1923	3.991149	
1924	7.133596	
1925	5.96	
1926	2.927273	
1927	6.451111	

1928	5.43	7.1
1929	3.012809	5.1
1930	9.965604	5
1931	16.85483	23
1932	9.808205	18
1933	7.974054	-6
1934	0.793099	18.2
1935	1.940137	-2.4
1936	2.388649	-3.7
1937	0.02	1.4
1938	1.115897	3.5
1939	1.4	2.6
1940	0.141463	2.3
1941	-1.61588	1.9
1942	-5.73876	-1.6
1943	-0.89371	2.9
1944	4.230099	4.3
1945	3.24	-13.1
1946	1.25	-11.6
1947	-0.71157	-8.4
1948	-7.20736	-7.64
1949	-6.27171	-20
1950	-6.255	-16.8
1951	-16.1157	-23.9
1952	-13.6153	-25
1953	-0.06184	0
1954	3.912195	0.2
1955	2.092816	-6.5
1956	-1.63114	-7.4
1957	2.857857	-15.8
1958	3.253275	-17.9
1959	3.253262	-49.5
1960	1.454473	-15.2
1961	2.482857	-3.5
1962	5.276825	-14.1
1963	4.321594	-11.4
1964	1.909048	-11.5
1965	0.884031	-16
1966	2.164925	-18.4
1967	1.396812	-16.4
1968	2.652448	-7.1
1969	1.838328	5.9
1970	1.997616	0.4
1971	0.339712	-15.3
1972	-0.3141	0

Sources: For Argentina the figures are the real interest rates paid on government bonds and are directly from (Reutz 1991). For Australia the real interest rates are derived from

the nominal rates paid on government bonds (Vamplew 1987) deflated by CPI (Statistics 2005).

Table 4.13 – Internal Debt as a proportion of Public Debt, 1900-71

Year	Australia (total)	Argentina (federal)	Unconsolidated (Argentina, federal)
1901	15%	0%	
1902	17%	0%	
1903	18%	0%	
1904	19%	0%	
1905	20%	0%	
1906	21%	0%	
1907	24%	0%	
1908	26%	0%	
1909	26%	0%	
1910	27%	0%	
1911	30%	0%	
1912	32%	0%	
1913	32%	0%	
1914	31%	0%	11%
1915	33%	0%	20%
1916	39%	0%	27%
1917	44%	0%	29%
1918	46%	0%	34%
1919	50%	0%	37%
1920	53%	0%	41%
1921	55%	0%	43%
1922	53%	0%	45%
1923	53%	0%	43%
1924	51%	0%	37%
1925	51%	0%	31%
1926	50%	0%	28%
1927	50%	0%	22%
1928	47%	0%	16%
1929	48%	0%	25%
1930	48%	0%	32%
1931	48%	0%	35%
1932	47%	0%	31%
1933	48%	40%	25%
1934	49%	42%	24%
1935	50%	61%	3%
1936	51%	65%	2%
1937	51%	72%	4%
1938	52%	67%	10%
1939	52%	68%	8%
1940	53%	65%	13%
1941	55%	62%	18%
1942	61%	65%	18%
1943	68%	65%	22%

1944	74%	67%	26%
1945	77%	67%	27%
1946	80%	72%	27%
1947	81%	77%	22%
1948	81%	82%	18%
1949	81%	85%	15%
1950	82%	88%	12%
1951	83%	90%	9%
1952	84%	93%	7%
1953	84%	94%	6%
1954	85%	96%	4%
1955	84%	91%	9%
1956	84%	88%	12%
1957	85%	89%	11%
1958	85%	76%	24%
1959	84%	61%	39%
1960	84%	58%	42%
1961	84%	55%	39%
1962	84%	51%	44%
1963	84%	45%	51%
1964	84%	34%	63%
1965	85%	28%	66%
1966	86%	22%	73%
1967	86%	18%	78%
1968	87%	21%	73%
1969	86%	22%	71%
1970	88%	56%	35%
1971	89%	60%	31%

Note: Prior to 1933 all debt in Argentina is assumed to be external despite much of it being labelled internal, as contemporary sources noted that internal debt was largely held by foreigners and did not indicate it was held in Argentina.

Sources: The figures for Argentina are derived from: Unconsolidated debt – 1914-27 (Luisi 1934), 1928-71 (Vizcaíno 1972); Internal debt – (Vizcaíno 1972). The figures for Australia are derived from (Vamplew 1987).

Table 4.17 – Argentine Bond Spread over Australia, 1870-1935

Year	Argentina	Australia	Argentine as proportion of Australian
1870	9.24	4.87	190%
1871	8.72	4.79	182%
1872	7.98	4.71	169%
1873	7.64	4.64	165%
1874	7.82	4.55	172%
1875	8.9	4.45	200%
1876	12.78	4.57	280%
1877	10.63	4.48	237%
1878	10.67	4.38	244%
1879	9.21	4.49	205%
1880	7.93	4.49	177%

1881	7.05	4.1	172%
1882	6.92	3.82	181%
1883	6.85	4	171%
1884	6.73	4.26	158%
1885	7.9	4.2	188%
1886	7.86	4.18	188%
1887	8.79	4.17	211%
1888	8.02	3.81	210%
1889	8.01	3.55	226%
1890	10.34	3.52	294%
1891	10.29	3.65	282%
1892	9.15	4	229%
1893	8.73	3.97	220%
1894	8.94	3.86	232%
1895	8.28	3.56	233%
1896	7.74	3.56	217%
1897	7.78	3	259%
1898	7.87	3.11	253%
1899	7.89	3.04	260%
1900	8.01	3.12	257%
1901	7.8	3.34	234%
1902	7.7	3.83	201%
1903	6.45	3.51	184%
1904	6.05	3.79	160%
1905	5.93	4.01	148%
1906	5.29	3.45	153%
1907	5.64	3.38	167%
1908	5.68	3.57	159%
1909	5.36	3.66	146%
1910	5.11	3.82	134%
1911	5.21	3.64	143%
1912	5.36	3.83	140%
1913	5.4	4.85	111%
1914	4.9	4.25	115%
1915	5.1	4.47	114%
1916	5.3	5.06	105%
1917	5.3	5.33	99%
1918	5.1	4.94	103%
1919	5.3	5.29	100%
1920	5.6	5.87	95%
1921	5.4	7.22	75%
1922	5	6.78	74%
1923	5	6.29	79%
1924	5	6.01	83%
1925	5	5.96	84%
1926	5	5.2	96%
1927	4.9	5.34	92%

1928	4.9	5.43	90%
1929	5.3	5.26	101%
1930	5.7	5.57	102%
1931	7	6.51	108%
1932	9.1	4.68	194%
1933	4.9	3.92	125%
1934	4.3	3.61	119%
1935	4	3.31	121%

Note: The Argentine figures are: 1870-1913, yield on external long-term government bonds (títulos públicos) annual average; and 1914-35, yield on external Argentine customs loan. The Australian figures are the interest rates on government bonds.

Sources: The figures for Argentina are from (Della Paolera and Taylor 2003), appendix & p.301. The figures for Australia are from (Vamplew 1987), p.240.

Table 4.19 – Annual Debt + Monetary Change as a proportion of Budget Deficit and related figures, 1921-80

Year	Aus.	Arg.	Aus.M1	Arg.M1	Aus.debt	Arg.debt	Aus.BD	Arg.BD
1921	83%	118%	301.1	0.00013651	816,479	1,277,726,389	65811	0.00000900
1922	50%	197%	296.9	0.00014511	873,291	1,294,886,001	47470	0.00001617
1923	131%	88%	302	0.00017517	894,435	1,315,753,717	36200	0.00000898
1924	28%	196%	306.8	0.00018095	939,425	1,523,581,867	40534	0.00000744
1925	145%	736%	303.9	0.00017475	952,269	1,743,973,922	39306	0.00000510
1926	56%	213%	315.9	0.00019024	1,002,937	1,845,844,777	47994	0.00001056
1927	98%	126%	311.1	0.00020257	1,032,444	2,155,518,099	48131	0.00003674
1928	17%	247%	301.2	0.00021775	1,084,439	2,685,182,341	52158	0.00001590
1929	-41%	100%	302.3	0.00020404	1,092,643	2,945,756,950	43813	0.00002273
1930	111%	6%	247.8	0.0002006	1,101,658	3,268,692,488	42629	0.00003848
1931	227%	57%	241.8	0.00017062	1,151,896	3,322,932,398	41513	0.00002139
1932	53%	158%	254.8	0.00017735	1,241,069	3,461,582,505	26951	0.00001452
1933	229%	78%	251.2	0.00018641	1,256,795	3,561,930,929	13485	0.00001368
1934	124%	66%	286.3	0.00018704	1,273,678	3,661,532,077	19050	0.00001722
1935	87%	93%	297.2	0.00018853	1,292,916	3,453,484,556	22605	0.00001183
1936	84%	237%	313.1	0.00022028	1,306,254	3,686,790,380	21700	0.00001779
1937	77%	61%	341.4	0.00023919	1,313,304	3,958,003,598	21644	0.00002899
1938	111%	138%	353.5	0.00022968	1,325,138	4,338,773,137	21578	0.00002855
1939	351%	143%	357.6	0.000231	1,347,557	4,777,319,049	26720	0.00004454
1940	198%	329%	451.2	0.000251	1,403,930	5,197,602,124	51712	0.00003528
1941	223%	132%	500.4	0.000325	1,486,887	5,302,336,704	118242	0.00004567
1942	218%	290%	647.8	0.000375	1,691,609	6,161,986,313	218156	0.00005244
1943	113%	273%	888.9	0.000441	2,072,041	7,093,899,626	403716	0.00007368
1944	80%	195%	1147.1	0.000549	2,425,280	7,919,608,192	377463	0.00010071
1945	71%	262%	1253.3	0.000663	2,684,421	9,122,229,177	270187	0.00012681

1946	36%	252%	1325.3	0.000875	2,846,422	10,647,260,499	168801	0.00013496
1947	122%	616%	1395	0.001063	2,879,007	11,465,431,035	80483	0.00007189
1948	180%	320%	1539	0.001424	2,920,039	12,914,574,299	62704	0.00014957
1949	398%	256%	1755	0.0017572	2,946,579	15,171,358,761	63635	0.00026234
1950	283%	289%	2133	0.0022039	3,048,970	18,095,917,105	136381	0.00026399
1951	90%	171%	2729	0.0026733	3,197,905	21,075,777,411	202231	0.00038864
1952	105%	318%	2639	0.003041	3,415,140	26,093,717,364	290349	0.00038722
1953	101%	297%	2963	0.003772	3,590,291	33,733,806,790	240714	0.00046362
1954	65%	306%	3129	0.0043861	3,768,365	41,306,540,440	256003	0.00053349
1955	52%	242%	3159	0.0052607	3,921,936	51,473,793,270	242996	0.00073414
1956	61%	204%	3090	0.0060194	4,075,628	63,707,517,494	261862	0.00096147
1957	-9%	446%	3239	0.00675835	4,176,450	72,339,265,768	248085	0.00089381
1958	43%	245%	3179	0.00988273	4,177,911	103,972,965,017	255275	0.00305070
1959	54%	185%	3274	0.0142086	4,249,588	146,156,014,864	305900	0.00425992
1960	5%	213%	3522	0.0178541	4,317,464	168,522,329,094	280875	0.00230095
1961	53%	209%	3293	0.0205278	4,422,568	196,073,934,640	290148	0.00200166
1962	61%	217%	3379	0.0219564	4,540,982	247,060,245,470	343094	0.00525950
1963	91%	268%	3464	0.028282	9,434,268	304,413,884,935	766	0.00634503
1964	46%	189%	3732	0.0395567	9,862,958	428,345,482,845	914	0.01197638
1965	54%	314%	3791	0.0497414	10,224,530	483,759,900,000	817	0.00730631
1966	78%	206%	3816	0.0671484	10,640,146	648,192,319,865	967	0.01767564
1967	90%	256%	4074	0.08715	11,139,406	773,536,239,050	1240	0.01400032
1968	70%	177%	4414	0.1104	11,915,036	955,618,960,235	1336	0.01696414
1969	83%	243%	4750	0.12227	12,512,650	1,060,512,890,988	1105	0.01448197
1970	60%	502%	4985	0.14699	13,195,972	12,174,086,997	1038	0.01424800
1971	101%	305%	5312	0.20288	13,491,882	16,354,453,056	1015	0.04301900
1972	197%	449%	5796	0.29226	14,035,242	6,671,611,111	1124	0.07734000

1973	46%	225%	7285	0.573	14,764,926	25,183,428,571	1519	0.26135700
1974	243%	568%	7451	0.91049	15,303,282	36,844,145,455	1402	0.37603000
1975	93%	473%	8389	2.67609	17,769,930	211,393,480,784	4053	1.892160
1976	79%	250%	9572	9.51397	20,337,850	831,419,230,797	4757	8.054780
1977	92%	502%	10377	21.37	23,290,310	1,457,350,425,688	4914	10.123751
1978	94%	455%	11266	57.63	26,922,704	2,908,303,512,725	6429	24.113478
1979	51%	688%	13146	138.29	31,086,035	8,521,631,915,607	6636	32.057620
1980	28%	487%	14843	273.5	32,782,555	17,301,602,832,441	5865	74.024270

Notes and Sources: Australian M1 (\$m), (Vamplew 1987), p.247-8; Argentine M1 (2001 US\$), (Della Paolera and Taylor 2003), appendix; Australian debt is total public debt, (Vamplew 1987), p.285; from 1921-71 Argentine debt is national (nominal monies), (Vizcaíno 1972), pp.254-6, and from 1972-80 it is the change in internal and external public debt (nominal money); Australian budget deficit is the difference between total expenditure and total revenue and is in £'000 from 1921-62 and \$'000 from 1963-80, (Vamplew 1987), p.256; and the Argentine budget deficit is federal, (2001 US\$), (Della Paolera and Taylor 2003), appendix.

Table 4.25 – Argentine Revenue and Debt figures, 1865-1980

Year	Revenue	Debt
1865	8,345,686	
1866	8,387,026	
1867	13,054,047	
1868	12,598,842	
1869	12,373,610	
1870	14,896,938	47,505,986
1871	10,376,500	84,265,110
1872	20,683,245	80,012,729
1873	22,911,474	78,480,297
1874	18,472,588	77,183,464
1875	21,428,232	82,877,423
1876	13,623,914	86,813,567
1877	13,776,540	82,230,897
1878	17,517,508	80,649,083
1879	21,793,818	77,738,976
1880	19,760,479	86,313,102
1881	20,807,739	107,075,511
1882	26,867,107	124,112,684
1883	32,705,623	128,047,256
1884	36,169,793	122,503,098
1885	39,463,388	155,400,000
1886	46,631,506	162,900,000
1887	68,741,073	191,300,000
1888	67,831,522	410,700,000
1889	114,822,175	563,800,000
1890	73	893,100,000
1891	75.5	1,432,300,000
1892	110.9	1,412,700,000
1893	124.7	1,386,100,000
1894	121.7	1,404,400,000
1895	131.4	1,385,736,693
1896	129.1	1,239,720,254
1897	149.9	1,289,066,747
1898	136.7	1,328,690,665
1899	164	1,247,569,941
1900	150.8	1,039,981,139
1901	152.4	1,029,876,788
1902	155.6	1,033,251,166
1903	171.6	969,107,696
1904	188.6	969,439,553
1905	205.4	873,721,067
1906	228.8	862,637,246
1907	243.6	950,815,435
1908	254.2	906,683,221
1909	274.7	1,022,058,321

1910	302.1	1,029,069,700
1911	310.1	1,196,681,365
1912	336.4	1,207,950,247
1913	349.6	1,238,004,135
1914	250.1	1,392,858,841
1915	237.2	1,530,117,430
1916	240.5	1,705,207,190
1917	241.0	1,916,253,927
1918	308.3	1,977,737,264
1919	389.6	2,049,376,597
1920	493.9	2,122,105,556
1921	456.5	2,242,939,126
1922	438.9	2,360,639,803
1923	524.4	2,292,867,965
1924	577.6	2,412,056,561
1925	643.3	2,543,806,790
1926	619.3	2,557,040,363
1927	658.4	2,778,035,643
1928	702.9	2,802,136,762
1929	718.0	3,090,190,349
1930	621.4	3,317,497,999
1931	662.6	3,566,779,662
1932	595.4	3,566,300,000
1933	586.2	3,637,000,000
1934	749.5	3,707,500,000
1935	826.9	3,466,900,000
1936	823.7	3,668,400,000
1937	1,046.3	3,915,200,000
1938	993.7	4,327,000,000
1939	994.0	4,883,000,000
1940	1,088.8	5,185,000,000
1941	1,043.1	5,783,900,000
1942	1,089.5	6,329,600,000
1943	1,106.7	7,130,200,000
1944	1,417.3	7,964,000,000
1945	1,529.8	9,159,300,000
1946	1,981.0	10,830,300,000
1947	3,250.0	11,538,600,000
1948	4,094.4	12,940,000,000
1949	5,613.4	15,194,500,000
1950	7,577.8	18,096,000,000
1951	11,012.9	21,454,000,000
1952	13,475.1	26,104,300,000
1953	13,384.8	33,733,800,000
1954	14,715.5	41,306,600,000
1955	15,588.0	51,468,700,000
1956	19,747.1	63,703,000,000

1957	20,469.7	72,343,200,000
1958	30,192.4	103,960,600,000
1959	47,358.8	146,153,900,000
1960	108,347.8	168,520,400,000
1961	158,625.5	196,973,000,000
1962	155,912.0	247,927,700,000
1963	180071.5	305,259,600,000
1964	257536.4	419,166,100,000
1965	357028.7	484,546,100,000
1966	473519.8	648,922,400,000
1967	743780.3	774,017,800,000
1968	731181.4	956,053,200,000
1969	856601.9	1,060,906,900,000
1970	1046480	12,177,500,000
1971	1317780	15,914,300,000
1972	2416630	23,063,600,000
1973	3272420	46,620,900,000
1974	5549360	80,504,300,000
1975	11401700	257,418,900,000
1976	91820940	1,144,833,600,000
1977	285518000	2,194,688,200,000
1978	816491100	4,584,544,600,000
1979	1681181000	
1980	3607283000	

Notes and Sources: Revenue, 1864-89 (Cortés Conde 1989), 1890-1913 (Della Paolera 1988), 1914-31 (Vazquez-Presedo 1971), 1932-59 (TECHINT 1963), 1960-80 (Della Paolera and Taylor 2003); Debt, 1870-84 (Tornquist Ernesto & cia limitada Buenos Aires. 1920), 1885-94 (Cottely 1981), 1895-1910 (Dell'Oro Maini 1920), 1911-31 (Luisi 1934), 1932-78 (Cottely 1981). After 1914 both revenue and debt figures are deflated with inflation using (Domenech, Cavallo et al. 1986) from 1914-48 and (International Monetary Fund) 1949-80.

Table 4.26 – Debt & Revenue/Tax as a proportion of GDP, 1850-1985

Year	Argentina-Debt	Argentina-Revenue	Australia-Debt	Australia-Tax
1850				1.88
1851				3.69
1852				2.72
1853				3.59
1854			0.26	3.66
1855			3.17	4.44
1856			5.98	5.35
1857			6.81	4.94
1858			7.56	5.05
1859			10.55	4.57
1860			15.43	4.34
1861			17.52	4.16
1862			23.01	4.13

1863			24.02	4.1
1864			24.47	3.89
1865			24.88	4.89
1866			26.36	4.34
1867			30.29	4.83
1868			31.4	4.56
1869			34.33	4.79
1870			34.77	4.28
1871			38.44	3.84
1872			33.97	4.43
1873			29.72	4.31
1874			31.32	4.12
1875			21.59	3.62
1876			35	4.05
1877			35.61	4.11
1878			36.25	4.09
1879			41.93	3.96
1880			46.62	3.97
1881			46.56	4.36
1882			46.62	4.7
1883			48.9	4.4
1884	42.8%	10.6%	59.37	4.64
1885	34.2%	10.8%	61.57	4.63
1886	29.1%	12.3%	69.4	5.24
1887	31.0%	13.6%	64.86	4.82
1888	50.0%	13.5%	65.84	5.16
1889	39.0%	17.5%	65.33	5.23
1890	33.3%	17.2%	71.19	5.3
1891	57.8%	5.1%	77.12	5.46
1892	76.3%	8.4%	94.72	6.6
1893	77.9%	10.4%	110.9	6.36
1894	68.3%	9.2%	116.11	6.6
1895	58.0%	8.2%	122.65	6.28
1896	65.7%	8.4%	111.71	6.59
1897	70.5%	10.5%	118.39	7.04
1898	79.7%	9.2%	104.26	6.27
1899	89.2%	11.7%	104.35	6.31
1900	66.3%	10.0%	101.44	6.21
1901	69.0%	10.3%	100.68	5.95
1902	61.3%	9.6%	98.77	6.14
1903	55.7%	10.1%	106.52	6.99
1904	49.2%	9.8%	104.15	6.5
1905	36.9%	8.7%	106.39	6.49
1906	32.7%	8.7%	101.65	6.27
1907	34.3%	8.8%	90.98	6.11

1908	30.9%	8.7%	92.52	6.82
1909	30.5%	8.2%	89.47	6.14
1910	26.5%	7.8%	83.75	6.08
1911	30.5%	8.1%	79.46	6.49
1912	27.8%	8.3%	77.62	6.92
1913	28.1%	8.4%	75.09	6.61
1914	31.0%	6.9%	76.3	6.4
1915	28.4%	5.9%	88.44	6.68
1916	26.3%	5.4%	92.12	7.05
1917	25.2%	4.7%	102.41	6.58
1918	18.8%	4.6%	123.25	6.88
1919	17.3%	5.4%	121.25	7.98
1920	15.0%	6.3%	122.41	9.34
1921	18.7%	6.9%	118.15	10.78
1922	19.2%	6.7%	126.74	10.78
1923	17.0%	7.0%	118.46	10.26
1924	17.0%	6.7%	119.74	10.29
1925	19.3%	7.3%	110.6	9.91
1926	21.6%	7.5%	120.9	10.85
1927	24.1%	7.6%	119.42	11.49
1928	27.9%	7.5%	124.72	11.57
1929	30.2%	7.6%	127.64	11.9
1930	36.5%	7.2%	140.69	13.36
1931	41.2%	8.3%	179	15.3
1932	43.9%	9.5%	205.13	16.18
1933	45.2%	9.5%	198.86	16.41
1934	37.8%	7.9%	187.85	14.93
1935	34.5%	9.0%	180.57	14.73
1936	34.7%	8.2%	165.97	14.76
1937	32.4%	7.6%	152.97	14.09
1938	36.4%	8.3%	142.71	14.22
1939	38.2%	8.1%	148.16	15.19
1940	40.2%	7.5%	141.81	16.06
1941	38.1%	6.5%	138.63	16.94
1942	39.2%	6.4%	135.49	18.96
1943	42.9%	6.2%	144.99	19.84
1944	41.9%	7.4%	166.97	22.38
1945	43.7%	7.1%	188.91	26.37
1946	37.7%	6.7%	193.96	26.65
1947	29.5%	8.9%	184.49	27.64
1948	27.3%	11.8%	155.86	25.28
1949	26.7%	9.1%	136.29	25.38
1950	26.9%	9.1%	119.59	22.97
1951	21.9%	9.8%	94.43	25.33
1952	23.4%	10.3%	93.99	28.43

1953	26.2%	9.1%	87.1	24.53
1954	29.0%	9.0%	83.62	22.85
1955	30.5%	7.4%	81.68	22.29
1956	28.9%	7.2%	78.34	22.11
1957	25.6%	6.6%	73.71	22.59
1958	26.0%	7.6%	72.1	23.53
1959	19.2%	10.2%	68.27	21.69
1960	16.7%	10.8%	62.94	21.81
1961	16.2%	13.1%	60.62	23.12
1962	17.0%	10.7%	60.83	22.72
1963	15.8%	9.4%	58.63	22
1964	15.8%	9.5%	55.3	22.14
1965	12.6%	9.3%	52.15	23.41
1966	13.4%	9.8%	51.84	24.63
1967	12.0%	11.6%	49.41	24.02
1968	12.7%	9.8%	49.58	24.9
1969	11.9%	9.6%	46.26	24.73
1970	16.7%	9.9%	44.14	25.63
1971	18.2%	8.6%	41.03	25.95
1972	21.8%	9.5%	38.39	26.58
1973	20.0%	7.4%	35.41	25.57
1974	20.4%	9.0%	30.34	26.89
1975	18.6%	6.2%	28.76	28.43
1976	18.6%	9.4%	27.92	28.98
1977	19.2%	10.3%	28	29.53
1978	23.9%	11.8%	29.8	29.52
1979	30.2%	8.8%	30.42	28.46
1980	37.3%	9.4%	28.56	29.46
1981	48.1%	12.3%	24.94	30.5
1982	60.3%	10.6%	22.7	31.32
1983	59.5%	9.7%		
1984	60.5%	9.9%		
1985	64.3%	15.7%		

Notes: Argentine figures are federal whereas Australian are total.

Sources: From 1884-1969 Argentine debt to GDP is derived from (Vizcaíno 1972) & (Della Paolera and Taylor 2003), and is directly from (Dornbusch and Pablo 1987) from 1970-85. From 1884-1980 Argentine revenue to GDP is derived from (Della Paolera and Taylor 2003) and from 1981-85 is derived from (OXLAD). Both Australian debt and taxation to GDP figures are derived from (Vamplew 1987).

Table 5.2 – Proportion of Income Tax paid by wealthiest quartile of income taxpayers versus the remainder (bottom 75%), and income taxpayers/population, 1915-70

Year	Australia			Argentina		
	Top 25%	Bottom 75%	Inc. taxpayers/Pop.	Top 25%	Bottom 75%	Inc. Taxpayers/Pop.
1915	22.3%	77.7%	2.1%			

1916	25.1%	74.9%	1.8%			
1917	29.0%	71.0%	6.4%			
1918	27.2%	72.8%	7.7%			
1919	26.8%	73.2%	8.4%			
1920						
1921	28.8%	71.2%	13.9%			
1922	20.7%	79.3%	8.3%			
1923	20.9%	79.1%	7.7%			
1924	23.6%	76.4%	3.4%			
1925	25.7%	74.3%	3.7%			
1926	22.8%	77.2%	3.8%			
1927	25.9%	74.1%	4.1%			
1928	23.7%	76.3%	4.2%			
1929	27.3%	72.7%	4.2%			
1930	27.6%	72.4%	5.2%			
1931	24.6%	75.4%	4.7%			
1932	25.5%	74.5%	3.7%	82.3%	17.7%	0.7%
1933	26.0%	74.0%	3.5%	82.9%	17.1%	0.7%
1934	23.3%	76.7%	3.5%	83.9%	16.1%	0.7%
1935	22.3%	77.7%	3.9%	70.3%	29.7%	0.7%
1936	26.1%	73.9%	3.6%	76.0%	24.0%	0.6%
1937	23.0%	77.0%	4.3%	76.0%	24.0%	1.1%
1938	23.6%	76.4%	4.8%	75.0%	25.0%	1.1%
1939	22.0%	78.0%	5.0%	76.6%	23.4%	1.0%
1940	28.2%	71.8%	8.9%	77.8%	22.2%	0.9%
1941	26.3%	73.7%	11.0%	81.2%	18.8%	1.0%
1942	25.2%	74.8%	20.1%	81.4%	18.6%	0.7%
1943	27.6%	72.4%	27.2%	80.4%	19.6%	0.8%
1944	29.3%	70.7%	28.1%	79.8%	20.2%	0.8%
1945	26.6%	73.4%	27.6%			
1946	24.9%	75.1%	27.5%			
1947	26.8%	73.2%	32.2%			
1948	22.5%	77.5%	34.3%			
1949	30.9%	69.1%	35.8%			
1950	38.6%	61.4%	36.9%			
1951	16.7%	83.3%	38.3%			
1952	28.7%	71.3%	39.4%			
1953	17.7%	82.3%	39.2%			
1954	20.3%	79.7%	40.9%			
1955	26.3%	73.7%	39.7%			
1956	31.0%	69.0%	40.1%			
1957	20.4%	79.6%	40.2%			
1958	20.7%	79.3%	39.5%			
1959	23.1%	76.9%	39.9%			
1960	29.1%	70.9%	40.5%			

1961	32.2%	67.8%	41.1%			
1962	17.9%	82.1%	40.8%			
1963	20.0%	80.0%	41.4%			
1964	24.8%	75.2%	39.7%			
1965	29.4%	70.6%	40.5%			
1966	31.7%	68.3%	40.9%			
1967	17.2%	82.8%	41.5%			
1968	19.4%	80.6%	41.3%			
1969	24.1%	75.9%	40.6%			
1970	28.4%	71.6%	42.4%			

Sources: Australian data is constructed from the annual statistical volumes of: (Taxation 1915-60), (Statistics 1960-71). Argentine data is constructed from the annual statistical volumes of: (Nacion 1935-1945). Population data is from (Maddison 2003).

Table 5.4 – Income subject to income tax/GDP & Income tax payable/GDP, 1915-70.

Year	Australia		Argentina	
	Taxable Income/GDP	Inc. Tax Payable/GDP	Taxable Income/GDP	Inc. Tax Payable/GDP
1915-16	8.2%	0.4%		
1916-17	11.3%	0.8%		
1917-18	12.8%	1.2%		
1918-19	12.1%	1.1%		
1919-20				
1920-21	15.9%	1.2%		
1921-22	11.2%	0.8%		
1922-23	10.2%	0.7%		
1923-24	10.9%	0.7%		
1924-25	9.2%	0.6%		
1925-26	11.0%	0.6%		
1926-27	9.6%	0.5%		
1927-28	9.9%	0.5%		
1928-29	10.7%	0.5%		
1929-30	12.2%	0.7%		
1930-31	13.9%	1.3%		
1931-32	10.5%	1.1%		
1932-33	8.2%	0.7%		
1933-34	7.6%	0.5%		
1934-35	8.7%	0.5%		
1935-36	9.0%	0.5%	11.8%	0.7%
1936-37	9.3%	0.4%	10.8%	0.7%
1937-38	10.8%	0.5%	10.7%	0.7%
1938-39	11.2%	0.6%	10.7%	0.7%
1939-40	10.5%	0.8%	11.4%	0.8%
1940-41	13.5%	2.0%	12.6%	0.9%
1941-42	13.1%	2.8%	12.7%	1.0%
1942-43	25.0%	4.3%	13.3%	1.5%

1943-44	30.1%	6.5%	11.7%	1.3%
1944-45	33.1%	7.4%		
1945-46	30.7%	6.6%		
1946-47	28.8%	5.8%		
1947-48	29.5%	5.1%		
1948-49	32.3%	5.0%		
1949-50	32.6%	4.8%		
1950-51	28.9%	4.0%		
1951-52	32.4%	6.9%		
1952-53	31.2%	6.0%		
1953-54	33.7%	5.3%		
1954-55	34.4%	5.1%		
1955-56	34.1%	5.4%		
1956-57	33.6%	5.3%		
1957-58	32.2%	4.9%		
1958-59	31.8%	4.9%		
1959-60	32.9%	5.2%		
1960-61	32.4%	5.2%		
1961-62	32.2%	5.0%		
1962-63	32.3%	5.1%		
1963-64	32.0%	5.5%		
1964-65	32.1%	5.7%		
1965-66	32.0%	5.8%		
1966-67	31.6%	5.9%		
1967-68	31.7%	6.2%		
1968-69	31.6%	6.4%		
1969-70	31.7%	6.8%		

Sources: Australian data is constructed from the annual statistical volumes of: (Taxation 1915-60), (Statistics 1960-71), plus (Mitchell 2003). Argentine data is constructed from the annual statistical volumes of (Nacion 1935-1945) plus (OXLAD).

Table 5.5 – The number of individuals paying the top quartile of Income Tax Paid

Year	Australia	Argentina
1915	149	
1916	69	
1917	239	
1918	267	
1919	248	
1920		
1921	724	
1922	327	
1923	1411	
1924	1699	
1925	2258	
1926	1782	
1927	1725	

1928	1899	
1929	1882	
1930	1304	
1931	1042	
1932	779	1513
1933	472	1489
1934	811	1831
1935	830	962
1936	994	1181
1937	1411	2263
1938	1205	2005
1939	1165	2214
1940	2067	2303
1941	2269	1984
1942	5626	982
1943	16339	1678
1944	17986	1620
1945	27153	
1946	28226	
1947	20327	
1948	17875	
1949	14006	
1950	12406	
1951	8878	
1952	18787	
1953	21741	
1954	21498	
1955	21705	
1956	37380	
1957	28631	
1958	37952	
1959	40927	
1960	50476	
1961	54411	
1962	56348	
1963	67472	
1964	88563	
1965	90872	
1966	96099	
1967	115844	
1968	126960	
1969	154701	
1970	191169	

Sources: Australian data is constructed from the annual statistical volumes of: (Taxation 1915-60), (Statistics 1960-71). Argentine data is constructed from the annual statistical volumes of: (Nacion 1935-1945). Population data is from (Maddison 2003).

Table 5.6 – Average Income Tax Rates, Inflation, & Evasion, 1932-70

Year	Australia		Argentina		
	Av. Inc. Tax	Inflation	Av. Inc. Tax	Inflation	Evasion
1915	5.6%				
1916	7.5%				
1917	6.9%				
1918	9.1%				
1919	8.4%				
1920					
1921	7.3%				
1922	6.6%				
1923	6.7%				
1924	6.8%				
1925	6.1%				
1926	6.1%				
1927	5.4%				
1928	5.2%				
1929	6.0%				
1930	9.4%				
1931	9.6%				
1932	7.7%	-5.1%	5.9%	-11.1%	
1933	6.2%	-4.1%	6.1%	6.3%	
1934	5.8%	2.8%	6.2%	-5.9%	
1935	5.5%	1.4%	6.3%	6.3%	
1936	4.5%	1.4%	6.3%	11.8%	
1937	4.4%	4.0%	6.6%	0.0%	
1938	5.8%	2.6%	6.6%	0.0%	
1939	6.1%	2.5%	6.6%	2.6%	
1940	15.9%	3.7%	6.7%	2.6%	
1941	17.7%	4.7%	6.9%	2.5%	
1942	14.1%	9.0%	7.8%	4.9%	
1943	19.9%	4.1%	11.5%	2.3%	
1944	20.6%	-1.0%	11.2%	0.0%	
1945	19.8%	0.0%	12.5%	18.2%	
1946	18.1%	2.0%	15.0%	17.3%	
1947	14.9%	3.9%	15.3%	13.1%	
1948	13.0%	10.4%	15.7%	14.5%	
1949	11.6%	9.4%	16.5%	29.1%	
1950	10.3%	9.4%	23.6%	32.4%	
1951	17.2%	19.3%	25.0%	33.3%	46.9%
1952	15.7%	17.4%	26.6%	41.7%	49.6%
1953	14.9%	4.6%	26.7%	3.9%	49.9%
1954	12.9%	0.5%	27.0%	4.2%	49.1%
1955	11.9%	2.4%	27.9%	11.6%	50.6%
1956	12.1%	6.2%	31.1%	13.6%	43.9%

1957	12.7%	2.2%	32.4%	24.3%	46.3%
1958	12.0%	1.7%	33.8%	31.7%	52.6%
1959	12.1%	1.7%	41.8%	111.0%	63.5%
1960	12.1%	3.4%	43.2%	28.0%	59.1%
1961	12.9%	2.9%	43.6%	14.0%	
1962	12.4%	-0.4%	44.8%	28.1%	
1963	12.8%	0.4%		23.5%	
1964	13.7%	2.4%		22.1%	
1965	14.7%	3.9%		28.4%	
1966	15.4%	3.0%		31.8%	
1967	16.0%	3.6%		29.6%	
1968	16.5%	2.4%		16.2%	
1969	17.3%	3.1%		7.7%	
1970	18.1%	3.6%		7.0%	

Notes and Sources: Argentine average income tax rate is the unweighted average of income tax paid by each income bracket; from 1932-44 (Nacion 1935-1945), from 1945-62 (TECHINT 1963). Argentine inflation is from (OXLAD). The estimate of Argentine evasion is the estimated percentage of total income that was not declared, (Secretaria del Consejo Nacional de Desarrollo 1967). Australian average income tax rate is calculated by dividing the total income tax paid by total taxable income, calculated from (Taxation 1915-60) & (Statistics 1960-71). Australian inflation is from (Statistics 2005).

Table 5.7 – Growth rate in average Income Tax Rates minus the Growth Rate in Real GDP, 1916-70

Year	Australia	Argentina
1915		
1916	35.0%	
1917	-6.8%	
1918	35.4%	
1919	-13.7%	
1920		
1921		
1922	-14.9%	
1923	-4.2%	
1924	-4.3%	
1925	-14.5%	
1926	-3.5%	
1927	-13.2%	
1928	-2.8%	
1929	17.6%	
1930	66.1%	
1931	8.8%	
1932	-25.8%	
1933	-27.1%	-1.3%
1934	-11.5%	-6.3%

1935	-10.7%	-2.8%
1936	-23.5%	-0.7%
1937	-6.2%	-2.5%
1938	29.3%	-0.4%
1939	3.5%	-3.8%
1940	155.0%	-0.1%
1941	0.8%	-2.1%
1942	-31.9%	11.9%
1943	37.3%	48.2%
1944	7.2%	-14.0%
1945	0.8%	14.8%
1946	-4.7%	10.8%
1947	-20.4%	-8.5%
1948	-19.0%	-3.3%
1949	-17.5%	6.4%
1950	-17.8%	42.1%
1951	62.2%	2.0%
1952	-9.4%	11.3%
1953	-8.6%	-4.9%
1954	-19.7%	-2.9%
1955	-13.1%	-3.7%
1956	-1.9%	8.6%
1957	3.2%	-1.0%
1958	-10.7%	-1.7%
1959	-5.3%	30.1%
1960	-3.9%	-4.5%
1961	6.3%	-6.1%
1962	-10.3%	4.4%
1963	-3.1%	
1964	0.0%	
1965	2.8%	
1966	1.8%	
1967	-2.7%	
1968	-2.7%	
1969	-1.8%	
1970	-1.6%	

Sources: Argentine average income tax rate is the unweighted average of income tax paid by each income bracket; from 1932-44 (Nacion 1935-1945), from 1945-62 (TECHINT 1963). Argentine GDP data is from (OXLAD). Australian average income tax rate is calculated by dividing the total income tax paid by total taxable income, calculated from (Taxation 1915-60) & (Statistics 1960-71). Australian GDP data is from (Maddison 2003).

Table 5.8 – Growth rate in Income Tax Revenue minus the Growth of Average Income Tax Rates, 1916-70

Year	Australia	Argentina
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1916	102.8%	
1917	35.9%	
1918	-1.3%	
1919	45.2%	
1920	24.4%	
1921	20.3%	
1922	13.5%	
1923	-17.9%	
1924	-8.0%	
1925	16.4%	
1926	5.1%	
1927	22.4%	
1928	-1.4%	
1929	-14.7%	
1930	-53.6%	
1931	27.7%	
1932	12.6%	
1933	19.3%	21.9%
1934	-5.5%	15.6%
1935	10.1%	23.7%
1936	30.3%	-5.8%
1937	9.8%	31.0%
1938	-21.2%	11.7%
1939	2.8%	2.5%
1940	-141.9%	0.6%
1941	46.0%	-6.8%
1942	65.7%	23.2%
1943	-10.8%	-23.2%
1944	20.8%	52.9%
1945	21.1%	-29.7%
1946	7.8%	-13.7%
1947	14.7%	70.6%
1948	24.5%	-1.2%
1949	27.7%	-18.1%
1950	13.6%	-19.0%
1951	-5.1%	6.4%
1952	30.5%	-12.0%
1953	6.1%	-4.6%
1954	8.7%	-2.1%
1955	8.5%	1.4%
1956	6.2%	21.1%
1957	2.8%	-30.1%
1958	10.8%	13.5%
1959	-7.3%	-43.1%
1960	10.0%	10.0%

1961	13.3%	12.0%
1962	6.7%	-32.9%
1963	-102.9%	
1964	8.8%	
1965	14.5%	
1966	6.5%	
1967	3.0%	
1968	8.0%	
1969	8.3%	
1970	13.8%	

Sources: Argentine data is derived from (Nacion 1935-1945) for 1933-44, and from (TECHINT 1963) for 1945-62. Australian is derived from (Taxation 1915-60), (Statistics 1960-71), & (Vamplew 1987).

Sources

Primary

- Australian Bureau of Statistics (2001). Manufacturing from settlement to the start of the new century. Year Book Australia, 2001. Australian Bureau of Statistics, Canberra.
- Australian Bureau of Statistics, www.abs.gov.au, various statistics, 2005.
- Avellaneda, N. A. (1928). Discurso de Presentación por el Académico Doctor Pedro Olaechea y Alcorta. Conferencia de Nuevo Académico Doctor Nicolas A Avellaneda en el acto de su recepción, Buenos Aires, Academia Nacional de Ciencias Económicas.
- Blanco, E. A. (Ministerio de Hacienda de la Nación), (1956). La Política Presupuestaria, La Deuda Publica y La Economía Nacional. Conferencia dictada en la Escuela Superior de Guerra.
- Commissioner of Taxation, Annual Report of the Commissioner of Taxation, Parliament of the Commonwealth of Australia, Annual reports from 1915-1960.
- Commonwealth Bureau of Census and Statistics, Bulletin No. 1-10. Commonwealth Taxation, Commonwealth Bureau of Census and Statistics, Annual reports from 1960-1971.
- Corliss, J. C. (1927). Latin American Budgets, Part 1: Argentina, Uruguay, Paraguay, and Brazil. Trade Information Bulletin No. 497, Bureau of Foreign and Domestic Commerce, United States Department of Commerce.
- Espósito, J. (1940). Ley No. 775 sobre Obras Públicas - Necesidad de su Reforma. Buenos Aires, Talleres Gráficos de Ministerio de Obras Públicas.
- Fiorito, M. R. (Secretaria de Obras Publicas) (1969). Análisis económico de la evolución del gasto público en inversión en la Secretaría de Estado de Obras Públicas. Finanzas Públicas Segundas Jornadas, Trabajos Presentados en los Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi.
- Hansard Australian Parliamentary Debates, Parliament of Australia., various volumes
- Horne, J. and International Monetary Fund. Fiscal Affairs Department. (1991). Indicators of fiscal sustainability. Washington D.C., International Monetary Fund.
- Instituto Nacional de Estadísticas y Censos (INDEC). Buenos Aires, Republic of Argentina, www.indec.mecon.ar, **2005**, various statistics.
- International Monetary Fund, I. International Financial Statistics, ESDS International, www.esds.ac.uk, **2005**, Australian and Argentine time series data.
- Maddison, A. (2003). The World Economy: Historical Statistics. Paris, OECD Development Centre. **2005**.
- Mexía, E. R. (1913). Un Plan de Obras Públicas y de Finanzas. Buenos Aires, Librería Nacional.
- Ministerio de Hacienda de la Nación, "Memorias, Direccion General del Impuesto a los Reditos.", Annual Issues from 1935-1945.
- Ministerio de Hacienda de la Nación (1935). La Rebaja de Impuestos. Buenos Aires.
- Ministerio de Hacienda de la Nación (1950). La Coordinación Económica, Financiera y Administrativa como fundamento de la Prosperidad Nacional.
- Ministerio de Obras Publicas (1938). El Poder Ejecutivo Nacional 1932-38, Kraft Ltda.

- Ministerio de Obras Publicas de la Nación (1941). "Estudio sobre el régimen de ejecución de los Trabajos Públicos y del Proyecto de Plan para 1941; Informe de la Comisión Mixta nombrada por Resolución del Ministerio de Obras Públicas de 17 de enero de 1941 y del Representante del Departamento Nacional del Trabajo."
- Molina, V. M. (Ministerio de Hacienda) and Alvear, M. T. (Presidente de la Nación) (1924). Mensajes y Proyectos de Legislación Impositiva y Bancaria, Ministerio de Hacienda de la Nación, Remitidos por el P E al H Congreso de la Nación, Para ser considerados en el periodo de 1924. Buenos Aires, G Kraft.
- Newton, R. and J. Llerena (1882). Viajes y Estudios de la Comisión Argentina sobre la Agricultura, Ganadería, Organización y Economía Rural en Inglaterra, Estados- Unidos y Australia, Comisionados por el Exmo. Gobierno de Buenos Aires.
- Ortiz, R. M. (Minister of Finance, Argentina) (1936). Determined Policy of Sound Finance. The Daily Telegraph. London.
- Palacios, A. L. (1915). Presupuesto y Sistema Impositivo - Discurso que pronuncio Alfredo L Palacios, el 21 de Noviembre de 1914 en la Cámara de Diputados, al discutirse en general el presupuesto de la nación para 1915. Buenos Aires.
- Perón, J. (1950). Mensaje del Presidente de la Nación Argentina (General Juan Perón) al Inaugurar el 84 Periodo Ordinario de Sesiones del Honorable Congreso Nacional, Conceptos Doctrinarios. Buenos Aires, Subsecretaria de Informaciones de la Presidencia de la Nación.
- Poder Ejecutivo Nacional, Intervención en la Secretaria de Asuntos Técnicos (1956). Servicio de Coordinación de Trabajos Públicos - Proyecto de Creación. Buenos Aires, Taller Grafico de la Secretaria de Asuntos Técnicos.
- Prebisch, R. (1955). Informe Preliminar acerca de la Situación Económica. Buenos Aires, La Secretaría de Prensa y Actividades Culturales de la Presidencia de la Nación.
- Prebisch, R. (1956). Desarrollo Económico y Política Social. Mesa Redonda en la Universidad de Córdoba, Buenos Aires, Secretaría de Prensa de la Presidencia de la Nación.
- Republica Argentina (1914). Tercer Censo Nacional. Buenos Aires, Republic Argentina: 3-7.
- Secretaria del Consejo Nacional de Desarrollo, Sector Presupuesto Económico Nacional (1967). Estudios de Política Fiscal en la Argentina (Versión Preliminar), Republica Argentina, Presidencia de la Nación.
- Secretaria de Estado de Obras Publicas de la Nación (1966). Administración General de Obras Sanitarias de la Nación, Republica Argentina.

Secondary

- (2005). The Lucky Country, Australian Government Department of Communications, Information Technology and the Arts.
- Acemoglu, D. and J. A. Robinson (2003). Political Origins of Dictatorship and Democracy (unpublished).
- Adams, P. (2004). Odious Debts - Loose Lending, Corruption, And the Third World's Environmental Legacy, Probe International. **2005**: Electronically published book.
- Adelman, J. (1994). Frontier development : land, labour, and capital on the wheatlands of Argentina and Canada, 1890-1914. Oxford ; New York, Oxford University Press.

- Adelman, J. (1999). Republic of capital : Buenos Aires and the legal transformation of the Atlantic world. Stanford, Calif., Stanford University Press.
- Alberdi, J. B. and F. Cruz (1915). Bases y puntos de partida para la organización política de la República argentina. Buenos Aires,, La Cultura argentina.
- Alchin, T. M. (1983). "Intertemporal Comparisons of Tax Progressivity: 1950-51 to 1979-80." Australian Economic Papers 22(40).
- Alonso, P. (2000). Between revolution and the ballot box : the origins of the Argentine Radical Party in the 1890s. Cambridge, UK New York, NY, USA, Cambridge University Press.
- Amaral, S. (1988). "El descubrimiento de la financiación inflacionaria. Buenos Aires, 1790-1830." Investigaciones y Ensayos 37: 379-418.
- Amaral, S. (1998). The rise of capitalism on the pampas : the estancias of Buenos Aires, 1785-1870. Cambridge, UK ; New York, Cambridge University Press.
- Arriaga, A. D. o. G. R., Amnesty International USA (2003). The Fight Against Impunity in Argentina; Congressional Human Rights Caucus Briefing. Internet, Amnesty International USA.
- Barnard, A. (1985). Australian Government Finances: A Statistical Overview, 1850-1982. Working Papers in Economic History; no.59. Canberra, Australian National University: 48.
- Bates, R. H. (1995). Social Dilemmas and Rational Individuals: An Assessment of the New Institutionalism. The New Institutional Economics and Third World Development. J. Harris, J. Hunter and C. M. Lewis. London, Routledge.
- Bennett, S. C. (1975). Federation. Melbourne, Cassell Australia.
- Bergquist, C. W. (1998). Labor in Latin America : comparative essays on Chile, Argentina, Venezuela, and Colombia. Stanford, Calif., Stanford University Press.
- Blainey, G. (1967). The Role of Economic Interests in Australian Federation. Historical studies; selected articles, first series. J. J. Eastwood and F. B. Smith. [Carlton, Vic.] London, New York,, Melbourne University Press; Cambridge University Press: vii, 225 p.
- Blainey, G. (1980). A Land Half Won. Adelaide, Macmillan.
- Bolivar, M. Á. (1996). "Los Gastos Públicos Secretos." Boletín de Lecturas Sociales y Económicas, Pontificia Universidad Católica Argentina (Buenos Aires).
- Botana, N. R. (1994). El orden conservador : la política argentina entre 1880 y 1916. Buenos Aires, Editorial Sudamericana.
- Botana, N. R. and E. Gallo (1997). De la república posible a la república verdadera : 1880-1910. [Buenos Aires], Compañía Editora Espasa Calpe Argentina : Ariel.
- Bottini, E. B. (1931). Distribución del Impuesto. Conferencia de Extensión Universitaria, Pronunciada el 6 de Agosto de 1930 en la Sociedad "Luz", bajo el patrocinio de la Facultad de Ciencias Económicas, Buenos Aires.
- Buckley, K. D. and E. L. Wheelwright (1988). No paradise for workers : capitalism and the common people in Australia, 1788-1914. Melbourne ; New York, Oxford University Press.
- Burgin, M. (1946). The economic aspects of Argentine federalism, 1820-1852. Cambridge, Mass., Harvard University Press.
- Bushnell, D. and N. Macaulay (1994). The emergence of Latin America in the nineteenth century. New York, Oxford University Press.
- Butlin, N. G. (1985). What a way to run an empire, fiscally. Working papers in economic history ; no.55. Canberra, Australian National University: 68.

- Butlin, N. G., A. Barnard, et al. (1982). Government and capitalism : public and private choice in twentieth century Australia. Sydney ; Boston, Allen & Unwin.
- Butlin, S. J. (1953). Foundations of the Australian monetary system, 1788-1851. [Carlton], Melbourne University Press.
- Butlin, S. J. (1986). The Australian monetary system, 1851 to 1914. [s.l], J.F. Butlin.
- Cain, P. J. and A. G. Hopkins (2001). British imperialism, 1688-2000. New York, Longman.
- Capie, F. (2001). The Origins and Development of Stable Fiscal and Monetary institutions in England. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p.
- Carcano, M. A. (1972). Evolución histórica del régimen de la tierra pública, 1810-1916. [Buenos Aires], Editorial Universitaria de Buenos Aires.
- Carr, G. (2005). The proper study of mankind - A survey of human evolution. The Economist. 377.
- Cavallo, D., R. Domenech, et al. (1989). Agriculture and economic growth in Argentina, 1913-84. Washington, D.C., USA, International Food Policy Research Institute.
- Cavallo, D. and Y. Mundlak (1982). Agriculture and economic growth in an open economy--the case of Argentina. Washington, D.C., International Food Policy Research Institute.
- Centeno, M. A. (2002). Blood and debt : war and the nation-state in Latin America. University Park, Pa., Pennsylvania State University Press.
- Clark, V. S. (1908). "Australian Economic Problems. I The Railways." The Quarterly Journal of Economics, Harvard University Press 22(3): 399-451.
- Collis, B. and CSIRO (Australia) (2002). Fields of discovery : Australia's CSIRO. Crows Nest, N.S.W., Allen & Unwin.
- Cooke, S. R. and E. H. Davenport (1926). Australian Finance, Dedicated to the Imperial Conference 1926, Pelican Press.
- Cortés Conde, R. (1989). Dinero, deuda y crisis : evolución fiscal y monetaria en la Argentina, 1862-1890. Buenos Aires, Editorial Sudamericana, Instituto Torcuato di Tella.
- Cortés Conde, R. and G. T. McCandless (2001). Argentina: From Colony to Nation - Fiscal and Monetary Experience of the Eighteenth and Nineteenth Centuries. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p.
- Cottely, E. (1981). "Características Básicas de la Gestión Fiscal en la Argentina." Boletín Techint 223: 42-76.
- Crafts, N. (1977). "Industrial Revolution in England and France: Some Thoughts on the Question, "Why was England First?"" The Economic History Review 30(3).
- Crafts, N. and A. J. Venables (2003). Globalization in History, A Geographical Perspective. Globalization in historical perspective. M. D. Bordo, A. M. Taylor and J. G. Williamson. Chicago, University of Chicago Press: ix, 588 p.
- Cuccorese, H. J. (1966). Historia Económica Argentina (1862-1930). Buenos Aires, El Ateneo.
- Daunton, M. J. (2001). Trusting Leviathan : the politics of taxation in Britain, 1799-1914. Cambridge, UK ; New York, NY, Cambridge University Press.

- de Garis, B. (1999). Federation. The Australian century : political struggle in the building of a nation. R. Manne. Melbourne, Text Publishing: 333.
- Della Paolera, G. (1988). How the Argentine economy performed during the international gold standard : a reexamination: viii, 199 leaves.
- Della Paolera, G. and A. M. Taylor (2001). Straining at the anchor : the Argentine Currency Board and the search for macroeconomic stability, 1880-1935. Chicago, University of Chicago Press.
- Della Paolera, G. and A. M. Taylor (2003). A new economic history of Argentina. Cambridge ; New York, Cambridge University Press.
- Dell'Oro Maini, A. (1920). "El Impuesto Sobre la Renta, y su aplicacion en la Republica Argentina." Tesis Premiada por la Facultad de Derecho y Ciencias Sociales de Buenos Aires.
- Díaz Alejandro, C. F. (1970). Essays on the economic history of the Argentine Republic. New Haven,, Yale University Press.
- Díaz Alejandro, C. F. and A. Velasco (1988). Trade, development, and the world economy : selected essays of Carlos F. Diaz-Alejandro. Oxford, UK ; New York, NY, USA, B. Blackwell.
- Domenech, R., D. Cavallo, et al. (1986). "Estadísticas de la evolución económica de Argentina, 1913-1984." Estudios, Instituto de Estudios Economicos sobre la Realidad Argentina y Latinoamericana (IEERAL) Vol. 9: 103-84.
- Dornbusch, R. and J. C. d. Pablo (1987). "Argentina: Debt and Macroeconomic Stability." NBER Working Paper Series(2378).
- Duncan, T. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. Argentina and Australia, Essays in comparative economic development. A. E. Dingle and D. T. Merrett. Melbourne, Monash University.
- Duncan, T. and J. Fogarty (1984). Australia and Argentina : on parallel paths. Carlton Vic, Melbourne University Press.
- Dunkerley, J., Ed. (2002). Studies in the formation of the nation-state in Latin America. London, Institute of Latin American Studies.
- Eastwood, J. J. and F. B. Smith (1967). Historical studies; selected articles, first series. [Carlton, Vic.] London, New York,, Melbourne University Press; Cambridge University Press.
- Eaton, K. (2001). "Decentralisation, Democratisation and Liberalisation: The History of Revenue Sharing in Argentina, 1934–1999." Journal of Latin American Studies **33**(1): 1-28.
- Engerman, S. L. and K. L. Sokoloff (1997). Factor Endowments, Institutions, and Differential Paths of Economic Growth Among New World Economies: A View from Economic Historians of the United States. How Latin America fell behind : essays on the economic histories of Brazil and Mexico, 1800-1914. S. H. Haber. Stanford, Calif., Stanford Unviversity Press: xi, 315 p.
- Engerman, S. L. and K. L. Sokoloff (2002). "Factor Endowments, Inequality, and Paths of Development among New World Economies." National Bureau of Economic Research Working Paper 9259.
- Ferns, H. S. (1960). Britain and Argentina in the nineteenth century. Oxford [Eng.], Clarendon Press.
- Ferns, H. S. (1992). "The Baring Crisis Revisited." Journal of Latin American Studies **24**(2): 241-273.
- Flannery, T. F. (1995). The future eaters : an ecological history of the Australasian lands and people. New York, G. Braziller.

- Fogarty, J. (1985). The Role of the Export Sector in Industrialisation: The Australian and Argentine Experience Compared. Argentina and Australia, Essays in comparative economic development. A. E. Dingle and D. T. Merrett, Economic History Society of Australia and New Zealand, Monash University. **Occasional Papers No. 1.**
- Fogarty, J. (1985). Staples, Super-Staples and the Limits of Staple Theory: the Experiences of Argentina, Australia and Canada Compared. Argentina, Australia, and Canada - Studies in Comparative Development 1870-1965. D. C. M. Platt and G. Di Tella. Oxford, Macmillan.
- Fundación de Investigaciones Económicas Latinoamericanas (1987). "El Gasto Público en la Argentina, 1960-1985." Boletín Informativo TECHINT(350).
- Fundación de Investigaciones Económicas Latinoamericanas (1991). El Gasto Público en la Argentina 1960-1988. Buenos Aires, (FIEL) Fundación de Investigaciones Económicas Latinoamericanas.
- Gerchunoff, P. and L. Llach (1998). El ciclo de la ilusión y el desencanto : un siglo de políticas económicas argentinas. [Buenos Aires], Ariel : Compañía Editora Espasa Calpe Argentina.
- Gibson, E. L. (1996). Class and conservative parties : Argentina in comparative perspective. Baltimore, Johns Hopkins University Press.
- Gibson, H. (1893). The history and present state of the sheep-breeding industry in the Argentine Republic. Buenos Aires,, Ravenscroft and Mills, Edinburgh.
- Goodrich, C. (1964). "Argentina as a New Country." Comparative Studies in Society and History 7(1): 70-88.
- Groenewegen, P. D. and B. J. McFarlane (1990). A history of Australian economic thought. London ; New York, Routledge.
- Grossman, H. I. (2001). The State in Economic History. Transferring wealth and power from the old to the new world : monetary and fiscal institutions in the 17th through the 19th century. M. D. Bordo and R. Cortés Conde. Cambridge, UK ; New York, Cambridge University Press: x, 482 p.
- Haber, S. H., N. Maurer, et al. (2003). The politics of property rights : political instability, credible commitments, and economic growth in Mexico, 1876-1929. Cambridge ; New York, Cambridge University Press.
- Halperín Donghi, T. (1982). Guerra y finanzas en los orígenes del estado argentino (1791-1850). Buenos Aires, República Argentina, Editorial de Belgrano.
- Heaton, H. (1925). "The Taxation of Unimproved Value of Land in Australia." The Quarterly Journal of Economics, Harvard University Press.
- Herschel, J. F. and S. Itzcovich (1957). "Fiscal Policy in Argentina." Public Finance XII(2 & 3).
- Hirschman, A. O. (1981). Essays in trespassing : economics to politics and beyond. Cambridge [Eng.] ; New York, Cambridge University Press.
- Hirschman, A. O. (1992). Rival views of market society and other recent essays. Cambridge, Mass., Harvard University Press.
- Hobbes, T. (2004). Leviathan : or, The matter, forme, & power of a common-wealth ecclesiasticall and civill. New York, Barnes & Noble Books.
- Hobson, J. M. (1997). The wealth of states : a comparative sociology of international economic and political change. Cambridge ; New York, Cambridge University Press.
- Hora, R. (2001). The landowners of the Argentine Pampas : a social and political history, 1860-1945. Oxford , New York, Clarendon Press Oxford University Press.

- Howell, P. (1899). "Comparative Statistics of Australasian Railways." Journal of the Royal Statistical Society **62**(1): 83-124.
- Hueyo, E. (1918). "El Impuesto a la Renta." Revista de Economía Argentina **Tomo I**.
- Hueyo, E. (1925). "Impuesto a la Renta - Critica al Proyecto del Ministro Molina." Revista de Economía Argentina **Tomo 14**(No. 79-80).
- Irigoin, M. A. (2000). "Finance, Politics and Economics in Buenos Aires, 1820s-1860s: The Political Economy of Currency Stabilisation."
- Irigoin, M. A. (2003). Macroeconomic aspects of Spanish American Independence: The effects of fiscal and currency fragmentation, 1800s-1850s. The 63rd Annual Meeting of Economic History Association, Nashville, Tennessee.
- Jèze, G. (1923). Las Finanzas Públicas de la Republica Argentina, La Facultad de Ciencias Económicas de la Universidad de Buenos Aires y en el Instituto Popular de Conferencias de "La Prensa" bajo los auspicios del Instituto de la Universidad de París en Buenos Aires.
- Jones, G. (1993). British multinational banking, 1830-1990. Oxford, Oxford University Press.
- Levi, M. (1988). Of rule and revenue. Berkeley, University of California Press.
- Lewis, C. M. (1983). British railways in Argentina, 1857-1914 : a case study of foreign investment. London, Athlone.
- Lloyd, C. (2002). "Regime Change in Australian Capitalism: Towards a Historical Political Economy of Regulation." Australian Economic History Review **42**(3): 238-266.
- Lloyd, C. (2003). Economic policy and Australian state building: from labourist-protectionism to globalisation. Nation, state, and the economy in history. A. Teichova and H. Matis. Cambridge ; New York, Cambridge University Press: xvi, 450 p.
- López, A. T. (1957). "Las sistemas fiscales como generadores de deshonestidad." Revista de Ciencias Económicas **62**.
- Luisi, D. E. (1934). "Estado de la deuda publica por Presidencia, 1910-1931." La Revista de Ciencias Económicas **Año 22**(154): 363-79.
- Lynch, J. (2001). Argentine caudillo : Juan Manuel de Rosas. Wilmington, Del., SR Books.
- Macintyre, S. (2004). A concise history of Australia. Cambridge, UK ; New York, Cambridge University Press.
- Mann, A. J. and W. E. Schulthess (1981). "Nivel y la Composición del Gasto del Sector Gubernamental de la Republica Argentina, 1930-1977." Desarrollo Económico **21**(82).
- Manne, R. (1999). The Australian century : political struggle in the building of a nation. Melbourne, Text Publishing.
- Manzetti, L. (1999). Privatization South American style. Oxford ; New York, Oxford University Press.
- Marichal, C. (1989). A century of debt crises in Latin America : from independence to the Great Depression, 1820-1930. Princeton, N.J., Princeton University Press.
- Martin, G. (2001). Australia, New Zealand, and federation, 1883-1901. London, Menzies Centre for Australian Studies, King's College, London.
- Mata, C. G. (1929). "La Deuda Publica Argentina, Comparada con las de Otros Países." Revista de Economía Argentina **23**(136).
- McLean, I. W. (1996). "Recovery from the Depression: Australia in an Argentine Mirror." Unpublished.

- McLean, I. W. and A. M. Taylor (2001). "Australian Growth: A California Perspective." NBER Working Paper Series Working Paper 8408: 30.
- McMichael, P. (1984). Settlers and the agrarian question : foundations of capitalism in colonial Australia. Cambridge [Cambridgeshire] ; New York, Cambridge University Press.
- Mehlum, H., K. Moene, et al. (2006). "Institutions and the Resource Curse." The Economic Journal **116**(508): 1-20.
- Milward, A. S. and Economic History Society. (1984). The economic effects of the two world wars on Britain. London, Macmillan.
- Mitchell, B. R. (2003). International historical statistics : Africa, Asia & Oceania, 1750-2000. Houndmills, Basingstokes, Hampshire ; New York, Palgrave Macmillan.
- Mitchell, B. R. (2003). International historical statistics : the Americas, 1750-2000. Houndmills, Basingstoke, Hampshire ; New York, Palgrave Macmillan.
- Mó, F. F. (1977). Régimen Legal de las Obras Publicas - Doctrina, Legislación, Jurisprudencia. Buenos Aires, Depalma.
- Montequin, A. (1995). "Sector publico y sistema tributario argentino, 1914-1932." Ciclos (año 5) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires **5**(9).
- Moran, T. H. (1970). "The "Development" of Argentina and Australia: The Radical Party of Argentina and the Labor Party of Australia in the Process of Economic and Political Development." Comparative Politics **3**(1): 71-92.
- Mulhall, M. G. (1899). The dictionary of statistics. London., G. Routledge and Sons.
- Mulhall, M. G. and E. T. Mulhall (1892). Handbook of the river Plate. Buenos Ayres, London, M.G. and E. T. Mulhall: K. Paul, Trench & co.
- Norris, R. (1975). The emergent Commonwealth : Australian federation, expectations and fulfilment 1889-1910. Carlton, Vic., Melbourne University Press.
- North, D. C. (1990). Institutions, institutional change, and economic performance. Cambridge ; New York, Cambridge University Press.
- North, D. C. (2003). "The Role of Institutions in Economic Development - Gunnar Myrdal Lecture." UNECE Occasional Paper.
- North, D. C., W. Summerhill, et al. (2000). Order, Disorder and Economic Change: Latin America vs. North America. Governing for prosperity. B. Bueno de Mesquita and H. L. Root. New Haven, Conn., Yale University Press: vi, 266 p.
- North, D. C. and R. P. Thomas (1973). The rise of the Western world : a new economic history. Cambridge, Cambridge University Press.
- Nurkse, R. (1954). "International Investment To-Day in the Light of Nineteenth-Century Experience." The Economic Journal **64**(256): 744-58.
- O'Brien, P. K. (1988). "The Political Economy of British Taxation, 1660-1815." The Economic History Review **41**(1): 1-32.
- Olson, M. (1971). The logic of collective action; public goods and the theory of groups. Cambridge, Mass., Harvard University Press.
- Olson, M. (1982). The rise and decline of nations: economic growth, stagflation, and social rigidities. New Haven, Yale University Press.
- Olson, M. (1993). "Dictatorship, Democracy, and Development." The American Political Science Review **87**(3): 567-576.
- Ormerod, P. (1999). Butterfly economics : a new general theory of social and economic behavior. New York, Pantheon Books.
- Oszlak, O. (2004). La formación del Estado argentino - Orden, progreso y organización nacional. Buenos Aires, Ariel.

- Oszlak, O., A. Fontana, et al. (1982). La formación del estado argentino. Buenos Aires, Republica Argentina, Editorial de Belgrano.
- OXLAD Oxford Latin American Economic History Database, Latin American Centre of Oxford University.
- Parker, R. S. (1967). Australian Federation: the Influence of Economic Interests and Political Pressures. Historical studies; selected articles, first series. J. J. Eastwood and F. B. Smith. [Carlton, Vic.] London, New York,, Melbourne University Press; Cambridge University Press: vii, 225 p.
- Patterson, E. F. (1956). "The Extent and Pattern of the Expenditures of the Argentine National Government." Public Finance **XI**(1).
- Peire, J. J. (1959). Evasión Impositiva. Buenos Aires, Talleres Gráficos "Fanetti".
- Pinedo, F. (1956). El Fatal Estatismo. Buenos Aires, Guillermo Kraft Ltda.
- Pinkstone, B., D. Meredith, et al. (1992). Global connections : a history of exports and the Australian economy. Canberra, AGPS Press.
- Platt, D. C. M. and G. Di Tella (1985). Argentina, Australia, and Canada : studies in comparative development, 1870-1965. London, Macmillan in association with St. Antony's College, Oxford.
- Potash, R. A. (1980). The Army & Politics in Argentina 1945-1962, Perón to Frondizi. London, The Athlone Press.
- Potter, A. L. (1981). "The Failure of Democracy in Argentina 1916-1930: An Institutional Perspective." Journal of Latin American Studies **13**(1).
- Quesada, E. (1894). Reorganización del Sistema Rentístico Federal - El Impuesto sobre la Renta. Reorganización del Sistema Rentístico Federal - El Impuesto sobre la Renta, Los salones del Ateneo, Arnoldo Moen.
- Ramm Doman, R. A. (1932). "El Impuesto a la Renta - Su Forma y Su Aplicación." Revista De Economía Argentina **Tomo 29**(No 172).
- Reutz, T. (1991). "Ilusiones Fiscales, dimensión y método de financiamiento del déficit fiscal del gobierno, 1928-1972." Ciclos (año 1) - Instituto de Investigaciones de Historia Económica y Social, Facultad de Ciencias Económicas, Universidad de Buenos Aires **1**(1).
- Rock, D. (1975). Politics in Argentina, 1890-1930 : the rise and fall of radicalism. Cambridge, Eng., Cambridge University Press.
- Rock, D. (1987). Argentina, 1516-1987 : from Spanish colonization to Alfonsín. Berkeley, University of California Press.
- Rodríguez, C. J. (1940). "La Experiencia Financiera Argentina - El Crecimiento de los Gastos Públicos." Revista de Economía Argentina **Tomo 39**(N° 262-3).
- Rodriguez O, J. E. (1998). The independence of Spanish America. Cambridge, U.K. ; New York, Cambridge University Press.
- Rostow, W. W. (1960). The stages of economic growth, a non-Communist manifesto. Cambridge [Eng.], University Press.
- Sabato, H. (1990). Agrarian capitalism and the world market : Buenos Aires in the pastoral age, 1840-1890. Albuquerque, University of New Mexico Press.
- Sabato, H. (2001). The many and the few : political participation in republican Buenos Aires. Stanford, Calif., Stanford University Press.
- Sabato, H. and A. R. Lettieri (2003). La vida política en la Argentina del siglo XIX : armas, votos y voces. México ; Estados Unidos de America ; Buenos Aires, Fondo de Cultura Economica.
- Sabato, J. F. (1988). La clase dominante en la Argentina moderna : formación y características. Buenos Aires, Argentina, CISEA : Grupo Editor Latinoamericano.

- Sánchez Román, J. A. (2004). "Chapter 2: Economic Elites, Regional Cleavages, and the Introduction of the Income Tax in Argentina." Unpublished.
- Sarmiento, N. (1909). "El Impuesto Progresivo - Sobre la Propiedad y la Renta como base del Sistema Tributario." Anales de la Sociedad Científica Argentina LXVII(Primer semestre de 1909).
- Schedvin, C. B. (1990). "Staples and Regions of Pax Britannica." The Economic History Review **43**(4): 533-59.
- Schwartz, H. (1989). "Foreign Creditors and the Politics of Development in Australia and Argentina, 1880-1913." International Studies Quarterly **33**(3): 281-301.
- Scobie, J. R. (1967). Revolution on the Pampas; a social history of Argentine wheat, 1860-1910. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press.
- Seifert, R. (2005). Sugieren medidas para el campo - Las opiniones de la UCR, ARI, y Recrear. La Nación. Buenos Aires: 1, 16.
- Sewell Jr, W. H. (1967). "Marc Bloch and the Logic of Comparative History." History and Theory **6**(2): 208-18.
- Smith, D. A., D. J. Solinger, et al. (1999). States and sovereignty in the global economy. London ; New York, Routledge.
- Smith, J. "Progressivity of the Commonwealth Personal Income Tax, 1917-1997." The Australian Economic Review **34**(3): 263-278.
- Smith, J. (1993). Taxing Popularity - The Story of Taxation in Australia. Canberra, Federalism Research Centre, The Australian National University.
- Snider, L. M. (1987). "Identifying the Elements of State Power - Where Do We Begin?" Comparative Political Studies **20**(3): 314-356.
- Solberg, C. E. (1970). Immigration and nationalism, Argentina and Chile, 1890-1914. Austin,, Published for the Institute of Latin American Studies by the University of Texas Press.
- Soto, H. d. (2000). The mystery of capital : why capitalism triumphs in the West and fails everywhere else. New York, Basic Books.
- Stone, I. (1999). The global export of capital from Great Britain, 1865-1914 : a statistical survey. New York, St. Martin's Press.
- TECHINT (1963). "Sistema Impositivo y la Presion Tributaria." Boletin TECHINT **134**: 13-56.
- Torgler, B. and K. Murphy (2004). "Tax Morale in Australia: What Factors Shape it and has it Changed over Time?" Manuscript re-submitted to Journal of Australian Taxation.
- Tornquist Ernesto & cia limitada Buenos Aires. (1920). El desarrollo economico de la Republica Argentina en los ultimos cincuenta anos. Buenos Aires,.
- Treber, S. (1969). Tendencia a la inversión real del sector público argentino. Finanzas Públicas - Segundas Jornadas, Trabajos Presentados en las Segundas Jornadas de Finanzas Públicas, Córdoba, Ediciones Macchi.
- Trevisán, E. (1932). Reforma del Régimen Rentístico Argentina. Buenos Aires, Talleres S A Casa Jacobo Peuser.
- Vamplew, W. (1987). Australians: historical statistics. Broadway, NSW, Fairfax Syme & Weldon.
- Vazquez, R. I. (1938). Cuestiones de Aministracion Publica. Buenos Aires, La Facultad.
- Vazquez-Presedo, V. (1971). Estadísticas historicas argentinas (comparadas). Buenos Aires,, Ediciones Macchi.

- Veganzones, M.-A. and C. Winograd (1997). Argentina in the 20th century : an account of long-awaited growth. Paris, Development Centre of the Organisation for Economic Co-operation and Development.
- Vizcaíno, J. G. (1972). La Deuda Publica Nacional. Buenos Aires, EUDEBA - Editorial Universitaria de Buenos Aires.
- Walsh, C. (1988). Federalism Australian Style: Towards Some New Perspectives. Taxation and fiscal federalism : essays in honour of Russell Mathews. R. L. Mathews, G. Brennan, B. S. Grewal and P. D. Groenewegen. Sydney ; New York, Australian National University Press: xvii, 250 p.
- Watkins, M. H. (1963). "A Staple Theory of Economic Growth." The Canadian Journal of Economics and Political Science **XXIX**(2).
- Webber, C. and A. B. Wildavsky (1986). A history of taxation and expenditure in the Western world. New York, Simon and Schuster.
- Weiss, L. and J. M. Hobson (1995). States and economic development : a comparative historical analysis. Cambridge, MA, Polity Press.
- Wong, R. B. (1997). China transformed : historical change and the limits of European experience. Ithaca, Cornell University Press.