#### The London School of Economics and Political Science

The Political Economy of Unemployment, Labour Market Institutions and Macroeconomic Policies in Open Economies:

The Cases of Germany and the Netherlands in the 1980s and 1990s

### Sotiria Theodoropoulou

A thesis submitted to the European Institute of the London School of Economics and Political Science for the degree of Doctor of Philosophy, London, July 2008

#### **Declaration**

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work.

The copyright of this thesis rests with the author. Quotation from it is permitted, provided that full acknowledgement is made. This thesis may not be reproduced without the prior written consent of the author.

I warrant that this authorization does not, to the best of my belief, infringe the rights of any third party.

For Kristian

#### **Abstract**

The question that this thesis addresses is how western European countries with regulated labour markets managed to reduce their unemployment rates in the 1980s and 1990s. Most of the accounts in mainstream economics literature have been trying to explain this turnaround in performance in terms of labour market reforms that were undertaken in the direction of deregulation and by stressing potential interactions between such reforms in labour market policies, backing their claims with econometric evidence that is usually not robust.

This thesis takes a different approach both theoretically and empirically. Theoretically, it develops the hypothesis that in open economies, coordinated collective wage bargaining can lead to moderate wage/price outcomes in the presence of conservative/stability oriented macroeconomic policies even in the presence of generous labour market protection policies. Moreover, in countries with regulated labour markets, the effectiveness of moderate bargaining outcomes and labour market reforms in combating unemployment will depend on the size and openness of the economy: the smaller and more open an economy is, the more effective moderate bargaining outcomes and labour market reforms will be in reducing the equilibrium rate of unemployment. This hypothesis is an alternative to the 'deregulation thesis' rather than a competing one. This hypothesis is explored and further qualified in this thesis through qualitative comparative analysis-QCA with fuzzy-sets and the detailed study of the cases of the Netherlands and Germany in the 1980s and the 1990s.

The upshot of the analysis of this thesis is that the effects of labour market policies and institutions on labour market performance should be considered within the context of macro-level institutions (e.g. macroeconomic policies) and characteristics (e.g. openness to trade) if we want to accurately assess the need to reform them.

## **Table of Contents**

Acknowledge	ements	10
Chapter 1.	Introduction	12
1.1 Ove	erview	12
1.2 Une 13	employment and Labour Market Policies in Europe: The Stylised I	Facts
1.3 Lite	erature Review	18
1.3.1 determin	The role of labour market (protection) policies and institution ing the ERU in an open economy	
1.3.2 institutio	The role of collective wage bargaining and monetary points in determining the ERU	
1.4 Hyp	ootheses and Research Design	29
1.5 Out	line of the Thesis	32
-	The determinants of the equilibrium rate of unemployment in abour market institutions and macroeconomic policy orientation	-
2.1 Ove	erview	34
	Political Economy of Unemployment, Labour Market Institutions omic Policies in Open Economies: The Hypotheses	
2.2.1 Economi	Explaining Moderate Wage Bargaining Outcomes in Gies: Labour Market Institutions and Macroeconomic Policies	
2.2.2 in Comb	The Effectiveness of Wage Moderation and Labour Market Refeating Unemployment	
2.3 Em	pirically observable predictions and selection of empirical approac	h 45
2.4 Con	nclusions	51
Policies on	The Effects of Labour Market Institutions and Macroecond Unemployment in Open Economies: A Qualitative Compart Fuzzy Sets	ative
3.1 Ove	erview	53
	liminary Analysis: The Population of Cases and the Calibratio	
3.2.1	The Population of Cases	55
3.2.2	Defining and Calibrating the Fuzzy-sets	59
-	ploring the Existence of Necessary and/or Sufficient Conditions in the 1990s	
3.3.1	Necessary Conditions	75
3.3.2	Sufficient Conditions	79

3.4	Discussion of the Results	94
3.5	Conclusions	99
3.6	Annex1	01
3.6.1	Constructing the Hard Currency Index 1	01
hapter 4 the 198	Selecting Case-Studies: The puzzle of the Netherlands and Germa 80s and 1990s	
4.1	Overview	08
4.2	Criteria for the Case Selection	.09
4.2.1	Substantiating the QCA results	.09
4.2.2	Setting Up a Test for the Second Hypothesis of this Thesis 1	10
4.3 Unemp	The Netherlands and Germany: Stylised Facts on and Accounts of the ployment Performance	
4.3.1 Neth	Unemployment Performance and Labour Market Policies in nerlands and Germany: Stylised Facts	
4.3.2 Styli	Explaining the Dutch and German Unemployment Performance (ised Accounts	
4.4	Conclusions	25
4.5	Appendix	27
hapter 5 egulated	The Political Economy of Unemployment in Open Economies well Labour Markets: The Case of the Netherlands in the 1980s and 1990s 1	
5.1	Overview1	30
5.2	The policy and institutional framework shaping wage-setting behavior 131	oui
5.3	The determinants of moderate wage bargaining outcomes	.37
	Aggregate demand conditions and the effectiveness of moderning outcomes and labour market reforms in combating unemployment 1	
5.5	Conclusions	55
hapter 6 egulateo	The Political Economy of Unemployment in Open Economies well Labour Markets: the Case of Germany in the 1980s and 1990s	
6.1	Overview	57
6.2	The Policy and Institutional Framework Shaping Wage-Setting Behavior 158	oui
6.3	The Determinants of Moderate Wage Bargaining Outcomes	62
6.4 and La	Aggregate Demand Conditions and the Effectiveness of Wage Moderat bour Market Reforms in Combating Unemployment	
6.5	Conclusions	81

	n Open Economies: Lessons from Western Europe in the 1980s and 1990s 184
7.1	Overview
7.2	Lessons from the Netherlands and Germany
7.3	The German and Dutch Experiences in Perspective
7.4	Conclusions 196
Chapter 8	Conclusions
8.1	Key Messages of this Thesis
8.2	Theoretical, Policy and Methodological Implications of this Thesis 201
8.2.1	Theoretical implications
8.2.2	2 Methodological implications 205
8.2.3	Policy Implications
8.3	Limitations and avenues for further research
8.4	Some Final Thoughts
_	1 Raw values of Average Standardised Unemployment Rates in the 1990s Corresponding Fuzzy-set Values
	Corresponding Fuzzy-set Values
betw	veen 1990 and 1999 and Corresponding Fuzzy-set Values
_	3 Raw Values of Hard Currency Index in the 1990s and corresponding sy-set membership values
_	4 Regulated Labour Market in Small Open Economy as a Sufficient dition for Good Unemployment Performance in the 1990s
Mon	.5 Regulated Labour Market in Open Economy with Conservative letary Policy and Stability-Oriented Fiscal Policy as a Sufficient Condition Good Unemployment Performance in the 1990s
Cons	6 Regulated Labour Market in Open Economy with Either Small Size On servative/Stability Oriented Macroeconomic Policies as Sufficient ditions for Good Unemployment Performance in the 1990s
	7 Aspects of Labour Market Regulation as Sufficient Conditions for Bac mployment Performance in the 1990s
macı	3.8 Small Open Economy with conservative/stability-oriented roeconomic policies and poor labour market protection policies as a cient condition for Good Unemployment Performance in the 1990s 106

policy and uncoordinated collective wage bargaining as a Sufficient Condition for Good Unemployment Performance in the 1990s
Figure 3.10 Open, large economy with deregulated labour market and a hard currency as a sufficient condition for good unemployment performance in the 1990s
Figure 3.11. Large, closed economy with regulated labour market, a hard currency and as a sufficient condition for Good Unemployment Performance in the 1990s
Figure 4.1 Unemployment Rates in the Netherlands and Germany, 1970-1999 113
Figure 4.2 Inflation Rate (CPI) in the Netherlands, Germany and Europe 114
Figure 4.3 Equilibrium Rate of Unemployment (NAWRU) in the Netherlands and Germany, 1970-1999 (Source: OECD Economic Outlook, Vol.81)
Figure 4.4 Wage-setting and Equilibrium Unemployment Rate in a New Keynesian Framework
Figure 4.5 Wage Moderation (i.e. shifts in the wage-setting curve) in the Netherlands and Germany, 1970-1999 (1970=100) (Source: Estevao 2005) 116
Figure 5.1 Real Effective Exchange Rate vis-à-vis EU-15 (double weights) 143
Figure 6.1 Nominal and Real Effective Exchange Rate of the German Mark vis-à-vis the EU15 (Source: AMECO database)
List of Tables
Table 1.1 Unemployment Rates in the OECD area, 1970-1999 (Source: AMECO database)
Table 1.2 Share of all possible OECD Jobs Strategy Recommendations for Labour Market Reforms received by country, 1994
Table 1.3 Different Regimes of Labour Market Functioning (2006)
Table 3.1 Summary of Fuzzy-sets to be calibrated
Table 3.2 Analysis of Necessary Conditions for Cases with 'Good Unemployment Performance in the 1990s' (i.e. those with membership >0 in the outcome LOWUN)
Table 3.3 Analysis of Necessity applied to countries with 'Absence of Good Unemployment Performance in the 1990s' (i.e. those with membership >0 in the outcome ~LOWUN)
Table 3.4 Truth Table: BC*LMPOL*CBI*OPEN*HCI*POP→LOWUN
Table 3.5 Truth Table: BC*LMPOL*CBI*OPEN*HCI*POP→ lowun
Table 3.6 Solution Set: Model: BC*LMPOL*CBI*OPEN*HCI*POP→LOWUN. 85

Table 3.7 Summary of Causal Pathways/Sufficient Conditions for (Good) Unemployment Performance in the 1990s
Table 3.8 Solution Set: Model: BC*LMPOL*CBI*OPEN*HCI*POP→lowun 93
Table 3.9 Summary of Causal Pathways/Sufficient Conditions for Bad Unemployment Performance in the 1990s in cases with aspects of Labour Market Regulation
Table 3.10 Outcome of Interest and Hypothesised Causal Factors: Raw Values 102
Table 3.11 Outcome of Interest and Hypothesised Causal Factors: Fuzzy-set Membership Scores
Table 3.12 Fuzzy-set Membership to Solutions/Causal Pathways of Model BC*LMPOL*SMALL*OPEN*CBI*HCI → LOWUN
Table 3.13 Fuzzy-set membership to Solutions/Causal Pathways of Model BC*LMPOL*OPEN*SMALL*CBI*HCI → lowun
Table 4.1 Similarities and Differences between the Netherlands and Germany, 1980s-1990s
Table 6.1 Reform Effort (OECD Jobs Strategy) in the Netherlands and Germany, 1994-1999

#### ACKNOWLEDGEMENTS

This thesis is the product of a journey adventurous and long enough to be comparable to an Odyssey. In the course of my Odyssey, I was fortunate to benefit from the material, intellectual and moral support of several people and institutions.

The Bodossakis Foundation in Athens generously funded the first three years of my studies while the European Institute supported me with a studentship in 2004-5. I am also thankful to Professor Loukas Tsoukalis both for having strongly encouraged me to leave Greece to pursue my doctoral studies and for having been my supervisor at the European Institute during the first two years of my registration.

I am most grateful to Bob Hancké and Waltraud Schelkle, who saw me through this project. Both taught me great research design skills, introduced me to some fascinating strands of political economy literature and pushed me to learn to think independently, often by fundamentally disagreeing not only with me but also with each other. Neither lost their faith in me, even though I suspect that I tested their patience at times, and they generously ensured that I was granted the time and space I needed to grow and complete my journey. I am especially thankful for their unfailing support during the last two years, without which I doubt whether I would have kept my momentum to finish while holding a full-time job.

During my Odyssey, I benefited from participating in a great doctoral research seminar at the European Institute. I am grateful to all the participants for their helpful comments on earlier draft chapters of this dissertation, and most of all to David Soskice and Marco Simoni for taking extra time to discuss my ideas with me

I am indebted to Xavier Debrun, John Schmitt and Marcello Estevao for having generously given me access to their extensive datasets. The information included there was invaluable for my empirical analysis.

This journey would certainly not have been as worthwhile if it had not been for the great and greatly supportive friends I made while practically living in J14, especially Andreas, Daphne, Tome Caroline, Maria, Daphne, Emma, Dermot, Diego and Lauren. Special thanks are also due to Yorgos Zouros, Maria Troupi and Camilo Micolta for having been there for me always but especially during the most difficult of times.

The all but final version of this thesis was written while I worked at the Institute of International Integration Studies of Trinity College Dublin. I would like to thank the local seminar participants for their useful comments on late versions of my thesis. I am also very grateful to my friends and colleagues at IIIS, Carla and Sanjay, for having made those very long and grey working days in Dublin feel a little shorter and brighter.

Nikos Koutsiaras believed in me several years before any of my supervisors or I did. He has been a great teacher, a dearest friend and my most enthusiastic cheerleader since I first took an interest in labour market issues during my

postgraduate studies in Athens. His intellectual and moral support and personal example have been a source of inspiration and kept my perseverance in finishing this project strong.

My parents, Dionyssis and Irene, provided me with great early education opportunities and amounts of love large enough to allow me to believe that I could make things happen, even when the going got tough and, as in this case, long. Μαμά και Μπαμπά, σας ευχαριστώ για όλα!

My greatest debt though is with my beloved Kristian, the best company I could have ever wished for during an Odyssey. For his infinite patience, love, enduring sense of humour, support and encouragement, his cooking notwithstanding, I hope that the rest of our life will be long enough for me to express my gratitude in full. This thesis is dedicated to him.

Whatever errors or repetitions remain in the text of this thesis, I herewith declare them to be signs of deliberate imperfection.

London, Dublin and Athens, July 2008

#### CHAPTER 1. INTRODUCTION

#### 1.1 Overview

The question that this thesis addresses is how western European countries with 'regulated' labour markets managed to reduce their unemployment rates in the 1980s and 1990s. The term 'regulated labour markets' will be used in this thesis to characterise labour markets with generous non-employment benefits, strict employment protection legislation and an important role for collective bargaining in wage determination. How were these policies and institutions compatible with good unemployment performance in the 1980s and 1990s and to what extent should the labour market reforms towards deregulation that took place during that period be credited for the low unemployment rates observed in several western European countries?

Early 1990s diagnoses for the persistently high unemployment rates in Europe pointed the finger to one or all of the above labour market policies and institutions and the rigidities they caused and consequently, prescribed reforms to 'deregulate' labour markets (Layard et al. 1991; OECD 1994). Reforms did take place almost everywhere in Western Europe and while they often concerned more than one labour market policy areas, they stopped short from turning western European labour markets in the Continent and Scandinavia into 'deregulated' ones. Unemployment rates also declined, in several cases dramatically. Most of the accounts in mainstream economics literature have been trying to explain the turnaround in performance in terms of labour market reforms that were undertaken in the direction of deregulation. These claims have been backed by econometric evidence that often lacks robustness (Baker et al. 2005; Baccaro and Rei 2007), while it also seems to do a pretty poor job in explaining the evolution of labour market policies and unemployment performance over time (Blanchard 2007).

This thesis brings together and expands upon the insights of New Keynesian economics and institutional political economy literatures on the institutional determinants of the equilibrium rate of unemployment (henceforth 'ERU') to answer the above questions. The hypotheses that will be developed and tested

empirically attempt to explain unemployment performance in Western Europe because of 'regulated labour markets' rather than in spite of them. Empirically, this thesis explores its hypotheses through qualitative comparative analysis-QCA with fuzzy-sets and the detailed study of the cases of the Netherlands and Germany.

The rest of this chapter will explain how the questions of this thesis arise empirically and theoretically, outline the hypotheses, the approach taken to test them and the findings of this thesis. It will also provide a roadmap of the chapters that will follow.

## 1.2 Unemployment and Labour Market Policies in Europe: The Stylised Facts

Unemployment rose in most countries of Western Europe from the 1970s until well into the 1990s (see Table 1.1). The initial explanations attributed responsibility to large adverse shocks, such as the sharp increase in oil prices in 1973 and 1979, the concurrent slowdown in productivity growth during the 1970s, as well as the shift in monetary policy across the OECD-area, whose primary aim became to reduce and maintain low inflation rates (Blanchard 1999; 2007). Following the 'Volcker shock' in 1979, the increasingly free capital movements and the shift in macroeconomic orthodoxy, the priorities of monetary policy in advanced industrialised economies shifted away from active demand management towards price stability and fiscal policies followed in that direction soon thereafter.

Western Europe experienced a strong demand recovery in the mid- to late-1980s; however, unemployment rates did not revert to the pre-1970s-shocks rates. Moreover, inflation rates stabilized at low rates in most of the area at the time. These developments suggested that there had been an increase in the Equilibrium Rate of Unemployment (henceforth ERU) (Bean 1994), i.e. the rate of unemployment that is compatible with stable inflation. The contrast in unemployment evolution between Western Europe and the US drew attention to the supply-side determinants of the ERU, i.e. to labour market policies and institutions.

Labour market policies, such as generous unemployment benefits (henceforth UnB), strict employment protection legislation (henceforth EPL), and

institutions such as strong trade unions became the prime suspects for the dismal unemployment performance in Western Europe. In the early 1990s, when the difference in unemployment performance between Western Europe and the US was at its sharpest, these theoretical considerations generated the popular, among academic and policy circles alike, prescription that the solution to the problem of persistently high unemployment lied in the reform of these policies and institutions. According to this prescription, labour market institutions, such as strong trade unions and peak-level collective wage bargaining, and generous labour market protection policies, such as unemployment benefits and restrictive employment protection legislation should be reformed, if not dismantled, to allow the labour market adjustment mechanisms to operate more effectively (OECD 1994).

Table 1.1 Unemployment Rates in the OECD area, 1970-1999 (Source: AMECO database)

	1970	1975	1980	1985	1990	1995	1999
Ireland	6.3	7.9	8.0	16.8	13.4	12.3	5.7
UK	2.2	3.2	5.6	11.2	6.9	8.5	5.9
US	4.9	8.5	7.1	7.2	5.5	5.6	4.2
Canada	5.7	6.9	7.1	10.6	8.1	9.5	7.6
Canaua Australia	1.5	4.8	6.2	8.3	6.9	8.5	6.9
	0.1	0.2	2.0	3.7	7.8	6.3	6.8
New Zealand							
<u>Average</u>	3.4	5.3	6.1	9.6	8.1	8.4	6.2
Belgium	1.8	4.2	7.4	10.1	6.6	9.7	8.5
Germany	0.5	3.3	2.7	7.2	4.8	8.0	8.2
France	2.4	4.0	6.1	9.6	8.5	11.1	10.5
Austria	1.5	1.8	1.1	3.1	3.1	3.9	3.9
Netherlands	1.0	5.5	6.2	7.9	5.8	6.6	3.2
Switzerland	0.0	0.3	0.2	0.8	0.4	3.1	2.8
<u>Average</u>	1.2	3.2	3.9	6.4	4.9	7.1	6.2
Denmark	0.6	3.9	4.9	6.7	7.2	6.7	5.2
Sweden	1.5	1.6	2.0	2.9	1.7	8.8	6.7
Finland	2.1	2.7	4.7	4.9	3.2	15.4	10.2
<u>Average</u>	1.4	2.7	3.9	4.8	4.0	10.3	7.4
Greece	4.2	2.3	2.7	7.0	6.4	9.2	12
Spain	2.6	4.5	11.5	17.8	13.0	18.4	12.5
Italy	5.1	5.5	7.1	8.2	8.9	11.2	10.9
Portugal	2.6	4.4	7.6	9.1	4.8	7.3	4.5
<u>Average</u>	3.6	4.2	7.2	10.5	8.3	11.5	10.0

The OECD Jobs Strategy summarized this labour market reforms prescription in ten commandments, of which six referred to labour market reforms whereas the rest concerned recommendations for increasing competition in product markets, reforming education and training systems and gearing macroeconomic policies towards first and foremost stability (see OECD 1997 for the list; and OECD 1999b for the details on the recommendations for each country as well as for the relative importance of each measure). This strategy has been very influential in policy debates, with OECD members subscribing, at least in their rhetoric, to the implementation of that strategy and the Organization set up a periodical process that has been monitoring progress, while contributing to this assessment by producing indicators of reform and policies across all the policy areas of the strategy. While the theoretical ideas that informed the strategy did not necessarily advocate for wholesale labour market deregulation (see for example Layard, Nickell and Jackman 1991, chapter 10), as it can be seen by Table 1.2, this is what the OECD proposed in the 1990s. This table shows the share of overall recommendations issued for each country. It is quite telling that the Anglo-Saxon countries received the fewest, while countries like Germany and the Netherlands were very high on the list.

The idea that labour market policies and institutions lie 'at the root of European unemployment' (Siebert 1997) thus became grounded in debates. At the same time, the stability of low inflation for most of the 1990s and the adoption of a closed economy framework of analysis (c.f. Carlin and Soskice 2006), also gave rise to the idea, particularly among central bankers, that the observed unemployment rate is the ERU and that, therefore, unless labour market reforms take place to reduce it, favourable aggregate demand conditions and macroeconomic policies cannot do anything for high unemployment rates.

Table 1.2 Share of all possible OECD Jobs Strategy Recommendations for Labour Market Reforms received by country, 1994

Spain	0.71
Germany	0.65
Finland	0.60
Netherlands	0.52
Norway	0.48
France	0.43
Austria	0.39
Belgium	0.38
Sweden	0.35
Canada	0.34
Denmark	0.33
Italy	0.31
Greece	0.31
Ireland	0.22
Portugal	0.22
U.K.	0.18
Switzerland	0.18
Australia	0.16
New Zealand	0.12
U.S.A.	0.11

Source: Own calculations from data in (OECD 1999b, 178-9). The weights used are provided by the OECD

By the turn of the century, however, some puzzling patterns for the above prescriptions had emerged. First, small and open economies such as the Netherlands, Denmark, Sweden and Austria had managed to expand their employment and reduce their unemployment rates to rates comparable to those of the US and the UK (see

Table 1.3). This happened even though these countries maintained, as the OECD admitted,

"...extremely different policy settings [to those it had been suggesting]. These countries tend to be characterized by centralized and coordinated systems of industrial relations, with a high degree of coverage of collective agreements and often-strong emphasis on social dialogue. Unemployed workers benefit from a solid and comprehensive safety net, where relatively generous unemployment benefits go hand-in-hand with solid activation strategies. On the demand side, these countries tend to exhibit, on average, relatively less strict product market regulation and moderate to high levels of tax-wedges and employment protection' (OECD 2006, 190).

**Table 1.3 Different Regimes of Labour Market Functioning (2006)** 

		High Employment Countries		Low Employment Countries
	OECD	English	North	Countries of
	Non-	Speaking	European	Continental or
	weighted	countries	countries	Southern Europe
	Average	mainly <sup>1</sup>	mainly <sup>2</sup>	mainly <sup>3</sup>
Employment	2.01	1.28	2.13	2.71
Protection Legislation				
Generosity of	27.81	18.23	39.86	36.17
Unemployment				
Benefits System <sup>3</sup>				
Active Labour Market	29.25	15.76	64.14	25.84
Policies <sup>5</sup>				
Tax Wedge <sup>6</sup>	27.10	18.54	27.42	34.33
Union Coverage	59.96	30.75	83.33	82.57
Union Coordination	2.88	1.88	3.92	3.79
Employment Rate	67.11	70.92	71.91	62.54
Unemployment Rate	7.47	5.30	4.79	8.97
Total LMP	1.85	0.98	2.68	2.60
expenditures <sup>7</sup>				
Of which Active LMP	0.76	0.39	1.31	0.94
expenditure <sup>8</sup>				
Income Inequalities	29.35	31.50	25.58	29.85
(Gini index) <sup>9</sup>				
Relative Poverty	9.64	11.78	7.77	9.86
Rate <sup>10</sup>				

Source: (Bassanini and Duval 2006; OECD 2006, 191)

- 1. AUS, CAN, NZL, SWI, UK, US
- 2.AUT, DK, NL, SWE, NOR, IRE
- 3. B, FIN, F, ITA, DEU, P, S
- 4. Average replacement ratio across 2 income situations (100% and 67% of APW earnings), 3 family situations (single, with dependent spouse, with spouse at work) over a 5-year period of unemployment
- 5. ALMP expenditures per unemployed workers as a % of GDP per capita
- 6. Tax wedge between the labour cost to the employer and the corresponding net take-home pay of the employee for a couple with a dependent spouse and two children earning 100% of APW earnings
- 7. Total expenditures on active and passive programmes as a % of GDP
- 8. ALMP expenditure as a % of GDP
- 9. Gini index for total population
- 10. The % of population with income below 50% of the current median income

Moreover, even though these policies have had 'a clear budgetary cost' (OECD 2006, 192), the public finances (and external accounts) of these (Northern European) countries have been in good shape, as their participation in EMU testifies, whereas 'income inequalities as well as relative poverty rates appear to be

lower than in the first group of countries [i.e. the English speaking ones with the deregulated labour markets]' (OECD 2006, 192).

That does not mean that the Northern European/non-English speaking countries above had not implemented any of the suggested by the Jobs Strategy reforms. However, their reforms have mostly focused at the margin (ibid.): the use of atypical forms of employment had become more flexible; unemployment benefits systems had been rationalized so that in combination with some changes in tax rates they did not create unemployment traps but essentially their generous character remained intact; last but not least, there had been a trend towards more decentralized collective wage bargaining, which had nevertheless been accompanied by more effective central/peak-level coordination. The benefits of protection for employed workers had remained, in other words, untouched.

While it has by now been well established that generous labour market protection policies and regulated labour markets can be compatible with good labour market performance, in addition to lower inequality and poverty, there has not been any explanation as to how this is possible, especially following the critique that these labour market policies received on their alleged effect for unemployment in the early 1990s. This thesis takes a first stab in developing such an explanation. To that end, it starts by reviewing two strands of literature in the next section in order to set up the stage for developing its hypotheses in chapter 2.

#### 1.3 Literature Review

This section provides an overview of the literature on the determinants of the equilibrium rate of unemployment (ERU) in open economies. Two strands of literature will be presented, namely the New Keynesian economics literature on how labour market policies and institutions affect the ERU and the institutional political economy on how collective wage bargaining interacts with monetary policy to determine the ERU.

The latter strand of literature is brought in not only because it explores the effects of collective wage bargaining, a labour market institution that even the economics literature acknowledges as one that can have a benign effect on

unemployment but also because it brings into the picture the context of macroeconomic policy making. As mentioned earlier, the priorities of monetary policy also changed from the early 1980s onwards and this is an insight that is often muted in the economics literature on the effects of labour market policies on wage-setting behaviour and thereby on unemployment. Moreover, as

Table 1.3 suggests, the role of collective wage bargaining in shaping labour market performance outcomes may have been poorly understood in the economics literature, as European countries with very similar characteristics of collective wage bargaining have nevertheless ended up with very different employment and unemployment rates.

The review that follows has two goals. The first one is to understand the basic premises of the economics literature that has been informing the policy prescriptions, according to which labour market reforms are the solution to Europe's unemployment problem. The second goal is to set up the stage for combining and expanding upon the two strands of literature in order to develop the hypotheses of this thesis in the next chapter.

# 1.3.1 The role of labour market (protection) policies and institutions in determining the ERU in an open economy

The discussion of the determinants of the ERU starts with literature in economics, as this is the strand that has been emphasising the importance of labour market policies and thereby of their reform in reducing unemployment. The basis of this literature is a New Keynesian framework that assumes imperfectly competitive product and labour markets with price- and wage-setters respectively (Carlin and Soskice 1990; Layard, Nickell and Jackman 1991). Within this New Keynesian framework, there are two broad classes of models explaining the determinants of equilibrium unemployment, namely those that take the 'flows' approach (Mortensen and Pissarides 1999; Pissarides 2000) and those that take the 'stocks' approach (see Blanchard and Katz 1997; Blanchard 2007 for reviews) to its determination.

Broadly speaking, the fundamental implications of these models for long-run equilibrium unemployment are very similar (Nickell et al. 2002, 2-3). First, real demand determines both in the short- and the long-run the rate of unemployment. Secondly, real demand tends in the long-run towards the level that corresponds to the ERU. The ERU is the rate of unemployment that is compatible with stable inflation. Therefore, the determinants of the ERU also determine to what extent real demand can increase to reduce the actual unemployment rate without triggering inflation pressures. The underlying assumption here is that the central bank targets inflation and that its policy reaction function is symmetric, so that when wage- and price-setting behaviour towards non-inflationary outcomes, the monetary policy loosens.

The validity of this assumption is, however, contestable. As Allsop and Vines (1998, 15) suggest, the reaction function of an inflation-targeting central bank (the ECB in this case) can be asymmetric and, therefore, not respond by looser policy when wage- and/or price-setting behaviour become more moderate. Moreover, Nickell et al. (2002, fn. 1) also suggest that there can be policy errors, which keep real demand and unemployment away from their equilibrium level for long periods, citing Japan as the most prominent example in the 1990s. If the assumption of an inflation-targeting monetary policy with a symmetric reaction function does not hold, then it is not clear how in the long-run unemployment is determined by real demand. Falling nominal wages and prices are unlikely to create a real-balances effect because money supply is not exogenous in modern economies (see e.g. Dullien 2003). But even if there is a monetary policy intervention, it may not always be sufficient to stimulate demand in case profit expectations are depressed with falling prices and wages (for a discussion, see Hein and Truger 2005, 16-7).

Thirdly, as mentioned above, there are two sets of factors determining the ERU<sup>1</sup>. On the one hand, there are variables affecting the ease with which

\_

<sup>&</sup>lt;sup>1</sup> Wage- and price-setters stake through their wage- and price-setting behaviour, very often in a bargaining context, their competing claims over real output. Wage-setters' claims depend negatively on the (actual) unemployment rate. If competing claims are not compatible, then inflation will

individuals are matched with job vacancies, i.e. the flows of workers between employment and unemployment/inactivity (Pissarides 1990). On the other hand, there are variables that tend to increase the claims of wage- and price-setters over real output for given unemployment rate and demand level respectively. It is wage- and price-setters rather than the market that set wages and prices. Wages can be the outcome of collective bargaining. A crucial assumption is that unemployment has a moderating effect on the bargained wage because, other things being equal it reduces the welfare of workers.

Variables that make the matching of workers with vacancies more difficult will increase the ERU, not only because in steady state (where inflows to employment equal outflows from employment) there will be more unemployment and vacancies but also because such a bottleneck in the labour market will, ceteris paribus, increase the power of bargaining workers and thereby, their wage claims for given unemployment (Pissarides 1990; Mortensen and Pissarides 1999). Moreover, policies and institutions that alleviate the adverse effects of unemployment on the welfare of bargaining workers may also lead to a higher bargained wage for given unemployment, thus changing wage-setting behaviour and pushing the ERU higher. Incidentally, such policies can also affect the matching of workers with vacancies.

It should be noted that price-setting behaviour also determines the extent to which higher wage-setters' claims will lead to a higher ERU. So for instance, the stronger competition is in the product market, the less likely it is that firms/employers will concede higher wage-setters' claims because their capacity to shift the extra costs on their prices and maintain their profit margins intact is lower.

•

change. In an open economy, inflation can stabilise again in two ways: either the unemployment rate, one of the determinants of wage-setters' claims, or the real exchange rate will have to move in the appropriate direction. So if e.g. wage-setters claims are higher than what price-setters would be willing to concede to them, inflation will start accelerating. Higher domestic prices will ceteris paribus lead to a real exchange rate appreciation (Carlin and Soskice 1990; Layard, Nickell and Jackman 1991; Carlin and Soskice 2006) and in the presence of an inflation-targeting,, stability oriented central bank probably more so. This will lead to lower external competitiveness, lower aggregate demand and higher unemployment. Higher unemployment will result in lower wage-setters' claims, restoring compatibility between them and the claims of price-setters and stabilising inflation but now at a higher unemployment rate-ERU.

Alternatively, the stronger productivity growth is, the easier it is for employers to concede higher wage-setters' claims as increased output can accommodate higher claims by both sides.

Turning to the role of labour market policies in determining the ERU, overly generous, ill-administered and *exogenously set* non-employment benefits can affect the decisions of unemployed workers between looking actively for a job or promptly accepting job offers and staying in unemployment. A possible consequence of low intensity job-search is that unemployment spells can last longer and that the human capital of a worker may depreciate, thus making him/her less 'employable' (Layard and Nickell 1987). At the same time, unemployment benefits whose value is very close to labour income may reduce the difference in the utility of a worker when employed and when unemployed. The reason why unemployment can have a moderating effect on wages is because unemployed workers (the excess supply of labour) will be competing for the existing jobs in the labour market with the employed workers, thus putting pressure on the latter to keep their wage claims moderate so that they continue being employed.

Thus, generous unemployment benefits may have the perverse effect of making unemployed workers compete less fiercely (whether by choice or because of their human capital depreciation) with employed workers, whereas if unemployment does not pose a large enough threat to consumption possibilities because of the relatively high income that benefits may secure, employed workers may be less concerned with keeping their jobs and thus moderating their wage demands.

Strict employment protection legislation (henceforth EPL), usually in the form of strict firing rules, increases the costs of labour turnover for a firm. This tends to stabilise employment relations and promote investment in job-specific skills, which apart from increasing productivity may also support the pursuit of particularly profitable product market strategies (Estevez-Abe et al. 2001). Moreover, at times of economic downturn, the sluggishness in employment adjustment that follows from EPL may also operate as a macroeconomic stabilizer for the economy.

However stringent employment protection legislation may also have adverse effects. The awareness by wage-setting employed workers that their replacement is costly to the firms in combination with (quite common) rules that bind employers into applying collective wage-agreements to all the workers that they may employ, provides employed workers with power to raise their wage demands (Blanchard and Summers 1986; Lindbeck and Snower 1988). Other things being equal, strict employment protection legislation reduces the substitutability of employed and unemployed workers and thereby, reducing labour market competition and thus, weakening the wage-moderating effect of unemployment. Moreover, it has been alleged that in the presence of high sunk costs, like firing costs, employers may be more 'cautious' about expanding their labour demand during periods of economic upturn, particularly if they are not too optimistic about the duration of that upturn (see e.g. Blanchard and Portugal 2001). This, in turn, may further contribute to the extension of unemployment spells and the depreciation of human capital of unemployed workers, with the consequences mentioned above

In sum, although the aforementioned labour market policies and institutions can have benign effects for the efficient operation of labour markets (e.g. provide insurance against risks, address the issue of monopsony power of employers), they may also generate adverse effects on wage-setting behaviour, which in turn will lead to a higher ERU. The next subsection will look into wage-setting institutions. Although the economics literature has been also analysing their role in reducing the ERU (Calmfors and Drifill 1988; Layard, Nickell and Jackman 1991), this role is better understood in the context of institutional political economy. As

Table 1.3 suggested countries with similar characteristics in their collective wage bargaining and other labour market protection policies have nevertheless ended up having very different unemployment and employment outcomes.

## 1.3.2 The role of collective wage bargaining and monetary policy institutions in determining the ERU

Turning to the wage-setting process itself, there is some variety in structures across the group of advanced capitalist economies. In some countries or sectors wages are set more or less competitively, i.e. at a decentralised level and without the involvement of trade unions. However, in the majority of rich democracies trade unions collectively bargain with employers over wages and prices. In such context, union density and high union coverage are, other things being equal, considered to generate wage pressure, although coordination in collective wage bargaining, i.e. internalising the externalities involved in it (see Calmfors 1993 for a list), can offset these effects. There can be a number of mechanisms that enable coordination and centralised, encompassing bargaining is only one of them (Soskice 1990b; Traxler and Kittel 2000).

The hypothesis that encompassing collective wage bargaining may produce beneficial outcomes for macroeconomic performance is not new (Headey 1970; Lehmbruch and Schmitter 1982; Olson 1982; Cameron 1984; Bruno and Sachs 1985; Lange and Garrett 1985), although it has evolved over time to include a 'market-competition amendment' (Calmfors and Drifill 1988) and an 'employers' side amendment' (Carlin and Soskice 1990; Soskice 1990a; Layard, Nickell and Jackman 1991; see Calmfors 1993; Flanagan 1999 for reviews). Perhaps the most influential hypothesis guiding the economists' approach to the issue has been the 'hump-shape' relation between the level of bargaining and macroeconomic performance initially stated by Calmfors and Drifill (1988).

According to this hypothesis and under the assumptions of a closed economy, perfect competition in product markets, passive government policies and unions organising workgroups that are complements in production, there are two considerations shaping wage demands. On the one hand, if bargaining takes place at decentralised level, product demand is highly elastic and therefore, firms are unable to pass on higher wage costs to their product prices for this would lead to lower sales and employment. Therefore, product market competition disciplines wage claims and enhances macroeconomic performance. On the other hand, if

bargaining takes place at centralised level, then unions are aware that wage increases above productivity growth across the economy would lead all firms raising their prices, as that would not undermine any firm's competitive position, and that would result in a higher general price level, encroaching any real wage gains for unions. Therefore, the effects of higher general price level and real wages discipline wage demands and lead to higher employment and lower inflation. Neither of these considerations is as strong if bargaining takes place at intermediate level and this is why wage demands would be the highest, leading to worse macroeconomic performance than in either of the previous cases.

This hypothesis has been subjected to criticism on a number of grounds, most notably the significance of the level of bargaining as opposed to the degree of coordination of bargaining (Soskice 1990b); its validity once the closed economy assumption is relaxed (Danthine and Hunt 1994); and last but not least, its assumption of passive government policy (Calmfors 1982; Hall and Franzese 1998; Soskice and Iversen 1998; Franzese Jr 1999; Velasco and Guzzo 1999; Franzese Jr and Hall 2000; Soskice 2000; Franzese Jr 2001; Franzese Jr 2002; Franzese Jr 2004). More specifically, the latter criticism has led to an extensive literature exploring the interactive effects of collective bargaining structure and monetary policy (regime) for macroeconomic performance.

This literature has been exploring these strategic interactions from the perspective of both the central bank's and the collective bargainers' behaviour. Given that collective wage bargainers consider the effects of their wage claims and bargaining outcomes for employment and real wages, they must be taking into account the expected monetary policy reaction of the central bank. The more credibly conservative the central bank is, the more collective wage bargainers will perceive that bargaining outcomes, which trigger inflation, will be penalised with a monetary policy tightening. That is, the perceived detrimental effects of higher wages for employment will be stronger and in the presence of at least intermediate coordination in bargaining, a non-accommodating monetary policy regime should induce wage moderation (see Calmfors et al. 2001; Franzese Jr 2004 for summaries and reviews of this argument). Therefore, the exact position of the 'hump-shape'

between the structure of collective wage bargaining and macroeconomic outcomes depends on the type of monetary policy maker that wage/price bargainers are facing.

Franzese (2001) presents a particularly interesting version of the models examining the interaction between collective bargaining and monetary policy, whereby *coordination* (as opposed to concentration or centralisation) in collective wage bargaining strategically interacts with the conservatism of a credible central bank and the sectoral composition of wage bargainers to determine inflation and the ERU. Assuming unions and employers bargaining collectively over wages and prices, he then models their marginal utilities with respect to nominal wage increases as also depending on the monetary threat, i.e. the expected reaction of monetary policy to nominal wage increases. That is, in bargaining over nominal wages and prices, unions and employers also take into account the effects of monetary policy reaction. This latter assumption also allows him to vary the restraint effects of monetary policy on the wage- and price-setting behaviour of different sectors. Other things being equal, the private and exposed sectors are likely to exhibit more restraint in their price- and wage-setting, as a monetary tightening would harm them more than public sector unions. This is because public sector employment is assumed to be counter-cyclical.

Given these assumptions and modelling choices, Franzese finds that tradedsector led bargaining coordination with credible conservatism are complements in producing low ERU, whereas public-sector led bargaining coordination and credible conservatism are complements in producing a high ERU. In other words, the disciplining effects of coordination and monetary policy regime on wage-setting depend on the extent to which employment prospects are insulated by aggregate demand conditions. His empirical analysis on evidence that run up until only the early 1990s seems to confirm these hypotheses.

However, empirical evidence from the 1990s suggests that there is more to the shaping the interactions of monetary policy and coordination in collective wage bargaining than he assumes. On the one hand, Germany, perhaps the country that fitted his account the most, saw its unemployment rising persistently, in spite of its coordinated bargaining, the very credibly conservative central bank and the dominance of unions and employers from the export-oriented sectors in wage/price-bargaining. On the other hand, Ireland made its membership to the ERM the cornerstone of its macroeconomic policy making, restored a centralised and highly coordinated collective wage bargaining system, which was nevertheless dominated by public sector unions (Baccaro and Simoni 2007) and yet managed to reduce its unemployment spectacularly.

The strand of literature on the interactive effects between monetary policy and collective wage bargaining on the ERU has been generally steering clear from considering the effects of labour market policies such as non-employment benefits and employment protection legislation, whose effects are investigated by labour economics, on the interaction between collective wage bargaining and monetary policy. This is in spite of the fact that the earlier literature on corporatism drew clear links between the moderate outcomes of encompassing collective wage bargaining and the expansion of labour market protection/welfare state policies.

A notable exception to this trend is the work by Mares (2004; 2006) who examines the effects of maturing welfare states on employment performance. Building on the Soskice-Iversen model (2000a) of monopolistically bargaining unions in a closed economy, she suggests that the interactive effects of monetary policy and collective wage bargaining on wage-setting behaviour and the ERU will also depend on the level of taxes and the number of 'outsiders' which benefit from social policies (e.g. non-employment benefits). Assuming that collective wage bargainers also care about the provision of social policies, she hypothesises that the level of taxes that have to be levied in order to finance them can potentially affect the extent to which wage moderation can be effective in combating unemployment. In principle, collective wage bargainers are willing to pay some cost for these policies in the form of lower real wages. However, if this (non-wage labour) cost becomes so high that it compromises employment creation in spite of any wage moderation and/or if most of the benefits are paid to labour market outsiders (e.g. long-term unemployed who have not been shouldering any of the costs), then wage moderation incentives are weakened. She, therefore, predicts that maturing welfare states have over time reduced the effectiveness of wage moderation to foster full employment and that this in turn has reduced the willingness of unions to exchange wage moderation for employment creation.

Her analysis is useful for the purposes of this thesis also because it brings back to the debate the fact that wage-setters, especially on the unions' side, care about generous welfare state policies, such as unemployment benefits and, for that, are in principle willing to exchange them for wage moderation (Cameron 1984; Esping-Andersen 1990). This insight is important to take into account, given how much the New Keynesian literature has been emphasising only the adverse ('insulation') effects that generous labour market protection policies have on wage-setting behaviour and equilibrium unemployment. It is quite telling that many empirical analyses of the effects of labour market policies and institutions on unemployment fail to find an adverse effect for the 1960s. This was the time when wage moderation was politically exchanged for more generous protection policies and aggregate demand management that guaranteed full employment.

Mares' last prediction, however, clearly rests on the assumption that wage moderation is a sufficient condition for combating unemployment. In a New Keynesian framework and in the case of a closed economy, this would be true in the long-run, as the prediction of New Keynesian macroeconomic models is that real aggregate demand converges to the equilibrium level of output and unemployment, which in turn is determined by wage- and price-setting behaviour (see Layard, Nickell and Jackman 1991). However, in open economies, the ERU is determined by aggregate demand as well (Carlin and Soskice 1990; Layard, Nickell and Jackman 1991; Soskice 2000; Carlin and Soskice 2006). This is an important point for Mares' argument. If unions are willing to exchange wage moderation for combating unemployment and safeguarding, if not expanding, welfare state/labour market protection policies, then whether such moderate behaviour will bear fruit for either or both purposes depends also on aggregate demand conditions and, more importantly, policies. If wage moderation is not matched with buoyant demand, it cannot alone help reduce unemployment. Moreover, prolonged slumps tend to

extend the average spell of unemployment and thereby, create 'outsider', long-term unemployed who end up benefiting disproportionately from social policies.

These objections notwithstanding, both Franzese's (2001) and Mares' (2004; 2006) models provide useful insights for trying to make sense of how rich countries with regulated labour markets managed to reduce their unemployment rates in the 1980s and 1990s. The former (and the strand of literature it belongs to) suggests factors that can moderate wage- and price-setting behaviour in open economies, leaving open the question of how these factors may interact with labour market protection policies that may to some extent insulate wage-setters from the employment/income consequences of their wage-setting behaviour. Mares' argument suggests that in a context of collective wage bargaining, welfare state/labour market policies are parts of the bargain itself rather than exogenous factors shaping the choice between higher wage claims and higher (un)employment. This is in contrast with the implicit assumption of most (New Keynesian) economic analyses.

In sum, the comparative political economy literature offers some reasons to think that in order to answer the question of how the incentives of wage/price bargainers support a lower ERU, we have to analyse the specifics of bargaining coordination as well as their interaction with a non-accommodating monetary policy regime.

#### 1.4 Hypotheses and Research Design

To address the questions stated in section 1.1, this thesis combines and extends upon the two strands of literature that were reviewed in section 1.3, i.e. the New Keynesian economics and institutional political economy. The motivation behind this combination originates in the fact that the New Keynesian literature on the institutional determinants of unemployment has been rather mute about the fact that the priorities of macroeconomic policy have changed since the early 1980s with price stability gaining an equal if not higher weight in the objective function of many European central bankers. This shift has also had consequences for fiscal policy making, especially as international capital mobility increased over the 1980s.

The combination of the two has put pressure on governments to keep their finances on a sustainable path, a challenging task especially in those countries where labour market protection policies such as non-employment benefits have been generous.

Thus, the hypotheses of this thesis seek to answer the following questions: how can have low unemployment rates/high employment rates been compatible with relatively generous labour market protection policies, such as non-employment benefits and employment protection legislation and with an important role for trade unions in collective wage bargaining in Europe in the 1980s and the 1990s? Given that some reforms of these policies towards deregulation have taken place everywhere in Western Europe during the 1980s and 1990s, to what extent and under what conditions can they be credited for this success?

The hypotheses that will be developed and tested can be summarised as follows. Generous labour market protection policies can be compatible with moderate collective bargaining outcomes in open economies as long as monetary policy is conservative, fiscal policy is credibly oriented towards stability and collective bargaining is coordinated. A conservative monetary policy implies that any bargaining outcomes that fuel inflation will carry a heavy employment penalty, especially for those in the private and exposed to trade sectors. If the profitability of firms in these sectors is harmed following a monetary policy tightening, it is doubtful to what extent strict firing regulations can insulate wage-setters from the consequences of inflationary bargaining outcomes. Furthermore, in the presence of a stability oriented fiscal policy, the generosity of non-employment benefits cannot be taken for granted, especially when it is high. If the number of claimants increases disproportionately, then it is likely that there will be a retrenchment. Collective wage bargainers that are sufficiently coordinated can take into account both these potential externalities and for that deliver moderate bargaining outcomes, a necessary condition for low unemployment rate in the medium run.

However, moderate bargaining outcomes alone may not be sufficient in leading to low unemployment in the presence of a conservative central bank, whose reaction function is asymmetric, i.e. assigns unequal weights to price and output

stabilisation. In such a case, even labour market reforms aiming at reducing the fiscal burden that generous labour market protection policies put on the use of labour may not be effective. After all, the goal is not only to increase the incentives of inactive/marginalized 'outsiders' to enter the labour market and prefer employment to benefits but also to actually generate employment opportunities for them to do so. If aggregate demand does not actively respond to either moderate bargaining outcomes or such reforms, then neither of the two will be very effective in combating unemployment.

Therefore, the hypothesis goes, countries with 'regulated' labour markets and a conservative central bank, are more likely to enjoy low unemployment if they are small and open rather than large. The real exchange rate and through it external competitiveness will respond to moderate bargaining outcomes and lead to an expansion in export demand. The smaller and more open an economy is, the more likely it is that export demand will be a relatively high proportion of aggregate demand (Soskice 2000; Soskice 2007).

These hypotheses do not seek to refute the 'labour market deregulation' thesis but rather to limit its applicability. Although I do not go into great detail in exploring that, the principle of the above hypotheses is that the effects of labour market policies on wage-setting behaviour and medium-run unemployment depend on aspects of the macro-level context, such as the orientation of macroeconomic policies and the way their objectives are pursued (e.g. symmetric vs. asymmetric reaction function for an otherwise stability-oriented central bank), the openness of the economy and the effectiveness of coordination in collective wage bargaining.

The complexity of the hypotheses to be explored, the fact that I suggest that there can be more than one causal pathways to the same outcome (low unemployment) and the fact that to a large extent this thesis seeks to explore an alternative explanation for low unemployment rule out regression analysis as the most appropriate method of empirically investigating these claims. Instead, my

31

\_

<sup>&</sup>lt;sup>2</sup> It should be noted here that the definition of 'outsiders' that is used in this thesis refers to those people who are (long-term) unemployed/inactive rather than those having 'second-tier', 'dead-end' jobs.

approach will be configuration-oriented. The empirical work of this thesis proceeds in two steps. First, I use Qualitative Comparative Analysis with fuzzy-sets in order to assess the above hypotheses over a large number of cases (18 advanced capitalist democracies in the 1990s). Secondly, I use the comparative case-study of the Netherlands and Germany in the 1980s and the 1990s in order to elaborate on the QCA results and to test the hypothesis on the effectiveness of labour market reforms, which has a more dynamic character.

The empirical analysis will only run up to 1999 as from that year onwards, the EMU was launched and the ECB took over monetary policymaking for most countries in Western Europe. Given the difference in levels (national vs. supranational) in collective wage bargaining, fiscal and monetary policy that the EMU involves, this is an important change for the extent to which monetary policy shapes the incentives of wage-bargainers and fiscal policy authorities. To keep things simple, I will thus keep the analysis up to 1999.

The findings of these empirical steps lend support to these hypotheses, although they also open up a number of questions for further investigation. More specifically, these hypotheses seem to explain well the experience of countries such as the Netherlands, Germany, Denmark, Sweden and Belgium but leave some questions open on the case of Austria. Moreover, the QCA results suggest that the success of the English-speaking countries in reducing their unemployment rates cannot be explained by their deregulated labour markets alone and that instead there is more complexity and diversity in the causal pathways that lead to this outcome to be explored.

#### 1.5 Outline of the Thesis

This thesis will be structured as follows. Chapter 2 will develop the hypotheses of this thesis and discuss the selection of empirical method through which they will be tested. These hypotheses will seek to answer two questions. First, how regulated labour markets can be compatible with good unemployment performance in the 1980s and 1990s. Secondly, to what extent labour market reforms that aimed at increasing the flows of outsiders into employment can be credited for the improved

unemployment performance of western European countries with regulated labour markets. In doing so, it will combine and expand on the literatures of New Keynesian economics on the effects of labour market institutions on the equilibrium rate of unemployment and institutional political economy on the interactive effects of collective wage bargaining and monetary policy on the equilibrium rate of unemployment.

Chapter 3 will proceed with the first part of the empirical substantiation of the hypotheses developed in Chapter 2. More specifically, it will use Qualitative Comparative Analysis with fuzzy-sets in order to examine two things. First, whether deregulated labour markets are necessary for good labour market performance. Secondly, whether generous labour market protection policies and coordinated collective wage bargaining can be lead to good labour market performance in the medium-run.

Chapter 4 will discuss the selection of cases to be studied in more detail. After explaining why Germany and the Netherlands would provide an adequate testing set-up, it reviews some stylised accounts that explain the unemployment performance of each of the two countries in the 1980s and 1990s in order to show how the case-studies that follow in chapters 5 and 6 contribute to them. Chapter 7 recapitulates the findings of the two case-studies and goes over some of the cases that seem to fit the explanation offered by the hypotheses to highlight any open questions. Chapter 8 concludes.

# CHAPTER 2. THE DETERMINANTS OF THE EQUILIBRIUM RATE OF UNEMPLOYMENT IN OPEN ECONOMIES: LABOUR MARKET INSTITUTIONS AND MACROECONOMIC POLICY ORIENTATION

#### 2.1 Overview

The review of the literature in the introductory chapter suggested that when it comes to explaining the success of some western European countries in combating high unemployment in the 1980s and 1990s a number of questions are left open. More specifically, how can low unemployment rates/high employment rates be compatible with relatively generous labour market protection policies, such as non-employment benefits and employment protection legislation and with an important role for trade unions in collective wage bargaining (cf. OECD 1994)? Furthermore, given that some reforms of these policies towards deregulation have taken place everywhere in Western Europe during the same period, to what extent can they be credited for this success? The purpose of this chapter is to develop hypotheses that answer these questions, discuss their empirically observable predictions and explain what the most appropriate method for testing them will be.

To do so, the insights of the New Keynesian economics and institutional political economy strands of literature on the determinants of the equilibrium rate of unemployment will be used. These two literatures suggest that there are potentially two types of adverse effects of generous labour market protection policies on unemployment. First, assuming a negative relationship between real wages and unemployment, generous policies can insulate bargaining employees from the effects of their wage demands on demand and employment (Layard, Nickell and Jackman 1991; Blanchard 2007). Secondly, generous labour market policies, especially non-employment benefits, can result in income and payroll tax rates so high so as to undermine any effects of moderate wage bargains in combating unemployment, especially when the number of benefit recipients is high (i.e. in 'mature welfare states) (Hassel and Ebbinghaus 2001; Mares 2004; 2006). The logical conclusion of these arguments has been that reforming labour market

policies to reduce their generosity would, on the one hand, reduce the insulation of bargaining workers from the effect of their wage demands; and, on the other hand, help reduce the number of non-employed benefit recipients and thereby, reduce the cost of these policies on labour.

The hypotheses that will be developed in this chapter will address both these arguments and suggest two things. First, that the extent to which generous labour market protection policies insulate bargaining wage-setters from the consequences of their behaviour for demand and employment in open economies depends on the macro-institutional framework. A credibly conservative monetary policy can threaten to penalise wage/price bargaining outcomes that fuel inflation heavily enough to outweigh any insulation effects that generous labour market protection policies may generate. These threats will be compounded in the exposed to international trade sectors, as, in case of a monetary policy tightening, firms will have to face not only higher costs of using capital but also a real exchange rate appreciation and reduced competitiveness. Additionally, a stability-oriented fiscal policy can put limits to the extent that the non-employment benefits bill can grow, thus creating incentives for wage-setters to consider the fiscal externalities of their bargaining outcomes (Calmfors 1993). For these incentives to be internalised by collective wage bargainers, collective wage bargaining has to be sufficiently coordinated.

The second point that the hypotheses of this chapter will suggest is that in the presence of conservative/stability-oriented macroeconomic policies, moderate bargaining outcomes and the reforms in labour market protection policies, like those that were undertaken in the 1980s and 1990s in many western European economies in order to reduce the costs of generous labour market protection policies especially on the use of labour, are likely to be effective in combating unemployment only in small open economies with regulated labour markets. This is because, within the group of countries with regulated labour markets, it is only in small open economies that aggregate demand conditions are likely to respond flexibly and favourably to moderate wage outcomes and labour market reforms.

This chapter is structured in two main sections. The first section develops the hypotheses that answer the aforementioned questions. The second section discusses their predictions and what the most appropriate method for testing them empirically is. A final section concludes.

## 2.2 The Political Economy of Unemployment, Labour Market Institutions and Macroeconomic Policies in Open Economies: The Hypotheses

## 2.2.1 Explaining Moderate Wage Bargaining Outcomes in Open Economies: Labour Market Institutions and Macroeconomic Policies

Can generous labour market protection policies be compatible with moderate collective wage bargaining outcomes and if so, under what conditions? This section develops a hypothesis that provides an affirmative answer to the former question and an explanation to the latter. According to the New Keynesian macroeconomic literature, generous labour market protection policies can insulate wage-setters from the consequences of their behaviour for demand and employment. Given that unemployment moderates wage-setting behaviour, the result of generous labour market protection policies may be that it takes higher equilibrium rates of unemployment to moderate wage-setting behaviour. The same literature acknowledges, however, the potentially benign role of collective wage bargaining that effectively internalises the externalities that are inherent to wage-setting in moderating wage-setting behaviour (Layard, Nickell and Jackman 1991; Blanchard and Philippon 2004).

The hypothesis that will be developed in this section suggests that coordinated collective wage bargaining under a conservative monetary policy and stability-oriented fiscal policy in an open economy can induce wage bargainers into moderate outcomes even in the presence of generous labour market protection policies. To do so, I will build upon and refine Franzese's (2001) insights on how coordinated collective wage bargaining led by the exporting sectors interacts with a credibly conservative central bank to shape moderate wage-setting behaviour and lead to a lower ERU. More specifically, the discussion that follows below will incorporate the presence of policies that can cushion wage bargainers from the consequences of their behaviour, i.e. generous non-employment benefits and strict

employment protection legislation. The point to be explained is why the effects of coordinated collective wage bargaining and a credibly conservative monetary policy will be stronger than the insulating effects of generous labour market protection policies on wage-setting behaviour.

Franzese (2001) makes two implicit assumptions, which need to be expanded upon in order to build the hypothesis of this section. First, he conceptualises the coordination of collective wage bargaining as 'pattern-setting' (see Traxler and Kittel 2000, for definition), whereby bargaining outcomes in one dominant sector (usually the metal-sector) set the pace for wage developments in the rest of the economy. Secondly, he attributes to the government a passive role in collective wage bargaining even though it is the public sector employer. Both these assumptions need to be reconsidered in order to incorporate the insulation effects of generous labour market protection policies in shaping moderate wage-setting outcomes.

Starting with the assumption of 'pattern-setting' as a mode of horizontal coordination, it should be noted that it is only one of the possible modes of horizontal coordination in collective wage bargaining. Although 'pattern-setting' has been particularly effective in delivering moderate wage outcomes (Traxler and Kittel 2000), it was only relevant for Germany and Austria during the 1980s and 1990s (Traxler et al. 2001, 149). The coordination mode in most other western European countries that managed to reduce their unemployment rates during that time, such as the Netherlands, Denmark and Ireland, was characterised as 'statesponsored' (ibid.). This is a 'voluntary' (as opposed to 'state-imposed') peak-level form of coordination and so can be of 'inter-associational' (i.e. central-level bargaining) or 'intra-associational' (i.e. the confederations synchronise the bargaining policies of their affiliates) type. The state enters the process as an additional party, making the context usually tripartite, while coordination of this form requires the consent of all parties involved and consensus is achieved following the principle of 'political exchange' (Pizzorno 1978; Traxler and Kittel 2000, 1173). This is an important distinction insofar as it suggests that the relatively high power of unions and employers associations in the exporting sectors alone, in

combination with a credibly conservative central bank, may not be sufficient for explaining moderate wage bargaining outcomes.

In a context of 'state-sponsored' intra- or inter-associational mode of coordination, while exporting sector unions and employers are very likely to play a leading role, given that they are typically well-organised, there is more scope for understanding how the behaviour of other potentially powerful unions, e.g. in the public sector, is kept in check. The cases of Ireland and the Netherlands support this requirement. In the former case, it was the public sector unions that led the campaign for concluding and applying the Programme for National Recovery in 1987, the first of a series of social pacts which shaped moderate wage outcomes in collective wage bargaining (Baccaro and Simoni 2007). In the case of the Netherlands, although the IB union that organised across the exporting sector did traditionally have a dominant position among its counterparts in collective wage bargaining, it did not manage to get the leaders of the FNV union federation to impose its moderate line across unions as early as in the late 1970s (see Visser and Hemerijck 1997 and chapter V below). In both countries, the concerted action towards moderate wage bargaining outcomes began when the government committed clearly to consolidate its public finances.

The prevalence of 'state-sponsored' mode of horizontal ('macro'-) coordination suggests that the role of the government in collective wage bargaining should be considered more carefully. This does not mean that government policy has been any less important for wage-bargaining outcomes in countries were coordination has been achieved through pattern-setting (see for example Scharpf 1991 for a discussion of how and when German trade unions started internalising the policy priorities of the Bundesbank in the 1970s). Governments in western Europe, especially those in countries with regulated labour markets, gradually came under increased pressure to maintain their finances on a sustainable path in the 1980s and especially the 1990s, as one after the other they started shifting the emphasis of monetary policy goals towards maintaining price stability, either by tying the nominal exchange rate of their currencies to the Mark or/and by signing up to join EMU. While this shift did not over time lead to any wholesale dismantling

of the welfare state, an important part of which were the systems of nonemployment benefits, it did create pressure for governments to improve and keep the balance over revenues and expenditures, a task which the high unemployment rates of the early 1980s and 1990s made quite challenging.

As Calmfors (1993, 163) suggests, one of the inherent externalities of wage bargaining is of fiscal nature: if wage increases result in higher unemployment, then the associated higher cost for unemployment benefits has to be paid by higher taxes or lower government expenditure for the society as a whole. In open economies with generous benefits systems, this externality is likely to be even more important as these systems mature, i.e. as the number of benefit recipients increases. Therefore, in a context of peak-level mode of voluntary (as opposed to 'state-imposed') horizontal coordination, governments in economies in which monetary policy acquires a credible orientation to stability have incentives to press wage/price-setters towards bargaining outcomes that help them maintain their public finances sustainable or else threaten to curtail the generosity of benefits (or raise tax rates). A question that arises then is whether governments that 'sponsored' peak-level bargaining coordination in western European economies also have the leverage to put pressure on wage bargainers for moderation.

One reason why the government pressure on collective wage bargainers to deliver moderate outcomes may be effective is that the alternative can be harmful. So if bargaining outcomes trigger an adverse monetary policy response, unemployment rises and with it, benefit expenses, then unless the increase in unemployment reverts quickly, the government will probably have to either reduce the generosity of the benefits system or raise tax rates to finance the expenses (or both) in the medium-run. To the extent that unions care about labour market protection policies (Cameron 1984; Esping-Andersen 1990; Mares 2004) but also about their real take-home salary, there will be willingness to internalise this threat.

Traxler and Kittel (2000) argue that a necessary condition for voluntary peak-level coordination to be effective in moderating wage outcomes is to be matched with high 'bargaining governability'. Bargaining governability constitutes

some rules of the game (such as the legal enforceability of collective agreements and 'peace' obligations) so as to make the degrees of freedom allowed to the shop floor compatible with higher level bargaining coordination (ibid., 1175-6). These rules are usually guaranteed by the state. This suggests that in addition to the threats of reducing the generosity of benefits and/or raising tax rates, the government can have an extra lever of pressure at least on trade unions at peak level to deliver moderate wage outcomes, for it could threaten to remove the rules that ensure governability. Given how collective wage bargaining had had to undergo a process of 'organised' decentralisation in many western European economies in the 1980s and 1990s (e.g. in the Netherlands (Visser and Hemerijck 1997), in Denmark (Iversen 1999), ensuring bargaining governability can be important for maintaining the relevance of unions in the bargaining process.

To return to the question of this section, bringing the governments back into the picture of collective wage bargaining suggests the following. The shift of monetary policy priorities towards conservatism generates pressure for governments to maintain their public finances on a sustainable path. This implies that they have incentives to resist excessive increases over the public employment bill, which means that either public sector wage or/and employment growth increases have to be kept moderate. Therefore, the government as the public sector employer has reasons to resist excessive growth in bargaining outcomes.

Moreover, the government has incentives to put pressure on collective wage bargaining outside the public sector, as excessive wage increases, insofar as they lead to higher unemployment/inactivity, generate fiscal externalities in the form of increased benefit expenses and a reduction of the aggregate tax base (Calmfors 1993, 163). To the extent that unions care about the provision of labour market protection policies, they have incentives to internalise the government threat. Furthermore, to be effective the mode of 'state-sponsored' coordination requires high bargaining governability, a condition that depends on state provisions. Therefore, the government has both the incentive and the lever to induce coordinated collective wage/price-bargainers to conclude agreements with moderate

wage outcomes given the stability-oriented monetary policy and the relatively high trade exposure of most western European countries to trade.

Having logically established that given the a conservative monetary policy and stability-oriented fiscal policy, coordinated collective wage bargaining in open economies will deliver moderate wage outcomes even when wage-setters are 'cushioned' from the effects of unemployment by generous benefits, the next step is to explain why the same would be the case in the presence of employment protection legislation that makes firing difficult. The argument that mainstream economists put through is that strict firing rules reduce flows into and out of employment, thus contributing to long-term unemployment. Given that the employability of unemployed workers declines, the longer the spell of unemployment is (Layard and Nickell 1987), a large proportion of long-term unemployment increases the bargaining power of employed bargaining workers (Lindbeck and Snower 1988).

This line of argument rests on the assumption that the only determinant of bargaining power for workers is how easily substitutable they are with unemployed workers, which is not true. In open economies product market competition tends to be higher and, consequently, the product demand of firms in exposed sectors more elastic (see e.g. Danthine and Hunt 1994). Therefore, if the external competitiveness of firms in the exposed sector is compromised by excessive wage increases, forcing them out of business, there is relatively little insulation that strict employment protection can offer to wage bargainers in these sectors.

Moreover, if the monetary policy is conservative, then wage-bargainers will know that any bargaining outcomes that do not support price stability will not be accommodated by a nominal exchange rate depreciation and for that, they will have incentives to keep bargaining outcomes moderate even in the presence of strict employment protection legislation. Last but not least, strict employment protection legislation is associated with longer job tenure and for that, the development of more long-term view of the interests of the firm on the part of employees. Assuming risk-averse employees, employment protection legislation serves as an

insurance policy against job risks (Pissarides 2001). If wage bargaining is sufficiently coordinated, then the costs of this insurance are likely to be internalised in wage-setting.

To sum up, this section has developed a hypothesis on whether and if so, under what conditions coordinated collective wage bargaining and the orientation of macroeconomic policies will induce collective wage bargainers into producing moderate bargaining outcomes even in the presence of generous labour market protection policies that can potentially insulate bargainers from the consequences of their behaviour for demand and employment. What has been suggested is that the macro-institutional context determines how much insulation generous protection policies can offer to wage-setters.

To build this hypothesis, I have expanded on the model by Franzese (2001) by bringing the role of the government as a public sector employer that often sponsors and supports effective coordination in collective wage bargaining into the picture. It was argued that the shift of monetary policy orientation towards conservatism in the 1980s and 1990s in Western Europe put pressure on governments to maintain their public finances in a sustainable path. This gave them incentives to put pressure on public and exposed sector unions and employers to avoid bargaining outcomes that fuel inflation so as to internalise the fiscal externalities that this would involve in the form of higher unemployment and the need for higher taxes/lower government expenditure. Moreover, the combination of monetary conservatism and high openness to trade reduces the insulation and thereby, bargaining power, that strict employment protection legislation can grant bargaining employees.

# 2.2.2 The Effectiveness of Wage Moderation and Labour Market Reforms in Combating Unemployment

To what extent should wage moderation and labour market reforms in the 1980s and 1990s be credited for combating unemployment in western Europe and what conditions have determined this extent? This section will develop a hypothesis that answers this question. The starting premise is that the actual aim of these reforms has been twofold: on the one hand, to help governments maintain their finances on a

sustainable path by increasing the flows from subsidised unemployment/inactivity to employment and on the other hand, to support moderate bargaining outcomes in combating unemployment, as reducing the financing costs of benefits and expanding the pool of contributions/tax payers would reduce the non-wage labour cost imposed per employee (Hassel and Ebbinghaus 2001).

Given these purposes, the hypothesis that will be developed here will suggest that moderate bargaining outcomes and reforms in non-employment benefits and employment protection legislation can be successful in combating unemployment only insofar as they are matched with favourable aggregate demand conditions. In countries with regulated labour markets where, as the previous section hypothesised, moderate wage bargaining outcomes are achieved thanks to coordinated collective wage bargaining, a conservative monetary policy and a stability-oriented fiscal policy, favourable aggregate demand conditions are more forthcoming when the country is small and open than when it's large.

To develop this hypothesis, I depart from the insights of Mares (2004; 2006), who examines how generous and mature welfare states condition the interactive effects of collective wage bargaining and monetary policy on wage-setting behaviour and thereby, on unemployment in the medium-run. Her argument is that mature welfare states can undermine the effectiveness of union moderate wage demands in combating unemployment because the costs of financing them through payroll or income taxes increase the non-wage component of labour costs excessively. The policy prescription that follows from her argument is that reforms should be undertaken to reduce the number of benefit-recipients/outsiders (or changing the method of financing the welfare state) (Mares 2004, 132). This is exactly the kind of reforms that have been taking place in most western European countries since the 1980s: the provisions of and conditions for benefits have been tightened to reduce their attractiveness and increase the incentives for more active labour force participation, activation policies have been strengthened whereas the use of atypical forms of employment has been flexibilised to facilitate the flow of labour market outsiders back to employment.

Mares makes an important assumption that needs to be modified in order to better account for the effectiveness of labour market reforms in combating unemployment. Her model considers a closed economy, in which, according to mainstream New Keynesian macroeconomic analysis, aggregate demand has no effect on the equilibrium rate of unemployment in the medium-run. It is important to account for the openness of the economy, not only because, as it was suggested in the previous section, in the presence of a conservative monetary policy and a stability-oriented fiscal policy, openness to trade induces wage-setters in the exposed sectors to moderate their wage demands but also because in open economies, the ERU is determined by aggregate demand as well (Carlin and Soskice 1990; Soskice 2000; Carlin and Soskice 2006).

If labour market/welfare state reforms aim at reducing the number of 'outsiders' and the burden that the financing of benefits places on labour costs so as to enhance the benefits of moderate bargaining outcomes, then whether they will be successful in that respect also depends on whether sufficient employment opportunities are created in the economy to absorb the previously benefit-receiving or inactive individuals whose incentives to accept employed are altered by the reforms. The higher the employment creation rate, the more the pool from which tax contributions can be drawn will grow and the lower the tax burden that the financing of the welfare state places on each worker/employee will become.

Given that aggregate demand matters, the next issue to address then is where aggregate demand expansion can come from in open economies whose labour markets maintain a high 'level of regulation' (i.e. relatively generous non-employment benefits, relatively strict employment protection legislation and collective wage bargaining as the means to set wages). As it was hypothesised in the previous section, in such open economies, moderate bargaining outcomes follow from the combination of a conservative monetary policy, a stability oriented fiscal policy and effective bargaining coordination. The conservatism of monetary policy, although necessary to induce moderate bargaining outcomes, suggests that the central bank is not likely to respond as forcefully to stimulate demand, following moderate bargaining outcomes and labour market reforms that reinforce them.

Moreover, moderate real wage growth suggests that consumption demand growth is also likely to be moderate.

This is why, the most likely source of demand stimulation in open economies with regulated labour markets is their exports: thus generated moderate wage/price outcomes are likely to generate real exchange rate depreciation and thereby, stimulate export demand. Whether this export demand stimulus will be sufficient to stimulate aggregate demand and thereby, increase the effectiveness of the aforementioned labour market reforms depends then on the size of the economy (Soskice 2000). It is, therefore, hypothesised here that in open economies aggregate demand conditions are crucial for the success of moderate bargaining outcomes and labour market reforms aiming at increasing the flows of outsiders into the labour market and of wage moderation in combating unemployment. Given the conservative course that the credibly stability-oriented monetary policy is likely to take in countries with 'regulated' labour markets, wage moderation and labour market reforms in such markets are more likely to be effective in their aim in small and open economies than in large ones.

In sum, this subsection has sought to answer the question of to what extent moderate bargaining outcomes and labour market reforms in countries with regulated labour markets can be credited for combating unemployment. Starting from the assumption that these reforms aim at reducing the financial burden that generous labour market policies may place on non-wage labour costs and thereby enhance the effectiveness of wage moderation in combating unemployment, it was hypothesised first, that the success of both reforms and moderation will also depend on whether aggregate demand conditions are favourable; and secondly, that countries with regulated labour markets are more likely to enjoy such favourable demand conditions if they are small and open rather than large.

#### 2.3 Empirically observable predictions and selection of empirical approach

The aim of this section is to summarise the hypotheses that were developed in the previous two sections, spell out their predictions, take stock of what they imply for the 'labour market deregulation' thesis and discuss what the most appropriate

approach would be in empirically testing them. The previous two sections developed hypotheses that seek to answer the following questions: how can low unemployment rates/high employment rates be compatible with relatively generous labour market protection policies, such as non-employment benefits and employment protection legislation and with an important role for trade unions in collective wage bargaining? Given that some reforms of these policies towards deregulation have taken place everywhere in Western Europe during the 1980s and 1990s, to what extent and under what conditions can they be credited for this success?

The answer that was provided can be summarised as follows. Generous labour market protection policies can be compatible with moderate collective bargaining outcomes in open economies as long as monetary policy is conservative, fiscal policy is credibly oriented towards stability and collective bargaining is coordinated. Moreover, wage moderation and the reform of labour market policies such as non-employment benefits and employment protection legislation in order to reduce the tax burden on labour costs can only succeed in combating unemployment if matched with favourable aggregate demand conditions and such favourable conditions are more forthcoming in small open economies with the above characteristics than in large open ones.

Where does that leave the 'labour market deregulation' thesis, according to which less generous labour market protection policies and uncoordinated/decentralised collective wage bargaining are conducive to low unemployment/high employment? The hypotheses developed above do not seek to refute this hypothesis. Instead, what is suggested is that low unemployment/high employment rates can be achieved under different institutional and policy conditions in the domains of labour market and macroeconomic management. Wage-setters in countries with uncoordinated/decentralised collective wage bargaining have different incentives and capacity to internalise the costs of labour market protection policies and the threats of the central bank and the government as a fiscal policy maker against fuelling inflation than wage-setters in countries with coordinated collective wage bargaining. This is why, it is hypothesised here, the effect of generous labour market protection policies on the incentives of wage-setters to choose between higher wages and good employment prospects will be different depending on the macro-institutional context.

If these hypotheses are correct, then one should empirically observe the following. Western European countries with generous labour market protection policies enjoyed low medium-run unemployment rates in the 1980s and 1990s if their monetary policy has been conservative, their fiscal policy stability-oriented, their collective wage bargaining has been coordinated and they were small and open. Moreover, labour market reforms in western European countries with 'regulated' labour markets were effective in reducing their unemployment rates only if they were small and open to trade economies. These predictions suggest that the effects of labour market policies and institutions and their reforms on medium-/long-run unemployment are not purely marginal but rather interactive, depending on the macro-level institutions and macroeconomic conditions.

The interactive nature of these predictions has important implications for determining the most appropriate method of empirically testing them. The approach most commonly taken in the literature on the institutional determinants of the equilibrium rate of unemployment is time-series cross-section regression analysis often combined with some case studies (Elmeskov et al. 1998; Iversen 1999; Belot and Van Ours 2000; Blanchard and Wolfers 2000; Soskice and Iversen 2000b; Franzese Jr 2001; Nickell, Nunziata, Ochel et al. 2002; IMF 2003; Baker, Glyn, Howell et al. 2005; Baccaro and Rei forthcoming). Given the additive character of regression analysis, the only way to explore the operation of two different regimes using that tool would be to introduce interaction (multiplicative) terms. More specifically, a model testing the aforementioned predictions would have to include at least four interactive terms made up by four explanatory variables (labour market policy/institution x coordination in collective wage bargaining x monetary policy orientation x openness). Moreover, all the 'implicit' interactions among the variables included in the large multiplicative terms would have to be included to the specification to avoid the omitted variables bias (Bassanini and Duval 2006).

Interactive terms make formidable demands on data, consuming many degrees of freedom and thereby, increasing the variance of estimators and reducing their reliability. This is the problem of multicollinearity. Multicollinearity is a problem of the dataset in use (Greene 1997; Kennedy 2003) and its solution lies in improving the dataset in a way that it includes more information. However, in the case of the effects studied here, this is impossible. The number of countries that would be classified as advanced capitalist economies is restricted to a maximum of 21-22. Moreover, given the operation of Breton Woods until the early 1970s but also the shift in monetary policy orthodoxy from the late 1970s/early 1980s onwards, the years for which the hypotheses developed here would be relevant are also limited to a maximum of 25-28. Still a dataset of 22 x 28 = 616 observations would not be sufficient to fulfil the task of estimation under these conditions. This difficulty is further exacerbated by the fact that many of the policy/institutional variables of the dataset are more or less invariant over time.

An alternative solution to the problem of multicollinearity has been suggested by Franzese (2003). More specifically, rather than trying to include more information in the sample of data, he suggests modelling the context conditionality to follow a specific functional form, in other words, limit the complexity at the level of hypotheses to be tested. This should reduce the empirical demand on the data by revealing more of the theorised complex, context conditionality in the model. In the present case, however, this is not really possible without either restricting the variables we are interested in (as the economics and comparative political economy have been doing so far although). Furthermore, even various economists have been suggesting that in order to understand the effects of institutions on labour market performance, we need to get more detailed accounts of specific cases (Freeman 1998; 2005; Blanchard 2007).

Moreover, given the different effects that the various institutions may have on unemployment in different countries depending on the context pooling across countries and times is not appropriate. On the other hand, accounting for the heterogeneity of context across countries by including country-specific fixed-effects (Beck 2001) would be fraught with problems given that more than one of the

institutional/policy variables of interest vary very little, if at all over time within each country (Pluemper et al. 2005).

Last but not least, testing for causal effects of institutions and policies on medium-run unemployment using regression analysis with interactive terms on the sample of advanced capitalist economies has the flaw that it assumes that all possible institutional/policy configurations are in principle possible even though they are not observable in the dataset that is used (Ragin 2000; Morgan and Winship 2007). That is, either there are no counterfactual cases in the data or not a sufficient number of them to make reliable causal inferences. As it was shown in the case of Franzese's (2001) model, coordination as 'pattern-setting' in collective wage bargaining has not been prevailing in countries where public sector unions dominate the process (Traxler, Blaschke and Kittel 2001). Instead, institutions and policies do not only affect unemployment as configurations but also take forms that condition each other (Soskice 2007).

Regression analysis will, therefore, not be the chosen method for empirically testing the predictions of the hypotheses that were developed in this chapter. A different approach will be followed at this stage, namely fuzzy-set Qualitative Comparative Analysis (henceforth fs/QCA) (Ragin 2000)<sup>3</sup>. Fs/QCA is a technique that allows the researcher to systematically explore relations between explanatory categories or combination of categories and categorical outcomes (Ragin 1987). This method can be seen as an extension of John Stuart Mill's difference and similarity methods into a systematic (computer-based) comparative approach (Schneider and Wagemann 2003).

Fs/QCA has some advantages compared to regression analysis for the kind of argument that is explored here. It is more adept at exploring causal configurations whereas it also makes easier the identification of multiple pathways to an outcome. Rather than using interactive terms, fs/QCA considers any case

of the lagged dependent variable term (standardized unemployment rate).

49

<sup>&</sup>lt;sup>3</sup> It should be noted that I did attempt to use regression analysis for testing the predictions of the proposed hypotheses. Predictably, the results were neither meaningful (many statistically insignificant coefficients but statistically significant regressions) nor robust, with the only exception

aspects that appear together systematically as potentially interdependent. Moreover, in contrast to the correlational approach of regression, fs/QCA can help reveal patterns of association that may differ across subsets of cases and thereby, allows the discovery of more complex causal narratives than are generally possible with regression analysis (Kenworthy and Hicks forthcoming).

These advantages notwithstanding, however, fs/QCA has certain limitations, compared to regression analysis. The most important are that it considers deterministic associations between the causes and the outcome rather than tendential; QCA analysis is essentially bivariate, because it examines the relationship between the outcome and the hypothesised combination of causes without holding everything else constant<sup>4</sup>; finally, fs/QCA does not allow the examination of outcomes and causes in cross-country, over-time manner (ibid). However, given the difficulties that regression analysis would pose for examining the hypotheses of this thesis, fs/QCA will be one of the methods of choice.

However, as fs/QCA alone does not explain how configurations of causal factors work to produce the outcome of interest, it will be complemented with case-studies that will seek to put flesh to the bones of its results. Moreover, it is doubtful whether fs/QCA can empirically test for the hypotheses on the conditions under which labour market reforms are likely to be effective in combating unemployment. This is because, as it was mentioned above, fs/QCA is best for conveying associations between causes and outcomes, in other words it can suggest whether there is any causal association. The effectiveness of labour market reforms in combating unemployment, on the other hand, concerns more a dynamic phenomenon. For that reason, the related predictions will be tested through case-studies, whose selection will be justified following the discussion of the fs/QCA results.

\_

<sup>&</sup>lt;sup>4</sup> This reflects the case-oriented origins of this method as opposed to the 'variable-oriented' focus of quantitative analysis.

#### 2.4 Conclusions

The purpose of this chapter was to develop hypotheses that would answer the following questions. First, how can low unemployment/high employment be compatible with generous labour market protection policies such as nonemployment benefits and employment protection legislation and collectively bargained wages? Secondly, to what extent labour market reforms that were nevertheless pursued in Western European economies in the 1980s and 1990s in their generous protection policies can be credited for the success of some of these countries in reducing unemployment? It was hypothesised that generous labour market protection policies can be compatible with moderate collective bargaining outcomes in open economies as long as macroeconomic policies are the monetary policy is conservative, fiscal policy is credibly oriented towards stability and collective bargaining is coordinated. Moreover, moderate bargain outcomes achieved under these conditions and the reform of labour market policies such as non-employment benefits and employment protection legislation in order to reduce the tax burden on labour costs can only be successful in combating unemployment if matched with favourable aggregate demand conditions. Under these requirements, small and open economies with regulated labour markets are more likely to enjoy favourable aggregate demand conditions in response to moderate bargaining outcomes and reforms than large and (less) open economies.

Given the interactive nature of the predictions of these hypotheses, it was argued that time-series cross-section regression analysis is not an appropriate method for empirically testing their validity. As it was discussed, the main problems of this method for assessing the predictions of the above hypotheses are the relatively small size sample given the demands that context conditionality would impose on the data and the limitations in accounting for the heterogeneity of countries. For these reasons and given that the hypotheses of this thesis suggest that the effects of labour market policies and institutions on unemployment outcomes in the medium-run depend on configurations of factors, qualitative comparative analysis with fuzzy sets (fs/QCA) will be used for empirically testing this hypothesis. This is the subject of the following chapter. Moreover, given the more

dynamic and also interactive nature of the predictions on the effect of labour market reforms on unemployment but also the limitations of fs/QCA, case-studies material will be used to substantiate and test these hypotheses further in the rest of the chapters of this thesis.

# CHAPTER 3. THE EFFECTS OF LABOUR MARKET INSTITUTIONS AND MACROECONOMIC POLICIES ON UNEMPLOYMENT IN OPEN ECONOMIES: A QUALITATIVE COMPARATIVE ANALYSIS WITH FUZZY SETS

#### 3.1 Overview

The purpose of this chapter is to provide a first empirical test for the predictions of the hypotheses developed in chapter 2. More specifically, this chapter will test the hypothesis that coordinated collective wage bargaining can lead to moderate bargaining outcomes and consequently a lower equilibrium rate of unemployment in open economies as long as the monetary policy is conservative, the fiscal policy is credibly oriented towards stability and even in the presence of generous labour market protection policies. In turn, moderate bargaining outcomes will be more effective in combating unemployment in small open economies than in large ones. Taken together these two statements constitute an alternative rather than a strictly speaking competing hypothesis to the one according to which only countries with deregulated labour markets, meaning not only uncoordinated/decentralised collective wage bargaining but also lenient employment protection legislation and non-generous non-employment benefits can achieve good unemployment performance. My hypothesis suggests that generous market policies and high bargaining coordination (i.e. 'high labour market regulation') may under certain conditions lead to low unemployment, although they are not necessary for that purpose.

As it was argued in the previous chapter, the interactive, context conditional effects of the hypothesised causal factors on unemployment and the relatively small dimensions of the population of countries to and the period for which they are applicable render time-series cross-section analysis inappropriate for testing the predictions of this hypothesis. This is because the marginal effects of the various hypothesised policy, institutional and structural causal factors cannot be reliably gauged under these constraints. Moreover, it was suggested that in a context where macroeconomic policies are conservative/credibly oriented towards stability,

generous labour market protection policies, effective bargaining coordination and a small and open to trade economy generate *sufficient* conditions for moderate bargaining outcomes and low unemployment in the medium- to long-run, although this configuration of causal factors is not *necessarily* the only path to this outcome. Given these characteristics of the hypothesis and the relevant population of countries and period of time to which they are potentially applicable, an approach that emphasises configurations of causal factors (rather than variables) in investigating necessary and/or sufficient causal associations will be used, namely Qualitative Comparative Analysis (Ragin 1987; 2000).

Based on Mill's method of difference, Qualitative Comparative Analysis (henceforth QCA) is a technique that allows the researcher to systematically test for the existence of deterministic necessary and/or sufficient causal relations between explanatory factors and outcomes using a relatively large number (usually >10) of cases (Ragin 1987; 2000). To do that, the characteristics of each case (e.g. of each country) in terms of the outcome of interest (e.g. unemployment performance) and the hypothesised causal factors (e.g. labour market policies) have to be systematically coded in a way that allows for comparisons. In its original form, QCA relied on binary crisp-sets, whereby each case was coded as either possessing a characteristic and thereby, being 'in' the set, or not and thereby, being 'out' of the set. The variant of QCA that will be used here is QCA with fuzzy-sets (henceforth fs/QCA). Fuzzy-sets allow for the coding of the various interesting characteristics of cases in a way that permits variation to the degrees to which they possess them or not and thereby, to the extent to which they are 'in' or 'out' of the fuzzy-set.

A number of steps need to be taken in order to apply this technique. First of all, the population of cases of interest has to be delineated. A case is the unit of analysis in QCA. The population of cases is the group of cases whose characteristics will be systematically analysed to draw conclusions about the existence of necessary and/or sufficient conditions between the causal factors and the outcome of interest. The second step then is to code the characteristics of these cases in terms of outcome and causal factors by assigning each case membership (or lack thereof) into a fuzzy-set for the outcome or causal factor of interest. This

coding is based on knowledge on the cases and will be discussed below. These first two steps will be discussed in section 3.2 of this chapter. Thirdly, the coded characteristics of cases are analysed systematically in order to derive whether any causal factors (or combinations thereof) are necessary and/or sufficient conditions for the occurrence of the outcome. It should be noted here that although fs/QCA investigates the existence of deterministic relationships, there is scope for allowing for some uncertainty by introducing probabilistic criteria in assessing the existence of necessary or sufficient conditions. This third step will be discussed in section 3.3 of this chapter. Fourthly, the results of the analysis are discussed with reference to case knowledge. This discussion will take place in several steps. The first, most general-level step will be taken in section 3.4 of this chapter, whereas more detailed case-studies will be carefully selected and discussed in chapters 4-7 of this thesis.

# 3.2 Preliminary Analysis: The Population of Cases and the Calibration of Fuzzy-Sets.

This section discusses the two preparatory steps that precede the actual qualitative comparative analysis, namely delineating the population of cases to be analysed and mapping their characteristics as fuzzy-sets. Both these steps rely on knowledge about the cases. In what follows, I first explain how I demarcated the population of cases whose characteristics will be analysed in order to test the hypothesis of the previous chapter. Secondly, I code the characteristics of cases in terms of the outcome of interest, i.e. unemployment performance, and the various causal factors that constitute the hypothesis to be tested, i.e. labour market protection policies, coordination of collective bargaining and so on, into fuzzy-sets and discuss these coding choices.

# 3.2.1 The Population of Cases

As already mentioned, fs/QCA is a technique that analyses a large number of cases in order to assess whether hypothesised causal factors (and combinations thereof) are necessary or/and sufficient conditions for an outcome to occur. Therefore, each case is the unit of observation in qualitative comparative analysis. The population of 'cases' that will be used here are 18 advanced capitalist economies during the 1990s (1990-1999). The countries are the following: Australia, Austria, Belgium,

Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the UK and the US. Greece, Spain and Portugal are excluded due to gaps in data on important causal factors such as bargaining coordination (see further below). There are two reasons for delineating the population of cases as I do here, one concerning the type of countries that are included and another concerning the period in which they are observed.

Regarding the former, this is the group of countries for which the theoretical hypotheses explored here are most empirically relevant. Advanced capitalist economies all have had relatively well-developed labour market policies and institutions to an extent that sets them apart from the rest of the world (e.g. Less Developed or 'Transition' countries to the same extent). This group of countries has been at the forefront of developments with respect to both macroeconomic policymaking and trade integration, compared to the rest of the world. However, interesting variation does exist within this group along all these dimensions. Even though the orthodoxy according to which macroeconomic policies should aim at both price and output stability is accepted by policy makers across this group of countries, there have been discernible differences in the way that central banks in e.g. Germany the US and the UK have been pursuing these goals, with the Bundesbank being more conservative and the Fed and the Bank of England using more discretion in stabilising output as well as prices (Franzese Jr 2001; Soskice 2007). Labour market protection policies and institutions vary not only between Western Europe and North America or Oceania but also within Western Europe itself, as does the degree of trade integration.

This is also why countries from outside Western Europe are included in the population. Most EU members, with the exceptions of the UK and to a large extent Ireland, have been characterised by generous labour market protection policies and relatively coordinated collective wage bargaining (Ireland as well). In order to investigate whether there is an alternative path to low unemployment to 'deregulated' labour markets, one would need some variation within the population of cases that are studied. As most countries with 'deregulated' labour markets have been outside Europe (US, Australia, New Zealand, Canada), adding those to the

population would increase the leverage of the analysis countries. Last but not least, this group of countries has also been the main target population of the empirical investigations in economics and comparative political economy on the effects of labour market institutions on unemployment. Even though QCA with fuzzy sets has been chosen here as an alternative method that can remedy some of the shortcomings of variable-oriented quantitative empirical approaches, it is useful to study the same population in order to maintain some comparability in the results with the existing empirical literature and engage with the existing debate more meaningfully.

Regarding the choice of time period that defines the cases to be studied, the focus on the 1990s can be justified on a number of reasons. First, the divide in unemployment performance between advanced industrialised economies with regulated labour market and those without, especially in favour of the latter, really emerged in the early 1990s, as did the 'labour market deregulation thesis' as a solution to high unemployment, especially in Europe (OECD 1994; Blanchard 2007). Until 1990, countries such as Germany and Sweden were considered as examples of economies that had fared fairly well following the oil shocks of the 1970s and the gradual re-orientation of macroeconomic policy goals towards price stability in the 1980s (see e.g. Bruno and Sachs 1985).

Moreover, although unemployment rates started declining in some countries with regulated labour markets already in the 1980s (e.g. in the Netherlands and Denmark), it was during the 1990s that their performance really bounced back and went down to rates that were comparable to those of countries with less regulated labour markets such as the U.S. (see for example, Austria, Denmark but also the Netherlands). Furthermore, the New Keynesian economics literature suggests that the variation in labour market policies and institutions seems to best explain the variation in unemployment performance across countries in the 1990s but not over time, i.e. since the 1960s (Blanchard 2007).

Secondly, although the reorientation of macroeconomic policy goals towards maintaining price and output stability began in the 1980s, it became more

widespread and consolidated, especially in western Europe from the early 1990s onwards, once the plan for launching the EMU was adopted. This is especially true for fiscal policy, as the establishment of ERM in 1979 gradually led a number of EC members to start shadowing the monetary policy of the Bundesbank in the 1980s. Consequently, focusing on the 1990s would allow us to observe one of the hypothesised causal factors in more cases and more consistently than in the 1980s.

Thirdly and very importantly, the period of study will be restricted up to 1999 as this was the last year when most EU members still had their own national central banks. The handover of monetary policy to the ECB constitutes a change in regime, not so much in terms of the orientation of the monetary policy maker as in the interplay of the ECB's threats and the incentives of nationally bargaining wage/price-setters and fiscal policy makers to avoid fuelling inflation. In the absence of Euro-area wide collective wage bargaining coordination mechanisms, the incentives to internalise the inherent externalities of wage bargaining become more complicated than the suggested argument.

Fourthly, competitiveness considerations in wage/price-setting and thereby, their effects for the ERU were more widespread, at least in western Europe, in the 1990s than in the 1980s with the completion of the Single Market programme and the advent of EMU. Thus, the 1990s was also the decade when macroeconomic policies became more credibly oriented to stability, concerted collective bargaining re-emerged more consistently (Fajertag and Pochet 1997, 8; Hassel 2003; Hancké and Rhodes 2005) and when economic integration, particularly financial, of advanced capitalist economies proceeded fast.

For these reasons and given the rather limited capacity of fs/QCA to incorporate dynamic effects in evaluating the existence of causal relations (cf. Rihoux 2006) between hypothesised factors and outcomes, the population of cases that will be used in the subsequent analysis will be constituted by advanced capitalist economies during the 1990s. It should be repeated here that the fs/QCA results are not the end of the empirical investigation but rather provide a 'map' for examining case-study material in a more systematic way. The actual way in which

any causal relations that will be uncovered operate will, therefore, be discussed further and expanded over time.

## 3.2.2 Defining and Calibrating the Fuzzy-sets

### 3.2.2.1 Some general points

Having established the population of cases that will be examined, the next step to prepare for the analysis is to code the characteristics of each case with regards to the outcome and the hypothesised causal factors in a systematic way. Qualitative comparative analysis is concerned with ordering conceptual categories rather than assessing statistical correlations. This is why QCA requires the use of set-theoretic variables that broadly illustrate whether a case exhibits a characteristic or not. A fuzzy-set is a pseudo-continuous scale, ranging from 0 to 1, on which cases are coded, depending on the intensity with which they exhibit the characteristic that defines the set. Fuzzy-set membership is, therefore, the tool that allows the researcher to codify the characteristics of the different cases with respect to the outcome and the hypothesised causal factors in a systematic and consistent way so that similarities and differences in the presence of the outcome and the causal factors can be used to gauge necessary and/or sufficient conditions for the occurrence of the outcome (Ragin 2000).

In the present analysis, the outcome of interest (unemployment performance) and the hypothesised causal factors (e.g. bargaining coordination, labour market protection policies and so on) will define a fuzzy-set each. Subsequently, the position of each case (i.e. of each advanced capitalist economy in the 1990s) in this fuzzy-set will be determined, i.e. whether it is 'in' or 'out' of the set. This positioning will be based on factual knowledge. A fuzzy-set should not be thought of as a mere re-scaling of any quantitative indicator on the characteristic that has to be coded into the 0-1 scale. Determining the membership value of any case in a fuzzy-set relies heavily on qualitative anchors rather than strictly mathematical equivalence (Epstein et al. 2008, 3).

When a case belongs fully to a set defined by the presence of a characteristic, then it will receive a set membership value of '1'. When a case is

completely out of a set defined by the presence of a characteristic, then it will receive a set membership value of '0'. However, as the sets that will be used here are 'fuzzy', cases can belong (or not) to a set to varying extents depending on how 'intensely' they possess the characteristic that defines the set. The crossover point that distinguishes being 'in' the fuzzy-set from being 'out' of the set is the setmembership value '0.5'. In other words, cases can be characterised as being 'in' the set defined by a characteristic and receive membership values between 0.51 and 1, while those that are 'out' of the set will receive membership values between 0 and 0.49.

Depending on the quantity, consistency and comparability of factual knowledge that the researcher has on the characteristics of the cases to be coded and analysed, a fuzzy-set can take different forms with regards to its 'continuity'. In general, the more information there is available on a characteristic and the more systematic and comparable it is across cases, the more 'continuous' the fuzzy-set will be, the use of the aforementioned qualitative anchors for determining membership notwithstanding (Ragin 2000).

It should also be mentioned at this point that for each set that is defined to code the presence of a characteristic (e.g. of a hypothesised causal factor) in the various cases, there automatically exists a set defined as its 'negation', that is, a set that codes the absence of the characteristic in the various cases (see more details in practice below). When QCA is used to test for the existence of necessary and/or sufficient conditions between hypothesised causal factors and an outcome of interest, it may also reveal that the absence of one or more of these causal factors is a necessary and/or sufficient condition for the outcome to occur.

In what follows, the construction of fuzzy-sets and the assignment to each case of a membership scores in each fuzzy-set will be discussed. For each fuzzy-set, I will explain its definition and then the reasons for assigning membership (or lack thereof) for the different cases. The facts according to which decisions over fuzzy-set membership will be made are mostly provided by data that have been routinely used in quantitative, variable-oriented investigations in economics and

comparative political economy (some of the most comprehensive or recent studies using these data are Iversen 1999; Franzese Jr 2001; Nickell and Nunziata 2002; IMF 2003; Baker, Glyn, Howell et al. 2005; Baccaro and Rei 2007)<sup>5</sup>. To preview the discussion, Table 3.1 summarises the fuzzy-sets that will be defined and calibrated in the following two subsections.

Table 3.1 Summary of Fuzzy-sets to be calibrated

Outcome/Causal Factor of	Definition of Fuzzy-Set	Fuzzy-set Label
Interest Outcome of Interest		
Average Unemployment in the 1990s	Cases with low average unemployment rate in the 1990s	UNR
Relative Change in Unemployment in the 1990s	Cases with high relative negative change in unemployment between 1990 and 1999	ΔUNR
Unemployment Performance in the 1990s	Cases with EITHER low average unemployment rate in the 1990s OR high relative negative change in unemployment between 1990 and 1999	LOWUN
<b>Hypothesised Causal Factors</b>		
Strictness of Employment Protection Legislation	Cases with strict employment protection legislation in the 1990s	EP
Generosity of Unemployment Benefits	Cases with generous unemployment benefits (i.e. high replacement ratio) in the 1990s	RR
Generous Labour Market Protection Policies	Cases with EITHER strict employment protection legislation OR generous unemployment benefits in the 1990s	LMPOL
Bargaining Coordination	Cases with high coordination in collective wage bargaining in the 1990s	ВС
Openness to Trade	Cases with high openness to trade in the 1990s	OPEN
Size of the economy	Cases with small economies in the 1990s	SMALL
Conservative Monetary Policy	Cases with an independent central bank in the 1990s	CBI
Stability orientation of fiscal policy	Cases with a hard currency in the 1990s	НСІ

<sup>-</sup>

<sup>&</sup>lt;sup>5</sup> I am indebted to Xavier Debrun (main author of IMF 2003 above) and John Schmitt (contributor in Baker, Glyn, Howell et al. 2005) for kindly providing me with their extensive datasets.

## 3.2.2.2 Fuzzy-set for the outcome of interest

The first fuzzy-set to be created is the one that will help code the outcome of interest, that is, good unemployment performance in the 1990s. There are two different ways in which good unemployment performance can be defined. One could look into either its level or its change during the 1990s. I take into account both in order to assign fuzzy-set membership to the cases of the population. That is, for a case in the population studied here to be characterised as a good performer in terms of unemployment, it must have either had a low average unemployment rate in the 1990s or experienced a relatively sharp decrease in its unemployment rate during the 1990s. There are a number of reasons for these choices.

First, I take into account both the level and the change in unemployment in the 1990s to account for its variable evolution across different cases. As mentioned earlier, the relative performance of advanced capitalist economies in terms of unemployment in the 1980s and 1990s kept changing (see Freeman 1998; Blanchard 2007). By the late 1990s, the group of countries whose unemployment rates were relatively low had had rather variable experiences. In some cases, unemployment had risen quite dramatically in the 1980s and early 1990s but declined substantially by 1999. In some other cases, unemployment remained low to moderate throughout the 1980s and 1990s, yet by 1999 it was higher than in the 1980s. Unfortunately, the QCA fuzzy-sets do not allow for over-time variation in the incidence of a causal factor to be captured in detail.

This is why calibrating the fuzzy-set of low unemployment by focusing only on the average rate in the 1990 or only in the change between 1990 and 1999 would not capture the picture of good unemployment performers of the late 1990s very accurately (for that, see also the graphs on the 'raw' values of average unemployment and its relative change for the 1990s). On the other hand, as any effects of institutions on unemployment are medium- to long-term (i.e. the Equilibrium Rate of Unemployment-ERU), relying on information at the very end of the 1990s in order to assess these effects would not be a sound practice.

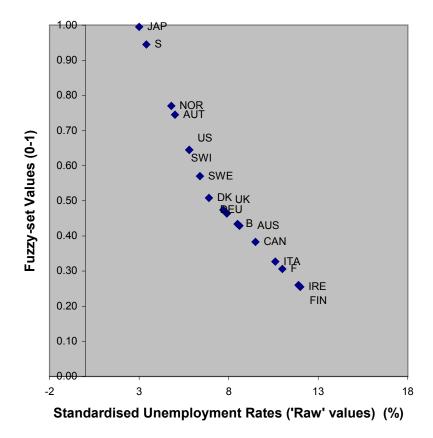
The variable that I use for information on the level of unemployment is the average (standardised) unemployment rate of each country during the 1990s. On the other hand, the variable that I use to draw information on the change of unemployment is the relative change in unemployment rate between 1990 and 1999 in each country. Given that these two variables are not easily combined in their 'raw data' form, I created a fuzzy-set reflecting each of them and then united the two sets (set operation 'O' or 'OR') to create the fuzzy-set of cases with *good unemployment performance in the 1990s*. Thus, I created a fuzzy-set of cases with *low average unemployment in the 1990s* and a fuzzy-set of cases with *high relative reduction in unemployment rate between 1990 and 1999*. For a case to belong into the fuzzy-set of *good unemployment performance in the 1990s*, it must have received a membership score greater than 0.5 in *either* the set of cases with low average unemployment in the 1990s or the set of cases with high relative reduction in unemployment rate in the 1990s.

Having discussed the definition of the fuzzy-set for the outcome of interest, i.e. good labour market performance/low unemployment, and the criterion upon which membership will be assigned, the next step then is to discuss how the membership of each case is actually assigned. Table 3.10 and Table 3.11 at the annex of this chapter show the raw data on unemployment (and other variables that will be discussed later) and the respective fuzzy-set membership values that correspond to them. Thus, Japan, the country with the lowest average unemployment rate for the 1990s (3%) is assigned full membership in the set, i.e. a score of '1'. At the other extreme, Finland and Ireland, the countries with the highest 10-year average unemployment rate (11.9 and 12 percent respectively), are completely out of the set of good unemployment performance and received a membership score equal to '0'.

The crossover point that draws the line between membership and non-membership in this fuzzy-set is set to correspond to an average unemployment rate of 7%. That is, a case with average unemployment rate over the 1990s of 7% would be neither 'in' nor 'out' of the fuzzy-set of cases with low unemployment in the

1990s and would receive a membership score of '0.5'. This is not a particularly low unemployment rate, however, it is meant to capture the fact that many countries started out with quite high rates in the 1990s and later on brought these rates down to figures between 3 and 5%. At the time, this was a fairly low rate within the group of advanced capitalist economies. It should also be noted here that a 'continuous' fuzzy-set form is chosen here, to reflect the confidence and accuracy of the standardised unemployment rate data that are used to index fuzzy-set membership (Ragin 2000, 294). Essentially this means that after defining which average unemployment rate determines full membership ('1') and non-membership ('0') in the fuzzy-set and which ones determine that a case is neither 'in' nor 'out' ('0.5'), the membership of the rest of the cases is determined essentially by normalising their average unemployment rates for the 1990s into the 0-0.49 and 0.51-1 intervals. To illustrate the process, Figure 3.1 shows the correspondence between raw values and fuzzy-sets.

Figure 3.1 Raw values of Average Standardised Unemployment Rates in the 1990s and Corresponding Fuzzy-set Values



The calibration of the fuzzy-set of cases with a high relative reduction in unemployment was even more straightforward. Finland with an increase of 6.99% was considered to be fully out of the set and received '0' membership. The Netherlands, on the other hand, with a reduction of –2.22 received full membership to the fuzzy-set. The crossover point was defined by zero average change in unemployment between 1990 and 1999. Again, thanks to the accuracy of the standardised unemployment rate data, a continuous fuzzy-set was used here.

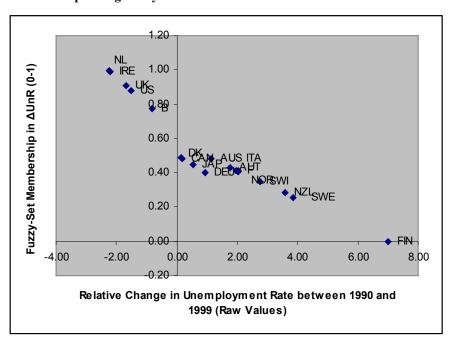


Figure 3.2 Raw Values of Relative Change in Standardised Unemployment Rates between 1990 and 1999 and Corresponding Fuzzy-set Values

# 3.2.2.3 Fuzzy-sets for the hypothesised causal factors

Having coded the cases' unemployment performance by means of fuzzy-set membership, the next step is to do the same for the hypothesised causal factors. The factors that I will construct fuzzy-sets for are the following: labour market protection policies, such as employment protection legislation and the unemployment benefits system, the coordination of collective wage bargaining, the credible orientation to stability of macroeconomic policies, the openness of the economy to trade and the economy size. In what follows, I discuss how I have defined the fuzzy-sets that code the information on each case with regards to these factors.

Starting with labour market protection policies, I consider employment protection legislation and unemployment benefits. The stricter the employment protection legislation is and/or the more generous the unemployment benefits are, the more they can insulate bargaining wage-setters from the effects of their behaviour on demand and employment (Blanchard 2007). To code the characteristics of the various cases along these two policy dimensions, I generate

two distinct fuzzy-sets: one set for cases with *strict employment protection legislation in the 1990s (EPL)* and another set for cases with *generous unemployment benefits in the 1990s (UnB)*. The factual evidence upon which I rely to determine the membership of each case in each of these sets comes from the 'Nickell-Nunziata' dataset, which contains, among others, indicators on the strictness/generosity of these policies for the cases of interest (see Nickell, Nunziata, Ochel et al. 2002 for details on the indicators).

The values of the raw data on the strictness of employment protection legislation range from 0 to 2, with higher values indicating stricter EPL (see Table 3.10 and Table 3.11 at the Annex). Cases with EPL indicator equal to '2' are given full membership to the fuzzy-set, i.e. a membership value of '1'. Cases with EPL indicator equal to '0' are considered to be completely out of the fuzzy-set and, thereby, get a membership of '0' to that set. The cross-over point is set to correspond to a raw EPL value of '1', i.e. cases with EPL value of '1' are considered to be neither 'in' nor 'out' of the above fuzzy-set and are therefore, granted a fuzzy-set membership of '0.5'. Similarly, cases with raw EPL values between 1.1 and 1.99 are granted fuzzy-set membership values between 0.51 and 0.99, whereas cases with raw EPL values between 0.1 and 0.49 are assigned fuzzy-set membership values between 0.1 and 0.49.

There are different dimensions that determine the generosity of an unemployment benefits' system, including their replacement ratio, their duration and the eligibility criteria for receiving these benefits. Thus, assessing in a consistent manner the overall generosity of a benefits' system is a difficult exercise. The existing indicators of this generosity (Nickell, Nunziata, Ochel et al. 2002) reflect the former two of these dimensions, i.e. the replacement ratio and the benefit duration. The benefit replacement ratio indicators average the respective ratios over three different family types for the first year of unemployment of the beneficiary. Indicators on the benefit duration are calculated as the ratio of the weighted average of replacement ratios in subsequent years of unemployment over the replacement ratio in the first year of an unemployment spell (ibid., 26-7).

Given how the benefit duration indicator is calculated, I used measures of the benefits' replacement ratio alone in order to code the generosity of unemployment benefits systems in the cases considered here. This is not because the duration of benefits does not matter for determining the incentives of wage-setters and thereby, the unemployment rate in the medium-to-long run but rather because the duration indexes calculated as above can be misleading in two ways. First, a country that offers relatively low benefits in terms of replacement ratio from early on in the unemployment spell and for relatively long periods of time may appear to be more generous than a country that offers relatively high benefits for the first year of an unemployment spell but then gradually reduces them.

Secondly, the replacement ratios beyond the first year of unemployment spell can conceal different policies with respect to the treatment of long-term unemployed. To provide a specific example, according to the available indicators (from the Nickell-Nunziata dataset), the benefit duration value in Sweden for the period 1988-1995 was 0.04 whereas the respective values for Denmark was 0.85 and for the UK 0.70. Taken at face value, these figures suggest that according to this dimension of generosity, the Danish unemployment benefits' system was far more similar to the UK one than it was to the Swedish. Of course, this is not true, as Denmark and Sweden have traditionally had strong activation policies for their unemployed workers, while the emphasis in the UK benefits system was more on poverty alleviation (Esping-Andersen 1990; 1999; Plougmann and Madsen 2005; Dingeldey forthcoming).

Given these considerations, I use the indicators of benefit replacement ratio for the first year of unemployment spell in order to determine the membership of each case in the fuzzy set of cases with generous unemployment benefits. The case with the highest average benefit replacement ratio for the 1990s was the Netherlands. I, therefore, assigned the full set membership value of '1' to the raw replacement ratio value of 72.75 %. The case with the lowest benefit replacement ratio in the 1990s (22.12%) was the UK. I, therefore, considered it as being completely 'out' of the fuzzy-set of cases with generous unemployment benefits, assigning it a membership value of '0'. I placed the crossover point distinguishing

membership from non-membership to the set at the median value of the all replacement ratios for the 1990s at 47%. Thus, cases with replacement ratios between 47 and 72 % are considered to be 'in' the above fuzzy-set and get membership values between 0.51 and 0.99, while cases with replacement ratios lower than 47% and higher than 22% are considered to be out of the fuzzy-set and receive membership values between 0.1 and 0.49 (see Table 3.10 and Table 3.11 at the Annex)<sup>6</sup>.

Having created the two fuzzy-sets that code the characteristics of cases on the generosity of two of their labour market protection policies, namely employment protection legislation and unemployment benefits, I then create the fuzzy-set of cases with 'high labour market regulation' (LMPOL). That is, I characterise as cases with high 'labour market regulation' those that have either strict employment protection legislation or generous unemployment benefits. For that purpose, I perform a 'union' set-operation (EPL  $\cup$  UnB  $\rightarrow$ LMPOL). The membership of a case in the set defined as 'countries with high labour market regulation' is calculated as the case's *highest* membership in either of the two sets that were united to construct it. The implicit simplifying assumption behind this is that any of these two causal factors (EPL or UnB) affects wage-setting behaviour in the same way with regards to determining unemployment performance. That is, generous unemployment benefits and strict employment protection legislation insulate wagebargainers from the consequences of their behaviour for demand and employment in a similar way.

Creating a joint fuzzy-set to illustrate the labour market policy aspects of the cases is necessary to make some space for including extra causal factors in the analysis but also in an attempt to simplify the results. Fs/QCA is well equipped to

<sup>&</sup>lt;sup>6</sup> Assigning the fuzzy-set membership value '0.5' is avoided as much as possible in order to maximise the information that is used from the cases to assess sufficient causal conditions. A membership value of 0.5 in a causal factor's fuzzy-set implies that the case to which it is assigned is neither in nor out of neither the defined fuzzy-set nor its negation. The consequence of this is that when one investigates the existence of sufficient conditions, such cases are not accounted for in determining the consistency with which a causal configuration causes an outcome. Given the not so high number of available cases in my analysis and the relatively high number of causal factors, this can have significant implications for the reliability of the results (see below).

deal with complexity (i.e. with configurations of causes). However, designing a model with too high a ratio of causal factors to cases can jeopardise the robustness of the results in the analysis of sufficient conditions (Lieberson 2004; Marx 2005). Although there are no specific guidelines on the safe design proportions, using a maximum total of 6 causal factors with 18 cases to analyse them should do reasonably well. This is why including more than one of the factors which generate bargaining power for wage-setters/workers by insulating from the effects of their wage-setting behaviour on demand and unemployment as separate fuzzy-sets involves more costs than benefits for the analysis here.

The next fuzzy-set that will be created is that of countries with *high* coordination in collective wage bargaining (BC). Bargaining coordination is the extent of intentional harmony in wage-setting between higher and lower levels of bargaining (Kenworthy 2001). To calibrate the set, I use Kenworthy's dataset (see Table 3.10 and Table 3.11 for details) on expected coordination in collective wage bargaining. The values for the index range from 1 to 5, with higher scores indicating higher expected coordination. Thus, countries with the lowest expected coordination, such as the UK and the US get a membership of '0' into the fuzzy-set, whereas countries with high expected coordination get a membership close to '1'<sup>7</sup>. The '0.5' crossover point is set at raw value 3.

Union density, a variable often used in empirical investigations on the relationship between institutions and unemployment is not included as a potential causal factor here. The logic behind its use would have been that the higher the union density, the stronger the distortion of competition is in wage-setting and, therefore, the higher the growth of labour costs would be for given unemployment rate. Other things being equal, that should be associated with a higher equilibrium rate of unemployment. However, Traxler, Blaschke and Kittel (2001, 225-6) show that there is no convincing empirical evidence supporting this hypothesis. Although

\_

<sup>&</sup>lt;sup>7</sup> Kenworthy (at <a href="http://www.u.arizona.edu/~lkenwor/data.html">http://www.u.arizona.edu/~lkenwor/data.html</a>) assigns the values of the range 1-5 discreetly to the various countries for each year. However, as the data used to calibrate the fuzzy-sets here are averaged over the 1990s and as his indicator of expected coordination has been varying over time, no country had a score of '5', i.e. of complete expected coordination, throughout the 1990s. This is why no country got assigned the full membership value of '1' in the respective fuzzy-set.

high union density can be a helpful prerequisite for encompassing unions that internalise bargaining externalities, it is not necessarily associated with coordinated wage bargaining, which is, according to the hypothesis of this thesis, what matters really. This is because a high share of employed workers may be members of a high number of unions, which in turn may or may not coordinate their wage-setting decisions. On the other hand, low union density can nevertheless co-exist with high coordination in bargaining, depending on the legislative provisions that may restrict competition among unions in representing workers (see Traxler and Kittel 2000 for the notion of 'bargaining governability'). For this reason, union density is omitted as a causal factor here.

The next fuzzy-sets to be created are those that reflect the characteristics of cases with respect to the *credible orientation of their macroeconomic policies towards stability*. There should ideally be two fuzzy-sets, one reflecting the orientation of monetary and the other reflecting the orientation of fiscal policy, as the two may or may not be well coordinated (see e.g. Schettkat 2003 for the example of the Netherlands and Germany in that respect). Finding consistent and comparable information that would help calibrate these two fuzzy-sets for the population of cases is fraught with some difficulties, especially for fiscal policy.

The orientation of monetary policy has been typically proxied by a (0-1) indicator of central bank independence (CBI) in the literature (Franzese Jr 2001; IMF 2003; Baccaro and Rei 2007). The construction of this indicator relied on the constitution of each central bank and interviews with a number of officials (see e.g. Cukierman 1992; Hall and Franzese 1998; Franzese Jr 2001). However, Iversen (1999) criticised this approach because the CBI index alone may not sufficiently illustrate the monetary policy regime as it only reflects the constitutional aspects of central banks and as monetary policy orientation changed even though these characteristics remained stable for a long time. He instead suggested the combination of the CBI index with a (0-1) measure of hard currency policy to capture the fact that a number of advanced capitalist economies shifted the focus of their monetary policy already from the 1980s while the change in the constitution of their central banks only followed in the (late) 1990s (see Annex for details on its

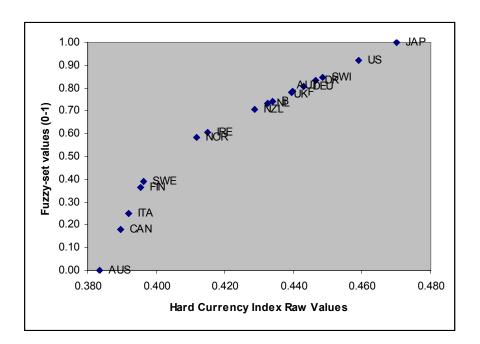
construction). On the other hand, there are no similar, if imperfect, indicators of the orientation of fiscal policy towards stability. Hallerberg and colleagues (2001) provide some classification of the extent to which fiscal policies of EU member states follow rules rather than being discretionary, however, their work covers the period that starts in 1998.

This is why, the movements in the nominal effective exchange rate, as per Iversen (1999, 57-60) above, will be used here to provide some indication of whether fiscal policy too has been oriented towards stability. The rationale is that if this has been the case, then financial markets will have been behaving in a manner that strengthens the nominal exchange rate of a currency. Given that the hard currency index also aims at reflecting the orientation of fiscal policy in the context of my analysis, I will keep the central bank independence and hard currency information separate and construct two fuzzy-sets that reflect each of these indicators.

Thus, two fuzzy-sets will be created to reflect the orientation of macroeconomic policies towards stability, namely, a set for cases with *independent central banks* (CBI) and a set for cases with *very hard currencies* (HCI). Membership in the fuzzy-set of cases with independent central bank will follow closely the values of the index itself (see Table 3.10 at the Annex for its 'raw' values). This means that there will be no cases that are considered to be completely 'out' of the set and receive membership value of '0'. This is reasonable, given that in spite of the considerable variation in the constitution of central banks within the group of countries studied here, there was some common macroeconomic orthodoxy guiding monetary policy making. Nor will there be cases that will be considered as completely 'in' the set and receive membership value of '1'. In fact, Germany receives the highest score, 0.93, for the Bundesbank, a fair value, given that the ECB was constituted to be even more independent. The 'cross-over' point that distinguishes membership from non-membership to the fuzzy-set is assigned to a 0.50 'raw' value of the CBI indicator.

Membership in the fuzzy-set of case with very *hard currencies* (HCI) is determined using the raw data on an extended version of Iversen's Hard Currency Index (see Annex for details on its construction). The values of this index range from 0.384 (Australia) to 0.470 (Japan). The highest the value of the index is, the harder the currency was. Given the highly relative nature of this measure, the value of the hard currency index that defines the crossover point between membership and non-membership in the set was determined by visual inspection of the raw values (see Figure 3.3). Thus, the crossover point was set between the raw values 0.396 and 0.412. The rest of the membership scores below and above these points were assigned in a continuous form. Australia received the '0' membership score, whereas Japan received the '1' full-membership score.

Figure 3.3 Raw Values of Hard Currency Index in the 1990s and corresponding Fuzzy-set membership values



The last pair of causal factors for which fuzzy-sets have to be constructed are the openness of an economy to trade and its size. For the former causal factor, the fuzzy-set is defined as the set of cases with *high openness to trade (OPEN)*. The factual information used for assigning cases their membership in this set is the average sum of exports and imports over GDP for the period 1990-1999. A

continuous fuzzy-set is chosen here as the measurement (in terms of raw data) of openness to trade of an economy is quite straightforward. Given that among the rich democracies, there are hardly any that are closed to trade, there are no cases with '0' membership to the set. Japan receives the lowest membership value, 0.18, given that 18% of its output is in the exposed sectors. On the other hand, cases such as Belgium, the Netherlands and Ireland had more than 100% of their GDP was in the exposed sectors and for that receive a membership of '1'. The cross-over point '0.5' point of the fuzzy-set is set to reflect cases where 50% of GDP is in the exposed sectors (see Table 3.10 and Table 3.11 at the annex).

To calibrate the size of the economy, I defined a fuzzy-set of *small cases* (SMALL). To assess membership into that set I use data on the average population of each case in the 1990s. The US with an average population of 265 millions is the case considered to be completely 'out' of this set, receiving a '0' membership. Ireland on the other hand with an average population of 3.6 millions is considered to be fully 'in' the set, receiving a membership of '1'. The crossover point between membership and non-membership in the fuzzy set is 20 million inhabitants. The fuzzy-set is continuous.

# 3.3 Exploring the Existence of Necessary and/or Sufficient Conditions for Good Unemployment Performance in the 1990s

Having created the fuzzy-sets for low unemployment in the 1990s and the causes of interest, the next steps involve investigating whether any of these causal factors (or combinations thereof) have been necessary and/or sufficient conditions for low unemployment in the 1990s. The hypothesis spelled out in the previous chapter attempted to explain how 'regulated' labour markets can be a sufficient condition for low unemployment in the medium- to long-run while suggesting that 'deregulated' labour markets (i.e. labour markets where labour market protection policies are not generous and wage bargaining is uncoordinated/decentralised) are not a necessary condition for good unemployment performance.

To infer whether a causal factor or a combination thereof is a necessary or/and sufficient condition for an outcome the fs/QCA technique 'browses' the

aspects of each case in the population of cases used here. These aspects are reflected in the membership of each case in the fuzzy-set of the outcome and each of the hypothesised causal factors (see Table 3.11 at the annex). Comparing similarities and differences in membership in the sets of factors and the outcome, the technique delivers simplified statements on necessary and sufficient conditions for the occurrence of the outcome.

Broadly speaking a causal factor is necessary for the occurrence of an outcome if this factor is present in all (or almost all) cases to the same or higher degree than the outcome. In fuzzy-set terms, a causal factor is a necessary condition for the occurrence of the outcome if the membership of each case in the fuzzy-set of this factor is equal or greater to the case's membership in the fuzzy-set of the outcome. Conversely, a causal factor (or combination thereof) is a sufficient condition for the outcome if this factor is present in all (or almost all) cases to the same or lower extent than the outcome. Again, in fuzzy-set terms, a hypothesised causal factor is a sufficient condition for the occurrence of the outcome if the membership of cases in the fuzzy-set of this factor is lower or equal to their membership in the outcome.

The advantage of fs/QCA compared to straightforward small-N case analysis is that it can gauge similarities and differences in case aspects and the outcome across a larger number of cases (18 here) (Ragin 2000). Therefore, while it focuses on the effects of *configurations* of causes (as opposed to net effects), it enables us to use insights about the effects of these configurations on the outcome for a larger number of cases. It thus tackles a problem that the use of case-studies for explaining phenomena has been traditionally marred with, namely the difficulty to draw more generalisable inferences.

The necessity and sufficiency of causal factors and their combinations are examined separately.

## 3.3.1 Necessary Conditions

The existence of necessary conditions is examined first. In practical terms, this process will examine for each causal factor, whether the membership of each case in

the factor's fuzzy-set is lower or equal than the membership of the case to the fuzzy-set of the outcome. Intuitively, this procedure will examine whether the incidence of a factor in the cases of population is at most as strong as the incidence of the outcome. Examining whether any of the hypothesised causal factors was necessary for low unemployment in the 1990s to occur will also reveal whether there was any combination of causal factors that was necessary for that outcome to occur. To understand why, one needs to understand how the joint incidence of several of the hypothesised causal factors in a case is coded in terms of fuzzy-sets.

A useful example is that of a case (here an advanced capitalist economy in the 1990s), which had generous labour market protection policies, high bargaining coordination, macroeconomic policies that were credibly oriented towards stability and was a small and open economy in the 1990s. This case should belong to each of the fuzzy-sets corresponding to these factors, i.e. it should have membership values between 0.51 and 1 in each of the fuzzy-sets that map the incidence of the above The concurrent incidence of these factors in this case can also be conceptualised as a fuzzy-set, defined as the intersection (in set-theory terms '\cap') of the fuzzy-sets of these factors. The membership of this case in the fuzzy-set that maps the joint incidence of these factors will be given by the lowest membership score of this case in any of the single causal factors' fuzzy-sets. In other words, the extent to which these causal factors jointly occurred in a case in the 1990s is determined by the lowest extent to which any of them occurred in this case in the 1990s. Therefore, testing for whether any single causal factor was a necessary condition for low unemployment in the 1990s will suffice for revealing whether any configuration of causal factors that includes this factor was a necessary condition for low unemployment in the 1990s.

To examine whether there have been any necessary conditions for low unemployment in the 1990s I use Table 3.2. This table illustrates for each causal factor the proportion of cases whose membership in the factor's fuzzy-set is greater or equal to their membership in the outcome's fuzzy-set. In other words, these tables illustrate the proportion of cases in which the incidence of the causal factor is

stronger than the incidence of the outcome, provided that the outcome occurs. The same exercise is repeated for the fuzzy-sets defined for the 'negation' of the hypothesised causal factors, that is, in order to check whether the absence of any of the hypothesised causal factors was a necessary condition for bad unemployment performance in the 1990s. As mentioned earlier, membership in these 'negation' fuzzy-sets is equal to (1-membership score) in the original fuzzy-set.

Table 3.2 Analysis of Necessary Conditions for Cases with 'Good Unemployment Performance in the 1990s' (i.e. those with membership >0 in the outcome LOWUN)

Causal Condition	Proportion of cases: Cause>=Outcome	Significance of Proportion
<b>Bargaining Coordination</b>	0.5	N/a
Labour Market Policies	0.55	N/a
Conservative Monetary Policy	0.38	N/a
Openness to Trade	0.55	N/a
Hard Currency	0.44	N/a
Small economy (Population)	0.61	N/a
~Bargaining Coordination	0.44	N/a
~Labour Market Policies	0.28	N/a
~Conservative Monetary Policy	0.39	N/a
~Openness to Trade	0.33	N/a
~Hard Currency	0.28	N/a
~Small economy (Population)_	0.33	N/a

Given the randomness that characterises social phenomena, whereby a cause may not be related with an outcome by means of a necessary condition for reasons that are beyond the context of a particular analysis, a probabilistic criterion for judging necessity is used here (Ragin 2000, 226-7). Therefore, rather than testing whether any hypothesised causal factor was 'always necessary' for low unemployment in the 1990s, I test for whether any causal factor was 'almost always' necessary for that outcome. In practical terms, this means that rather than requiring the necessity condition above to apply to 100% of cases in the population, I would consider the test for necessity as 'passed' even if this necessity condition applied for 80% of cases. As it seems, no causal factor seems to pass this test<sup>8</sup>.

<sup>-</sup>

<sup>&</sup>lt;sup>8</sup> A binomial distribution is used in order to calculate this probability. The statistic is given by  $(N r)^T$   $p^r q^{N-r}$  where N is the number of cases with membership in the outcome, r is the number of cases for which membership in the cause is greater or equal to their membership in the outcome, p is the level of statistical significance (0.05) and q=1-p (see Ragin 2000, 112). This probability is calculated *only* 

This result supports what one of the hypotheses of this thesis suggests, namely that there is no single institutional path to low unemployment (see also Freeman 1998; 2000).

As an extra test for the hypothesis examined here, I also investigated whether any of the hypothesised causal factors have been a necessary condition for the 'negation' of the outcome, that is, for 'not good' unemployment performance in the 1990s. This is because any claims on whether a causal factor is a necessary (and later even sufficient) condition for an outcome do not imply that the absence of the factor is a necessary condition for the absence of the outcome. Instead, the latter should be investigated separately (Wagemann and Schneider 2007, 26). Investigating the existence of any necessary conditions for bad unemployment performance can shed additional light on the effects of the hypothesised causal factors on unemployment performance.

Table 3.3 below suggests that none of the causal factors (or their absence) qualifies as a necessary condition for bad unemployment performance in the 1990s, defined as either a high average rate or a high increase between 1990 and 1999. This lends some indirect support to one of the 'raisons d'être' of this thesis by suggesting that generous labour market protection policies and bargaining coordination do not have to be associated with bad unemployment performance. If this is so, then it is worth investigating how regulated labour markets can lead to low unemployment.

if the proportion of cases with membership in a causal factor greater or equal to their membership in the outcome is 0.7 or higher.

Table 3.3 Analysis of Necessity applied to countries with 'Absence of Good Unemployment Performance in the 1990s' (i.e. those with membership >0 in the outcome ~LOWUN)

Causal Condition	Proportion of cases: Cause>=Outcome	Significance of Proportion
<b>Bargaining Coordination</b>	0.39	N/a
Labour Market Policies	0.55	N/a
Conservative Monetary Policy	0.61	N/a
Openness to Trade	0.55	N/a
Hard Currency	0.55	N/a
Small economy (Population)	0.5	N/a
~Bargaining Coordination	0.44	N/a
~Labour Market Policies	0.44	N/a
~Conservative Monetary Policy	0.33	N/a
~Openness to Trade	0.28	N/a
~Hard Currency	0.39	N/a
~Small economy (Population)_	0.22	N/a

## 3.3.2 Sufficient Conditions

## 3.3.2.1 The Method

The next step in the analysis is to test whether any of the hypothesised causal factors (or combinations thereof) were sufficient conditions for the low unemployment in the 1990s. In fs/QCA terms, this question can be written as

## LMPOL\*BC\*CBI\*HCI\*OPEN\*SMALL→LOWUN

i.e. the joint presence of the hypothesised causal factors, as mapped in the fuzzy-sets on the left-hand side of this expression, can be a sufficient condition for low unemployment. In fuzzy-set QCA terms, '\*' signifies 'AND'. Moreover, a causal factor written in 'UPPER-CASE' characters signifies that it is its presence that is part of the sufficient condition (i.e. that cases have membership higher than 0.5 in the causal factor's fuzzy-set). A causal factor written in 'lower-case' characters signifies that it is the absence of the causal factor that is a sufficient condition for the outcome to occur.

The previous chapter spelled out a hypothesis that will be tested here, namely that in small open economies, generous labour market protection policies combined with coordinated collective wage bargaining, a conservative monetary policy and fiscal policy that is oriented towards stability can lead to low unemployment in the medium- to long-run. It was also suggested that this was only

one of the possible paths to low unemployment and that labour markets with less generous protection policies and uncoordinated wage bargaining can also lead to low unemployment.

Fuzzy-set QCA allows to test whether both these paths can be sufficient for delivering low unemployment, even though none of them is necessary. Any of the above combination of causal factors will be a sufficient condition for low unemployment if the incidence of low unemployment in the 1990s in the cases analysed here is at least as strong as the incidence of the hypothesised combination of causal factors. The strength of this incidence is given by membership in the respective fuzzy-sets. In other words, a causal factor or a combination thereof is a sufficient condition for low unemployment in the 1990s if the membership of each case in the fuzzy-set of low unemployment is equal or greater than its membership in the fuzzy-set of the causal factor or combination thereof. In set-theory terms, the causal factor or combination thereof will have to be a subset of the outcome.

The fs/QCA technique, this time with the aid of software<sup>9</sup>, systematically 'browses' through the characteristics of all 18 cases, as mapped by their membership in the various fuzzy-sets. It compares differences and similarities and logically produces statements about sufficient causal conditions, defined as above. In contrast to the procedure that was followed for necessary conditions, the investigation of sufficient conditions explores combinations (configurations) of causal factors (or their absence/negation) rather than single causal factors only.

The first step for this investigation is to produce all the logically possible combinations of causal factors (or their absence)<sup>10</sup>. These combinations are shown in the Truth Table 3.4. To produce statements about which of these logically possible combinations of causal factors are sufficient conditions for the outcome, the researcher has to specify two more things. First, whether she wants causal

<sup>&</sup>lt;sup>5</sup>To that end the software programme fs/QCA 2.0 (available at <a href="https://www.u.arizona.edu/~cragin/fsQCA/software.shtml">www.u.arizona.edu/~cragin/fsQCA/software.shtml</a>) was used. This programme allows the analyst to specify the logical rules according to which the simplification of the patterns is done. These rules are discussed below in the text.

<sup>&</sup>lt;sup>10</sup> The number of the logically possible combinations is  $(3^k-1)$ , where k=number of causal factors. In this case, with k=6, the number of combinations is 728.

configurations that are logically possible but which are not observed in reality (i.e. counterfactuals) to be included in the analysis. Secondly, she has to choose the minimum consistency with which a causal configuration appears to be a sufficient condition for the outcome in the population of cases. These steps are explained below.

	Table 3.4	4 Truth Tab	le: BC*LMP(	DL*CBI*O	PEN*HO	CI*POP <b>→</b> I	LOWUN	
BC	POP	HCI	LMPOL	<b>OPEN</b>	CBI	number	LOWUN	consist
0	0	1	0	1	0	1	1	1
1	0	1	1	0	0	1	1	1
0	0	1	0	0	1	1	1	1
1	0	1	1	1	1	1	1	0.98
1	1	1	1	1	1	5	1	0.98
1	1	1	1	1	0	1	1	0.97
0	0	0	0	1	1	1	1	0.97
1	1	1	0	1	1	1	1	0.97
0	1	0	0	0	0	1	1	0.95
0	1	1	0	1	1	1	1	0.95
1	1	0	1	1	0	1	1	0.94
0	0	1	1	0	1	1	1	0.90
1	1	0	1	1	1	1	1	0.90
1	0	0	1	0	0	1	0	0.89

Among all the logically possible causal configurations, there will be some, which do not illustrate closely the characteristics of any case. In practical terms, there will be some causal configurations in whose fuzzy-set<sup>11</sup> there will be no case with membership score higher than 0.5. These causal configurations are called 'remainders' and are essentially counterfactuals, i.e. even though they could theoretically exist, they are not observed in the population of cases at hand. In a Truth Table these causal configurations can be distinguished by the fact that they receive a '0' in the 'number [of cases]' column. The researcher can choose whether she will include these counterfactuals in the analysis that investigates sufficient conditions, depending on her knowledge of the cases (Ragin 2000). I have chosen

\_

<sup>&</sup>lt;sup>11</sup> See subsection 3.3.1 on necessary conditions for how membership in the fuzzy-set of a configuration of causal factors is determined.

here to exclude them and, therefore, Table 3.4 above illustrates the 'truth table' without the 'remainders'.

Before the fs/QCA software produces statements about sufficient conditions, there is one more thing that the researcher needs to configure. As mentioned above, a configuration of causal factors is a sufficient condition for the outcome of interest if each case's membership in the outcome's set is greater or equal than the case's membership in the causal configuration's set. This is the test it has to pass. However, given the randomness that characterises social phenomena, it is probably sensible to characterise a causal configuration as a sufficient condition for an outcome even if does not pass this test for 100% of cases. The proportion of cases for which a causal configuration passes the test of sufficiency is given by the 'consistency' score and it is shown in the last column of the truth table under 'Yconsistency' (see Table 3.4 above).

The researcher, therefore, needs to determine the threshold of consistency for which she will accept to characterise a causal configuration as a sufficient condition for the outcome. It is often advised not to accept thresholds below 85% (Ragin 2000; Epstein, Duerr, Kenworthy et al. 2008), although this is not a rule to be applied without considering the specifics of each investigation (Schneider and Wagemann 2007). I have chosen here a consistency level of 90%. This means that a condition will be considered as sufficient if in at least 90% of cases, membership in the fuzzy-set of the outcome is greater or equal to the membership of the case in the fuzzy-set of the causal configuration. To return to the Truth Table, the causal configurations whose consistency is higher or equal to 0.90 are characterised as sufficient conditions and receive a '1' in the 'outcome' column to signal their acceptance as sufficient conditions whose expressions should be further logically minimised, whereas the rest receive a '0'.

Following these steps, the 'truth-table' is shortened and completed to include information on whether to use counterfactuals or not for the analysis and on which causal configurations can be characterised as sufficient conditions for the outcome on the basis of their minimum consistency level. The next step then is to use this

information in the truth-table (with the help of the software) and sub-set logic in order to simplify the causal configurations that have been designated as passing the sufficiency test into more parsimonious expressions of sufficient conditions. This is possible, because often some of the causal configurations that pass the sufficiency test in the Truth Table are contained within other causal configurations and are thus logically redundant. The results of this elimination/simplification exercise are provided in Table 3.6.

It should also be noted here that exactly the same analysis was undertaken for identifying sufficient conditions for the 'negation' of the outcome, i.e. for the occurrence of bad ('not good') unemployment performance. The results are reported in Table 3.5. As with the analysis of necessary conditions, this is a useful exercise in order to identify the conditions under which aspects of labour market regulation can lead to 'bad unemployment performance'.

	Table	3.5 Trutl	h Table: BC	*LMPOL*	CBI*OPE	N*HCI*POP	→ lowun	
BC	POP	HCI	LMPOL	<b>OPEN</b>	CBI	number	~lowun	Consist
1	0	0	1	0	0	1	1	0.97
0	0	1	1	0	1	1	1	0.96
0	1	0	0	0	0	1	1	0.93
0	0	0	0	1	1	1	1	0.91
0	1	1	0	1	1	1	0	0.83
1	1	0	1	1	1	1	0	0.81
1	0	1	1	1	1	1	0	0.74
0	0	1	0	1	0	1	0	0.73
1	1	0	1	1	0	1	0	0.72
1	1	1	0	1	1	1	0	0.65
1	1	1	1	1	0	1	0	0.65
1	0	1	1	0	0	1	0	0.64
0	0	1	0	0	1	1	0	0.59
1	1	1	1	1	1	5	0	0.54

#### 3.3.2.2 The Results

Table 3.6 below shows the 'minimised' (parsimonious) expressions of sufficient conditions for 'good unemployment performance in the 1990s' along with measures for assessing each of them, namely the consistency of each pathway as a sufficient condition and the proportion of cases for which it is relevant (raw and unique coverage) (for a more 'intuitive' version of these results, see Table 3.7). Each expression defines a causal pathway that was sufficient for leading to low unemployment in the 1990s. Each causal pathway consists of some combination of the hypothesised causal factors (or their 'negation'). It should be noted that the various sufficient conditions are alternatives (this is why the are joined by '+'), i.e. none of them is necessary and for that they can all, in principle, lead to the outcome.

However, some of them will be more consistently sufficient than others (see consistency score), that is, for some causal configurations there will be a larger proportion of cases for which this causal configuration is a sufficient condition for the outcome to occur than for others. Moreover, given its consistency, a causal configuration may be more or less relevant for explaining the relation between causes and outcome in the cases of the population (see raw and unique coverage scores indicating the proportion of cases for which a causal pathway is relevant).

The relevance of a causal pathway for explaining the occurrence of the outcome in a case depends on whether the intensity of the cause is similar to the intensity of the outcome in the particular case. In set-terms, the coverage depends on how close the membership of a case in the fuzzy-set of the causal configuration is to its membership in the fuzzy-set of the outcome. The coverage score that is reported below for each causal pathway/sufficient condition shows the proportion of cases for which good unemployment performance can be accounted for by this causal pathway. The fact that a causal configuration can be a sufficient condition for an outcome does not necessarily mean it can fully explain the intensity with which the outcome occur, as there may also be other factors determining the outcome which are not accounted for in the present analysis. This is why causal conditions that may have passed the test of sufficiency may nevertheless not be

relevant in explaining the occurrence of the outcome in high proportions of cases in the population.

Table 3.6 Solution Set: Model: BC\*LMPOL\*CBI\*OPEN\*HCI\*POP→LOWUN

Causal Pathways	Coverage	Consistency
(a) BC*LMPOL*OPEN*SMALL+	0.53	0.93
(b) BC*LMPOL*OPEN*CBI*HCI+	0.45	0.97
(c) lmpol*OPEN*SMALL*CBI*HCI+	0.35	0.95
(d) bc*open*small*CBI*HCI +	0.23	0.94
(e) bc*lmpol*open*SMALL*cbi*hci +	0.22	0.95
(f) bc*lmpol*OPEN*small*CBI*hci +	0.19	0.96
(g) bc*lmpol* OPEN*small*HCI*cbi +	0.16	1.00
(h) BC*LMPOL*open*small*HCI*cbi	0.13	1.00
Solution	0.80	0.90

"'s signifies 'AND' whereas '+' signifies 'OR'

Causal factors in lower-case signify membership <0.5 in respective fuzzy-set, i.e. 'absence' of the factor, whereas causal factors in upper-case letters signify membership >0.5 in respective fuzzy-set, i.e. 'presence' of the factor

An important and interesting feature of the QCA method is that neither these results nor the measures of consistency and coverage of each causal configuration that the analysis of sufficient conditions has indicated constitute hard evidence for the effects of the hypothesised causal factors by themselves. Instead they provide a map for reading through the evidence that a relatively large number of cases can provide on the phenomenon under study. Therefore, to evaluate each of these causal pathways and their relevance for the hypotheses that are being tested, the researcher has to make choices informed by case-knowledge in combination to the tools that the QCA technique offers (e.g. consistency and coverage measures).

The present analysis of sufficient conditions has produced a relatively high number of alternative sufficient conditions. Given that they have to be used as a map for reading the evidence that the cases in the population contain, it makes sense to try to somehow reduce their number. There are two, non-mutually exclusive, ways of doing this. First, one can consider the coverage scores of each causal pathway/sufficient condition and decide which ones deserve further discussion. A sufficient condition with coverage score of less than 30% is often considered as 'trivial' (Epstein, Duerr, Kenworthy et al. 2008). Whether such potentially 'trivial'

causal configurations should be studied further depends on whether the case or few cases they seem to be relevant for are of theoretical interest.

Table 3.6 suggests that all bar one causal pathways that include the *absence* of generous labour market protection policies *and/or* coordinated bargaining, have rather low coverage scores. This means that each of these causal conditions is empirically relevant as sufficient conditions for a very low number of cases in the population. Therefore, these causal pathways probably deserve some further discussion, given the prominence of the 'labour market deregulation thesis' in the debate. On the other hand, there are three causal pathways/sufficient conditions including 'high' labour market regulation and two of these have relatively high coverage scores (53 and 45 percent respectively). The third sufficient condition involving generous labour market policies and bargaining coordination has an especially low coverage score and for that, it will not be discussed further<sup>12</sup>. Therefore, considering the coverage scores in combination with the aspects of causal pathways and cases suggests that even pathways with low coverage should be examined further.

The second way of reducing the number of sufficient conditions that should be discussed is by combining them in a meaningful way, using the 'OR' (union 'U') set operation. This will be dictated by the question and hypothesis at hand. Given that one of the purposes of this thesis and of the qualitative comparative analysis undertaken here is to investigate configurations of factors that lead to low unemployment in countries with regulated and deregulated labour markets, it makes sense to combine causal pathways in a way that distinguishes between the two type of cases. Interestingly, all the causal pathways/sufficient conditions that include generous labour market protection policies always also include highly coordinated bargaining. Therefore, a meaningful way of combining causal configurations to facilitate further discussion is by dividing them depending on whether they contain

\_

<sup>&</sup>lt;sup>12</sup> As it will be shown later (see Figure 3.10 at Annex), this causal pathway was most relevant for potentially explaining the performance of Japan. However, even for this case, the match between sufficient condition and outcome suggested that there have been other factors, not accounted for by the present analysis that determined Japan's unemployment performance in the 1990s.

terms on generous labour market protection policies *and* bargaining coordination (henceforth designated as 'regulated labour markets') or not. This is what I do next.

Starting with the causal configurations that indicate sufficient conditions including 'regulated labour markets', one can see that pathways (a) and (b) from Table 3.6 can be combined into

## LMPOL\*BC\*OPEN\*(CBI\*HCI+SMALL)→LOWUN

This configuration suggests that within the population of cases that were analysed the combination of generous labour market protection policies, high bargaining coordination and high openness of the economy to trade led to low medium-run unemployment in the 1990s when also combined with

- o *either* a very independent central bank and hard currency, i.e. with macroeconomic policies that were conservative/credibly oriented towards stability (regardless of the size of the economy)
- o *or* with small size economy (regardless of the orientation of macroeconomic policies).

To further facilitate the discussion, these sufficient conditions and how they relate to the good unemployment performance and the cases of the population can be illustrated graphically. Two more steps are required for that. First, each causal pathway/sufficient condition is calibrated as a fuzzy-set itself and the membership of each case in it is calculated. Given that each causal configuration consists of a number of causal factors, all of which have to apply, the membership of each case in each of these sets is determined by its minimum membership to any of the factors constituting the configuration (i.e. the set operation 'AND' is used). Membership is also calculated for the joint configuration that I specified above. The membership of each case in this joint causal configuration is given by the case's highest membership in any of the causal pathways that constitute it, namely (a) or (b) (i.e. the set operation 'OR' is used). These membership scores are illustrated in Table 3.12 (see Annex), along with the membership of each case in fuzzy-set of the outcome.

Secondly, scatter-plots with equally scaled (0-1) axes are constructed illustrating on their horizontal axis the membership of each case in the causal configuration, which serves as a sufficient condition for the outcome. Membership in the fuzzy-set of the outcome is illustrated on the vertical axis of the scatter-plot. Given that both axes of the scatterplot range between 0 and 1, the scatter plot is a square. It was mentioned earlier that for a cause or a causal configuration thereof to be a sufficient condition for the outcome it must be a subset of it. This means that for a proportion of cases greater than 90%, their fuzzy-set membership in the causal configuration should be lower or equal to their membership in the outcome's fuzzy-set. Graphically, this implies that at least 90% of cases should lie on the upper triangle of the scatter plot. In general, the sufficient condition suggested by the causal configuration is stronger for a case, the closer this case lies to the diagonal, as such a position implies that the membership of the case in the fuzzy-set of the outcome is very close to its membership in the sufficient condition.

Figure 3.4 and Figure 3.5 illustrate the relationship between each of the sufficient conditions (a) and (b) above and low unemployment in the 1990s. Figure 3.6 shows the same relationship between the 'combined' condition and low unemployment in the 1990s. A number of lines are drawn within these plots to help us assess how relevant each sufficient condition is for the outcome. Apart from the diagonal, parallel lines shifted by 0.25 points from it are also drawn on both sides, delineating areas of relevance of the sufficient condition for determining the outcome in a case. The closer to the diagonal a case is and ideally above it, the more relevant the sufficient condition is for it. Cases lying near the vertical axis of the graph are those for which the outcome is least well explained by the sufficient condition.

One final point worth noting is that the sufficient condition as stated at the bottom of the graph only applies as such those cases with membership greater than 0.5 in the fuzzy-set of the outcome. Those cases very near the diagonal, whose membership in the outcome, however, is lower than 0.5, also have a membership in the sufficiency condition that is lower than 0.5. What is interesting, particularly in comparison to quantitative variable oriented analysis, is that QCA does not imply

that their non-membership in the outcome fuzzy-set is associated with the inverse of the sufficient condition stated. Instead, one should look into a case's membership in the causes that constitute the configuration/sufficient condition to see why its overall membership in the condition is lower than 0.5 and understand how this affects membership in the outcome.

Figure 3.4 Regulated Labour Market in Small Open Economy as a Sufficient Condition for Good Unemployment Performance in the 1990s

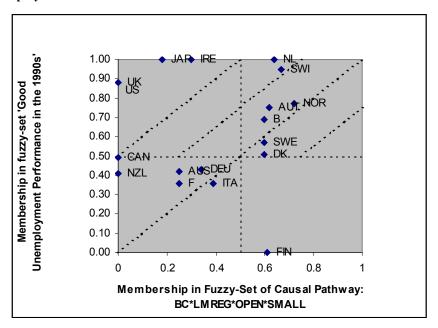


Figure 3.5 Regulated Labour Market in Open Economy with Conservative Monetary Policy and Stability-Oriented Fiscal Policy as a Sufficient Condition for Good Unemployment Performance in the 1990s

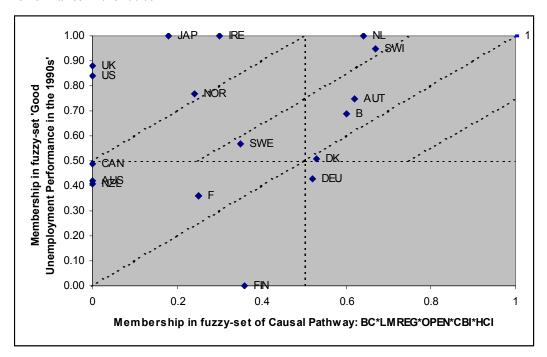
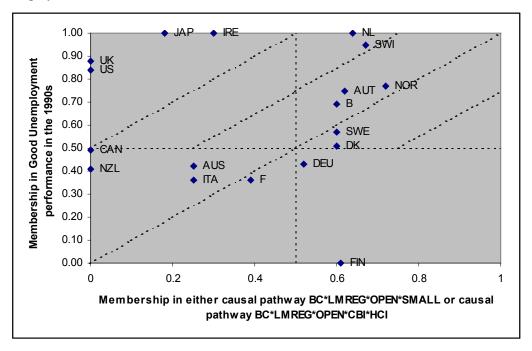


Figure 3.6 Regulated Labour Market in Open Economy with Either Small Size Or Conservative/Stability Oriented Macroeconomic Policies as Sufficient Conditions for Good Unemployment Performance in the 1990s



As mentioned above, there are five causal configurations that indicate sufficient conditions including 'deregulated' labour markets, only one of which, namely (c) has a coverage score higher than 30%. The only causal factors that most of these configurations have in common are the absence of generous labour market policies and often the absence of bargaining coordination. This is why trying to combine them into a more parsimonious expression using the 'OR' set-operation would not really facilitate their discussion. Nevertheless each of them is graphically represented in order to get an idea of which cases they seem to explain (see Figure 3.8 Figure 3.9, Figure 3.10 and Figure 3.11 at the Annex). These figures will be discussed in the following section. They suggest that each of these causal paths expresses a sufficient condition for low unemployment that is applicable to a different case with deregulated labour market at a time. The only exception is pathway (c) where the combination of poor labour market protection policies, macroeconomic policies credibly oriented towards stability, high openness and small size seem to explain well unemployment performance in Ireland and New Zealand in the 1990s.

The different causal pathways and the cases whose performance they explain are summarised in Table 3.7 below.

Table 3.7 Summary of Causal Pathways/Sufficient Conditions for (Good) Unemployment Performance in the 1990s

Causal	Causal Pathway Configuration	Cases whose								
Pathway/Sufficient	Causar rathway configuration	performance it								
Condition Label		explains well/fairly								
Condition East.		well								
Configurations with 'Regulated Labour Markets', i.e. generous labour market policies and										
	high bargaining coordination									
Small Open Economy with	LMPOL*BC*OPEN*SMALL	AUT, B, DK, NL, SWI,								
Regulated Labour Market		SWE, NOR, (FIN)								
Open Economy with	LMPOL*BC*OPEN*CBI*HCI	AUT, B, DK, NL, SWI,								
Regulated Labour Market,		DEU								
Conservative Monetary										
Policy and Stability										
Oriented Fiscal Policy										
Open Economy with	LMPOL*BC*OPEN*SMALL+	AUT, B, DK, FIN, NL,								
Regulated Labour Market	LMPOL*BC*OPEN*CBI*HCI→	SWE, SWI, NOR, DEU,								
and EITHER small size OR		(FIN)								
conservative monetary	LMPOL*BC*OPEN*(SMALL+CBI*HCI)									
policy and stability										
oriented fiscal policy										
Configurations with 'De	eregulated Labour markets', i.e. without gen	nerous labour market								
	policies or low bargaining coordination									
Small Open Economy	lmpol*OPEN*SMALL*CBI*HCI	IRE, NZL								
without generous labour										
market policies,										
Conservative Monetary										
Policy and Stability										
Oriented Fiscal Policy										
Large Open Economy with	lmpol*bc*OPEN*small*cbi*HCI	UK								
deregulated labour market										
and stability oriented										
macroeconomic policies										
Large closed economy with	bc*open*small*CBI*HCI	US								
uncoordinated bargaining										
and stability oriented										
macroeconomic policies										

Finally, the results of QCA<sup>13</sup> for the negation of the outcome of interest, i.e. for 'bad unemployment performance' in the 1990s are shown in Table 3.8. This analysis is useful to help us understand under what conditions generous labour market protection policies and/or high bargaining coordination can lead to high

\_

<sup>&</sup>lt;sup>13</sup> This analysis was performed under the same configuration as the analysis of sufficient conditions for low unemployment in the 1990s, that is, by not taking into account the 'remainders'/counterfactuals and by setting the threshold of consistency for sufficient conditions at 90%.

unemployment. Two sufficient conditions ((c) and (d)) emerge to that end and they are combined as follows:

## LMPOL\*open\*small\*(BC\*cbi\*hci+bc\*CBI\*HCI)→ lowun

That is, generous labour market protection policies lead to high unemployment when combined with relatively low openness of the economy to trade in a large economy and

- either high bargaining coordination and macroeconomic policies that are not credibly oriented towards stability
- or low bargaining coordination and macroeconomic policies that are credibly oriented towards stability.

Table 3.8 Solution Set: Model: BC\*LMPOL\*CBI\*OPEN\*HCI\*POP→lowun

Causal Pathways	Coverage	Consistency
(a) bc*lmpol*open*SMALL*cbi*hci+	0.40	0.92
(b) bc*lmpol*OPEN*small*CBI*hci +	0.33	0.91
(c) bc*LMPOL*open*small*CBI*HCI+	0.31	0.96
(d) BC*LMPOL*open*small*cbi*hci +	0.24	0.97
Solution	0.64	0.94

<sup>&#</sup>x27;\*' signifies 'AND' whereas '+' signifies 'OR'

Causal factors in lower-case signify membership <0.5 in respective fuzzy-set, i.e. 'absence' of the factor, whereas causal factors in upper-case letters signify membership >0.5 in respective fuzzy-set, i.e. 'presence' of the factor

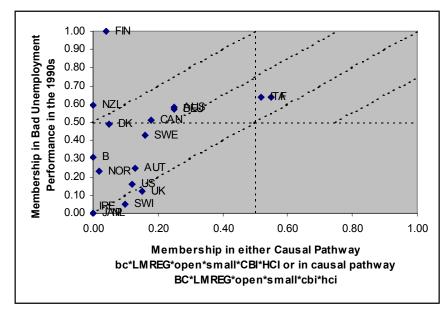
Intuitively, the causal pathways involving aspects of labour market regulation that the results above link to 'bad unemployment performance' in the 1990s are given in Table 3.9.

Table 3.9 Summary of Causal Pathways/Sufficient Conditions for Bad Unemployment Performance in the 1990s in cases with aspects of Labour Market Regulation

Causal Pathway/Sufficient	Causal Pathway Configuration	Cases whose performance
Condition Label		it explains well/fairly well
Generous Labour Market	LMPOL*bc*open*small*CBI*HCI	F
Policies in large, relatively		
closed economy with low		
bargaining coordination and		
conservative/stability-oriented		
macroeconomic policies		
Regulated Labour Market in	LMPOL*BC*open*small*cbi*hci	ITA
large, relatively closed	_	
economy with accommodating		
macroeconomic policies		

Figure 3.7 illustrates this joint sufficient condition for 'bad unemployment performance' in the 1990s in cases with some aspect of labour market regulation based on the fuzzy-set memberships shown in Table 3.13 (see annex).

Figure 3.7 Aspects of Labour Market Regulation as Sufficient Conditions for Bad Unemployment Performance in the 1990s



Having explained the derivation of sufficient conditions for the outcome of interest and the ways they are represented, we are now ready to proceed to the final step of any QCA analysis, that is, the link of the results to cases.

## 3.4 Discussion of the Results

The aim of this section is to provide a preliminary discussion of the qualitative comparative analysis results on the existence of necessary and sufficient conditions for good unemployment performance in advanced capitalist economies in the 1990s. The broad point to be addressed is whether these results lend any preliminary empirical support to the first hypothesis that was developed in chapter 2. This hypothesis had two parts.

First, that the experience of advanced capitalist economies in the 1980s and 1990s suggests that there has been no single institutional path to low unemployment. In other words, that while there are different institutional

configurations that can lead to low unemployment in the medium-run, including one with 'deregulated' labour markets and one with 'regulated' labour markets, none of them is necessary.

Secondly, that labour markets with generous protection policies and coordinated collective wage bargaining ('regulated' labour markets) can enjoy low unemployment in the medium-run when macroeconomic policies are credible oriented towards stability and when the economy is small and open to trade. Consistently with good QCA practice, the discussion of whether the results of the preceding analysis lend any support to these hypotheses will be grounded on case-knowledge (Schneider and Wagemann 2007).

Starting with the first leg of the hypothesis tested here, namely that there are no necessary conditions for low unemployment when it comes to the degree of labour market regulation, the analysis of the preceding sections provided support in three ways. First, none of the hypothesised causal factors passed the test for being a necessary condition, even at the probabilistic version of it, i.e. when tested for being an 'almost always necessary' conditions. The same result emerged from all causal factors (and their absence) were tested for being necessary conditions for the negation of the outcome, i.e. for 'not good' (bad) unemployment performance in the 1990s. This implies that no aspect of 'labour market regulation', i.e. generous or poor labour market protection policies, high or low bargaining coordination, has been necessary for good or bad unemployment performance in the 1990s.

Secondly, the analysis of sufficient conditions offered further indirect corroborating evidence that there is no single (i.e. necessary) path, especially deregulated labour markets, to good unemployment performance. As one can see in Figure 3.4, Figure 3.5 and Figure 3.6, sufficient conditions that seem to explain more or less well the group of cases characterised by 'regulated' labour markets (i.e. with generous labour market policies and coordinated collective bargaining) do not really explain the group of cases with deregulated labour markets and vice versa.

Thirdly, the variety of causal pathways/sufficient conditions for low unemployment that involve one or both aspects of deregulated labour markets (i.e.

poor labour market protection policies and/or low bargaining coordination) and their especially low coverage of cases suggests that even deregulated labour markets alone cannot explain low unemployment across the group of countries that are characterised by them (US, UK, Ireland). Instead, the analysis of the previous section that more factors should be taken into account.

Moving on to the second leg of the hypothesis, that is, the conditions under which cases with 'regulated' labour markets can achieve low unemployment, the analysis of sufficient conditions, given the cases of the population, again seems to offer supportive evidence. To reiterate the findings, granted high labour market regulation and openness to trade, there appear to have been two paths to low unemployment, i.e.

- *either* cases with macroeconomic policies that were credibly oriented towards stability as evidenced by their hard currency and a very independent central bank and irrespective of the size of their economy
- *or* cases that were small (in addition to open) economies, irrespective of the orientation of their macroeconomic policies.

Figure 3.6 suggests that these two sufficient conditions between them do a very good job in explaining unemployment performance in Austria, Norway, Denmark, Sweden, Belgium and Germany and a fairly good job in explaining the Netherlands and Switzerland.

In these two latter cases, it seems that more factors than the ones accounted for in the qualitative comparative analysis have boosted unemployment performance, so that the membership score in the set of good unemployment performance is much higher than the membership score of either sufficient condition set. In the case of the Netherlands, this probably has to do with the fact that unemployment fell to a large extent as a result of part-time employment creation (Visser 2000a), thus involving a large share of employment redistribution. This is not something that is accounted for in the unemployment statistics.

Moreover, cases such as Austria, the Netherlands, Belgium, Denmark and Switzerland are equally well explained by either sufficient condition. This means that they are all characterised by regulated labour market, macroeconomic policies that are credibly oriented towards stability and small and open economies, which is exactly the hypothesis that I set out to test in this chapter. This contrasts with Norway, Sweden and Germany. The former two cases' unemployment performance is explained well only by the 'regulated labour markets and small, open economy' configuration. Norway has kept pursuing active demand management policies, thanks to its oil revenues, in an attempt to exchange employment creation for moderate wage/price developments in a re-centralised bargaining system (see Iversen 1999 for details). Sweden, on the other hand, changed the orientation of its macroeconomic policies to emphasise price stability late in the 1980s (Iversen 1999; Anxo and Niklasson 2006). The result of this was that the Swedish Krone fell prey to speculative attacks in the early 1990s and had to be floated, thus leading to a rather low Hard Currency Index in the data that was used to calibrate the fuzzy-sets (see Table 3.10 and Table 3.11at the annex). Moreover, as Sweden opted out of EMU, its central bank did not have to adopt the conservative constitution of the ECB and that may have also affected its score in the Central Bank Independence index for the 1990s.

Germany, on the other hand, is the only case whose unemployment performance is explained well by the 'regulated labour market, open economy and macroeconomic policies credibly oriented towards stability' condition. In fact, the impact of this causal configuration on unemployment performance in Germany seems to have been weaker than that of a sufficient condition, as the German membership score in the low unemployment fuzzy-set is slightly lower than its membership score in the fuzzy-set of the causal configuration. This suggests that factors not accounted for in the analysis here weakened the effect of this sufficient condition in the case of Germany. The Unification is an obvious candidate explanation. It is an open question whether the fact that Germany is the only case that had macroeconomic policies, which were credibly oriented towards stability and an open but *not* small economy can account for its relatively bad unemployment

performance in the 1990s, especially compared to other cases explained by this sufficient condition.

This point signals a limitation of qualitative comparative analysis: while it can point out configurations of causal factors that have acted as necessary/sufficient conditions for the occurrence of an outcome, it does not explain how these factors combine among them to produce the outcome. More detailed case-studies are required to that end and these will follow in the next chapters of this thesis.

The analysis of sufficient conditions for the occurrence of the 'negation' of the outcome of interest, i.e. of bad unemployment performance in the 1990s, offers further support to the hypothesis that labour market regulation under appropriate conditions can lead to low unemployment. The results in Table 3.8 and Table 3.9 suggest that generous labour market policies lead to high unemployment in large and less open economies when combined with

- either high bargaining coordination and macroeconomic policies that are not oriented towards stability
- *or* macroeconomic policies that are oriented towards stability and *low* bargaining coordination.

Figure 3.7 suggests that the former condition explains the case of Italy in the 1990s whereas the latter explains the case of France during the same period. Both countries have been suffering from high unemployment rates in the 1990s.

These findings offer support to the hypothesis tested here because they show that generous labour market policies can lead to bad unemployment performance in two cases. Either when the right incentive structure (high openness and macroeconomic policies) is *not* in place to alleviate any insulation that they may offer to wage bargainers from the consequences of their behaviour on demand and employment; or when collective wage bargaining is *not* sufficiently coordinated to effectively internalise the threats of macroeconomic policies that are credibly oriented towards stability. Moreover, even if the appropriate combination of incentive structure and coordination mechanisms was in place, it is an open question

whether any moderate wage/price developments would produce sufficient demand expansion to reduce unemployment given the small size and relatively low openness to trade of both cases.

My hypothesis suggested that for generous labour market protection policies to be compatible with low unemployment, they should be combined with bargaining coordination, macroeconomic policies that are conservative/credibly oriented towards stability, high openness and possibly a small economy. These results show that if any of these conditions fail, then generous labour market protection policies will indeed lead to high unemployment. In that sense, these results advocate against the validity of the 'labour market deregulation' thesis, as they qualify the conditions under which generous labour market protection policies can be harmful.

All in all, the qualitative comparative analysis investigating the existence of sufficient conditions lends some initial support to the hypothesis stated in the previous chapter. According to this hypothesis generous labour market protection policies in open economies can lead to low unemployment in the medium run when combined with coordinated collective wage bargaining and macroeconomic policies that are oriented towards stability. These conditions will ensure that even if wage/price bargainers are insulated from the consequences of their behaviour for demand and employment thanks to generous labour market protection policies, macroeconomic policies that are oriented towards stability will threaten to impose a sufficiently high penalty in terms of unemployment if bargaining outcomes fuel inflation and this threat will lead to moderate wage/price bargaining outcomes. It was also hypothesised that under these conditions aggregate demand is more likely to be favourable in small open economies where moderate wage outcomes will lead to a real exchange rate depreciation and stimulate export demand. Export demand is a relatively higher proportion of aggregate demand in small and open economies than in large ones.

## 3.5 Conclusions

This chapter has sought to provide an empirical test for some of the hypotheses that were spelled out in chapter 2. More specifically, it has investigated whether

coordinated collective wage bargaining can lead to moderate bargaining outcomes in open economies as long as the monetary policy is conservative, the fiscal policy is credibly oriented towards stability and even in the presence of generous labour market protection policies. In turn, moderate bargaining outcomes will be more effective in combating unemployment in small open economies than in large ones. This hypothesis was spelled out as an alternative to the labour market deregulation thesis. It was, thus, suggested that both pathways can be sufficient to lead to low unemployment but neither is necessary. To test this hypothesis, I used qualitative comparative analysis with fuzzy-sets.

The results of this analysis seem to lend some support to the above hypothesis. First, neither aspects of labour market regulation or deregulation seem to be necessary conditions for good or bad unemployment performance. Secondly, different causal pathways seem to explain unemployment performance in countries with 'regulated' and 'deregulated' labour markets. Thirdly, the analysis of sufficient conditions suggested that the good performance of many countries with regulated labour markets in the 1990s was explained by the combination of generous labour market protection policies, bargaining coordination, their openness to trade and either their small size or macroeconomic policies that are conservative/stability oriented. In fact, it was shown that most countries with regulated labour markets and good unemployment performance can be classified under both these conditions. An exception to that was Germany, a large and open economy. Fourthly, it was suggested that the conditions that account for the good unemployment performance in countries with deregulated labour markets have been more complex and diverse than it's usually implied.

The results on the sufficient conditions for good unemployment performance in countries with regulated labour markets in the 1990s will have to be studied in more depth. After all, the QCA results only provide a 'map' for reading through relatively large numbers of cases and their configurations. This is what the following chapters will do.

## 3.6 Annex

## 3.6.1 Constructing the Hard Currency Index

The Hard Currency Index (HCI) that is used in the analysis is an extended version of the index presented by Iversen (1999). In his analysis, he uses it to proxy the non-accommodating monetary policy stance of a central bank. In my analysis, I also use it to proxy the stability orientation of fiscal policy on the assumption that if fiscal policy is credibly oriented towards stability, then the nominal exchange rate of its currency will not come under pressure to depreciate.

To construct this hard currency index I calculated and normalised (0-1) the relative change in the nominal effective exchange rate of each country (source: AMECO database). Then, I partitioned the 1970-1999 period into 3-5 periods ('regimes') of varying length. The rule for the partitioning was that within-period variance in relative change rates should be minimised whereas between-period variance should be maximised. Having identified the different 'regimes', I then averaged the values for the 1990s in order to calibrate the fuzzy-set of 'cases with a Hard Currency'.

Table 3.10 Outcome of Interest and Hypothesised Causal Factors: Raw Values

				Employment	t				
		Relative	ъ	Protection	D 64.1	G I.B. I.	0	Hard	
	Unamplayment	change in Unemployment	Bargaining	Legislation strictness	Benefits'	Central Bank Independence		Currency Index	Population
Case <sup>1</sup>	Rate <sup>2</sup>	Rate <sup>3</sup>	(1-5)	(0-2)	Ratio (%)	Index (0-1)	(0-1)	(0-1)	(000s)
Australia	8.6	1.13	2.4	0.5	25.9	0.47	0.38	0.384	17990
Austria	5	1.78	4	1.3	34.8	0.67	0.79	0.440	7896
Belgium	8.5	-0.83	4.5	1.27	47.1	0.72	1.37	0.434	10112
Canada	9.5	0.19	1	0.3	40.1	0.61	0.67	0.390	29116
Denmark	6.9	0.14	3.4	0.82	61.8	0.53	0.67	0.446	5227
Finland	11.9	6.99	3.8	1.1	54.3	0.58	0.61	0.396	5089
France	11	2.02	2	1.46	57.5	0.73	0.45	0.440	59286
Germany	7.7	0.94	4	1.46	38.3	0.93	0.52	0.443	79626
Ireland	12	-2.22	4.6	0.53	37.2	0.56	1.34	0.415	3616
Italy	10.6	1.98	3.4	1.72	36.2	0.48	0.44	0.392	56837
Japan	3	0.55	5	1.4	31.4	0.48	0.18	0.470	125261
Netherlands	5.8	-2.25	4	1.25	72.8	0.64	1.11	0.432	15400
New Zealand	7.9	3.58	1	0.8	28.7	0.69	0.58	0.429	3642
Norway	4.8	2.04	4.7	1.42	62.4	0.24	0.72	0.412	4348
Sweden	6.4	3.87	3.4	1.42	71.0	0.35	0.68	0.396	8757
Switzerland	3.4	2.75	4	0.55	64.3	0.85	0.67	0.448	6978
United Kingdom	7.9	-1.69	1	0.35	22.1	0.48	0.53	0.439	57951
United States	5.8	-1.52	1	0.1	28.1	0.75	0.22	0.459	264538

<sup>1.</sup> Case=country in the 1990s

Standardised unemployment rate (%)
 Relative change in standardised unemployment rate between 1990 and 1999 (%)

Table 3.11 Outcome of Interest and Hypothesised Causal Factors: Fuzzy-set Membership Scores

case	lowUnR	(-)ΔUnR	LOWUN <sup>1</sup>	BC	EP	BRR	$LMPOL^2$	CBI	<b>OPEN</b>	HCI	SMALL
Australia	0.34	0.42	0.42	0.35	0.25	0.08	0.25	0.47	0.38	0	0.56
Austria	0.75	0.37	0.75	0.75	0.62	0.25	0.62	0.67	0.79	0.78	0.87
Belgium	0.35	0.69	0.69	0.875	0.6	0.5	0.6	0.72	1	0.74	0.8
Canada	0.24	0.49	0.49	0	0.12	0.36	0.36	0.61	0.67	0.18	0.44
Denmark	0.51	0.49	0.51	0.6	0.41	0.78	0.78	0.53	0.67	0.83	0.95
Finland	0	0	0	0.7	0.43	0.64	0.64	0.58	0.61	0.36	0.96
France	0.09	0.36	0.36	0.25	0.72	0.7	0.72	0.73	0.45	0.78	0.38
Germany	0.43	0.43	0.43	0.75	0.72	0.32	0.72	0.93	0.52	0.81	0.34
Ireland	0	1	1.00	0.9	0.27	0.3	0.3	0.56	1	0.61	1
Italy	0.13	0.36	0.36	0.6	0.88	0.28	0.88	0.48	0.44	0.25	0.39
Japan	1	0.46	1	1	0.68	0.19	0.68	0.48	0.18	1	0.25
Netherlands	0.65	1	1	0.75	0.59	1	1	0.64	1	0.73	0.64
New Zealand	0.41	0.24	0.41	0	0.41	0.13	0.41	0.69	0.58	0.71	1
Norway	0.77	0.35	0.77	0.925	0.69	0.79	0.79	0.24	0.72	0.58	0.98
Sweden	0.57	0.22	0.57	0.6	0.69	0.96	0.96	0.35	0.68	0.39	0.84
Switzerland	0.95	0.3	0.95	0.75	0.28	0.83	0.83	0.85	0.67	0.85	0.9
United Kingdom	0.41	0.88	0.88	0	0.15	0	0.15	0.48	0.53	0.78	0.39
United States	0.65	0.84	0.84	0	0.01	0.12	0.12	0.75	0.22	0.92	0

<sup>1.</sup> Fuzzy set of cases with low average unemployment rate OR high relative reduction in their unemployment rate 2. Fuzzy set of cases with strict employment protection legislation OR generous unemployment benefits

Table 3.12 Fuzzy-set Membership to Solutions/Causal Pathways of Model BC\*LMPOL\*SMALL\*OPEN\*CBI\*HCI → LOWUN

case	LOWUN			lmpol* OPEN* SMALL* CBI*HCI	bc* open*small* CBI*HCI	bc*lmpol* open*SMALL* cbi*hci	bc*lmpol* * OPEN*small* ( CBI*hci	bc*lmpol* OPEN*small* cbi*HCI	K( *I MP()I *	BC*LMPOL* OPEN* (SMALL+ CBI*HCI)
Australia	0.43	0.25	0	0	0	0.53	0.38	0	0.25	0.25
Austria	0.75	0.62	0.62	0.38	0.13	0.21	0.13	0.13	0.13	0.62
Belgium	0.69	0.6	0.6	0.4	0	0	0.125	0.125	0	0.6
Canada	0.49	0	0	0.18	0.18	0.33	0.56	0.18	0	0
Denmark	0.51	0.6	0.53	0.22	0.05	0.17	0.05	0.05	0.05	0.6
Finland	0.26	0.61	0.36	0.36	0.04	0.3	0.04	0.04	0.04	0.61
France	0.36	0.25	0.25	0.28	0.55	0.22	0.22	0.27	0.25	0.25
Germany	0.47	0.34	0.52	0.28	0.25	0.07	0.19	0.07	0.07	0.52
Ireland	1.00	0.3	0.3	0.56	0	0	0	0	0	0.3
Italy	0.36	0.39	0.25	0.12	0.25	0.12	0.12	0.12	0.52	0.39
Japan	1.00	0.18	0.18	0.18	0	0	0	0	0.52	0.18
Netherlands	1.00	0.64	0.64	0	0	0	0	0	0	0.64
New Zealand	0.46	0	0	0.58	0	0.29	0	0	0	0
Norway	0.77	0.72	0.24	0.21	0.02	0.075	0.02	0.02	0.02	0.72
Sweden	0.57	0.6	0.35	0.04	0.16	0.04	0.04	0.04	0.16	0.6
Switzerland	0.95	0.67	0.67	0.17	0.1	0.15	0.1	0.1	0.1	0.67
United Kingdom	0.88	0	0	0.39	0.47	0.22	0.22	0.52	0	0
United States	0.84	0	0	-0.04	0.75	-0.04	0.08	0.25	0	0

Table 3.13 Fuzzy-set membership to Solutions/Causal Pathways of Model BC\*LMPOL\*OPEN\*SMALL\*CBI\*HCI  $\rightarrow$  lowun

Case	lowun o	lmpol*bc* pen*SMALL* ( cbi*hci	-	bc*LMPOL* open*small* CBI*HCI	BC*LMPOL* open*pop* cbi*hci	lmpol*bc*hci* (SMALL*open*cbi+OPEN*CBI*small)	LMPOL*open*small* (BC*cbi*hci+bc*HCI*CBI)
Australia	0.57	0.00	0.38	0.00	0.25	0.38	0.25
Austria	0.25	0.13	0.13	0.13	0.13	0.13	0.13
Belgium	0.31	0.13	0.13	0.00	0.00	0.13	0.00
Canada	0.51	0.18	0.56	0.18	0.00	0.56	0.18
Denmark	0.49	0.05	0.05	0.05	0.05	0.05	0.05
Finland	0.74	0.04	0.04	0.04	0.04	0.04	0.04
France	0.64	0.27	0.22	0.55	0.22	0.27	0.55
Germany	0.53	0.07	0.19	0.25	0.07	0.19	0.25
Ireland	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Italy	0.64	0.12	0.12	0.25	0.52	0.12	0.52
Japan	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Zealand	0.54	0.00	0.00	0.00	0.00	0.00	0.00
Norway	0.23	0.02	0.02	0.02	0.02	0.02	0.02
Sweden	0.43	0.04	0.04	0.16	0.16	0.04	0.16
Switzerland	0.05	0.10	0.10	0.10	0.10	0.10	0.10
United Kingdom	0.12	0.52	0.22	0.15	0.00	0.52	0.15
United States	0.16	0.25	0.08	0.12	0.00	0.25	0.12

Figure 3.8 Small Open Economy with conservative/stability-oriented macroeconomic policies and poor labour market protection policies as a sufficient condition for Good Unemployment Performance in the 1990s

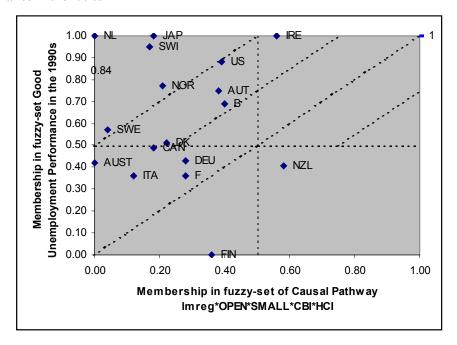


Figure 3.9 Large closed economy with conservative/stability-oriented monetary policy and uncoordinated collective wage bargaining as a Sufficient Condition for Good Unemployment Performance in the 1990s

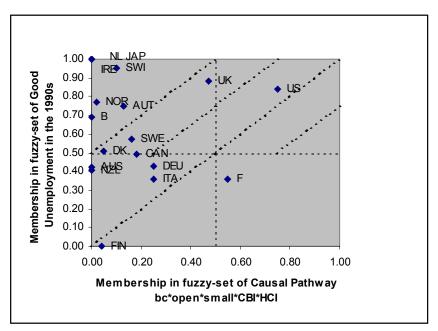


Figure 3.10 Open, large economy with deregulated labour market and a hard currency as a sufficient condition for good unemployment performance in the 1990s

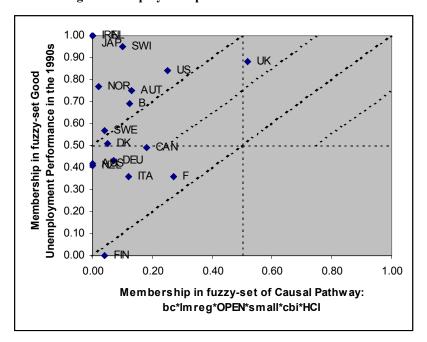
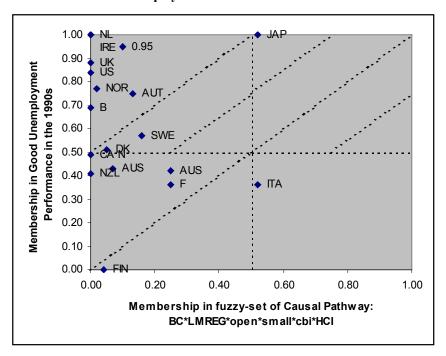


Figure 3.11. Large, closed economy with regulated labour market, a hard currency and as a sufficient condition for Good Unemployment Performance in the 1990s



# CHAPTER 4. SELECTING CASE-STUDIES: THE PUZZLE OF THE NETHERLANDS AND GERMANY IN THE 1980S AND 1990S

#### 4.1 Overview

The aim of this chapter is to provide the rationale for the selection of case-studies that will follow. There are two empirical purposes that these case-studies will need to fulfil. First, they will substantiate the results of the Qualitative Comparative Analysis of the previous chapter. More specifically, the previous chapter provided evidence that countries with generous labour market protection policies managed to achieve good unemployment performance in the 1990s as long as their collective wage bargaining was coordinated, their economy highly open to trade and *either* they were small in size *or* their monetary policy was conservative and their fiscal policy was credibly oriented towards stability. The results of this method do not, however, show how these causal factors combine together to produce low unemployment, so case-studies have to elucidate this.

Secondly, case-studies will be used to test empirically the second hypothesis of this thesis, regarding the conditions under which the moderate bargaining outcomes and the reform of non-employment benefit systems and employment protection legislation were effective in combating unemployment. As mentioned in chapter 2, the rationale behind reforms and unemployment is that reforms can help ease the cost of generous labour market protection policies on labour costs and thereby support moderate bargaining outcomes in combating unemployment.

To develop the rationale for the case-selection, this chapter will be structured as follows. The next section is going to specify the requirements that the selected cases will have to fulfil in order to provide useful evidence to substantiate the QCA results and a valid test for testing the second hypothesis. It will be shown that Germany and the Netherlands in the 1980s and 1990s fit these requirements. Section 4.3 will then show how the cases of Germany and the Netherlands are a good pair for fulfilling these purposes. The final section will summarise the discussion.

#### 4.2 Criteria for the Case Selection

### 4.2.1 Substantiating the QCA results

The Qualitative Comparative Analysis of sufficient conditions for low unemployment in the last chapter lent some preliminary support for inter alia the first hypothesis of this thesis. This hypothesis stated that countries with generous labour market protection policies can achieve low unemployment rates in the medium-run if their collective wage bargaining is coordinated, their macroeconomic policies are credibly oriented towards stability and they are open to trade and small in size. The QCA results on which causal configurations constitute sufficient conditions for good unemployment performance in the 1990s, however, also left some questions open. It was shown that countries with generous labour market protection policies and coordinated collective wage bargaining achieved low unemployment in the 1990s as long as they were highly open to trade and *either* small economies *or* had a conservative monetary policy and a fiscal policy that was oriented towards stability. At first glance, these results are different from the first hypothesis in chapter 2.

In fact, however, most of the cases whose unemployment performance could be explained by these causal configurations/sufficient conditions, such as Austria, Denmark, the Netherlands and Belgium, were both small *and* had macroeconomic policies with the aforementioned orientation. On the other hand, there were also cases for which only one of these causal configurations seemed sufficient to explain their unemployment performance in the 1990s. Germany, being a large open economy is a case in point. Sweden, Norway and to some extent Finland being cases with small economies but whose macroeconomic policies, according to the fuzzy-set calibration, were not consistently oriented towards stability in the 1990s are cases in point as well.

Consequently, in order to understand better how these causal pathways/sufficient conditions suggested by QCA operate in practice and to what extent they support the first hypothesis of this thesis, it would be sensible to examine how they have operated in cases that are explained by both causal pathways and cases that are explained by only one of the causal pathways. Such a

comparison would allow us to see how the small size of an economy could have had an impact on unemployment performance in the 1990s in open economies with the aforementioned labour market and macroeconomic policy characteristics. This suggests that Germany should be one of the cases to be studied, as it is the only *large* open economy whose unemployment performance can be explained by these labour market and macroeconomic policy characteristics, according to the QCA results. In order to choose the second case to be studied in more detail, it is sensible to examine the second purpose of the case studies, i.e. to test for the validity of the second hypothesis of this thesis.

#### 4.2.2 Setting Up a Test for the Second Hypothesis of this Thesis

The second hypothesis of this thesis concerned the effectiveness of moderate bargaining outcomes and reforms in non-employment benefits and employment protection legislation that took place in many western European countries with highly 'regulated' labour markets in the 1980s and 1990s. These reforms typically aimed at increasing the flows of unemployed/inactive individuals of the workingage population into active participation in the labour market so as to reduce the cost of financing (generous) benefits systems and facilitate moderate wage bargaining outcomes. If effective, these reforms would achieve this by reducing the fiscal burden of these benefits on labour costs.

It was argued in chapter 2 that in countries with 'regulated' labour markets the extent to which moderate wage bargaining outcomes and such reforms were effective in the 1980s but especially in the 1990s depended also on aggregate demand conditions. Moreover, in countries with 'regulated' labour markets, a conservative monetary policy and a stability-oriented fiscal policy whether or not aggregate demand conditions responded favourably to moderate bargaining outcomes and/or labour market reforms of the above sort largely depended on the size and openness of the economy: the smaller an open economy was, the more effective moderate wage/price outcomes would be in stimulating export and, through that, aggregate demand.

The prediction was that labour market reforms in western European countries with 'regulated' labour markets were effective in reducing their unemployment rates only if they took place in economies, which in addition to the above institutional characteristics were also small and open to trade. Given the dynamics and interactions involved in this hypothesis, it was argued in chapter II that case-studies would be the optimal way of testing it. The crucial point in this hypothesis is the conditions that secure favourable/flexible aggregate demand, that is the size of an open economy. Therefore, in order to test whether this hypothesis is valid one would need to compare cases with generous labour market protection policies, coordinated collective wage bargaining, a conservative monetary policy, a fiscal policy that was credibly oriented towards stability and open economies that differed in size and undertook labour market reforms in the 1980s and 1990s.

Taken together, these considerations suggest that the Netherlands would complete the pair of cases to be studied very suitably for these purposes. It was mentioned in the previous chapter that although the Netherlands could be characterised by the incidence of both causal configurations that appeared to be sufficient conditions for good unemployment performance in countries with regulated labour markets, none of these conditions explained it especially well. This was because the Dutch unemployment performance was much better than the intensity with which either of the sufficient conditions occurred in the country.

In trying to understand why the Dutch unemployment performance in the 1990s appeared to be so good in the calibration of the fuzzy-sets, it should be reminded that it was proxied using two components: average unemployment in the 1990s and the relative change in unemployment rate between 1990 and 1999. Of these two components, it is the relative change in unemployment that was exceptionally high in the Netherlands, as its average unemployment was relatively low but not as low in the population of cases that was examined (see Table 3.10 in the previous chapter). It has been well-known that employment creation in the Netherlands in the 1990s took primarily the form of part-time and/or fixed term employment (Visser 2000a). The reforms of the Dutch employment protection legislation in the 1990s have been largely credited with this development (ibid.).

Therefore, the case of the Netherlands in not only an open economy with generous labour market protection policies, coordinated collective wage bargaining, a conservative monetary policy, a stability-oriented fiscal policy and small in size but also in one in which plenty of labour market reforms in non-employment benefits and employment protection legislation, especially on atypical contracts, reforms took place in the 1980s and the 1990s. The following section will focus more closely on the cases of Germany and the Netherlands in order to illustrate their similarities and differences in the causal factors of interest and support their selection as cases to be studied.

# 4.3 The Netherlands and Germany: Stylised Facts on and Accounts of their Unemployment Performance

The aim of this section is to explain in more detail why the comparison of the cases of the Netherlands and Germany in the 1980s and 1990s would serve well the purposes of elaborating on the QCA results of chapter 3 and testing for the second hypothesis of this thesis. This section will also seek to locate these two case-studies within the broader literature in economics and political economy on the institutional determinants of unemployment performance. To these ends, this section will be divided in two sub-sections. The first subsection will present some stylised facts on the two cases, mostly on the alleged institutional determinants of their unemployment performance in order to emphasise the similarities and differences between them. Having established these similarities and differences between the two cases, the second subsection will then provide an overview of the main accounts in the literature on the performance of each of the two countries and point out the questions that these accounts leave open, especially when the two cases are considered jointly. These will also be the questions that the case-studies in the following chapters will address.

# 4.3.1 Unemployment Performance and Labour Market Policies in the Netherlands and Germany: Stylised Facts

As Figure 4.1 below suggests, the two countries started out at quite similar unemployment performance positions in 1970, with, in fact, Germany performing substantially better than the Netherlands up until 1990. However, by 1999, the

situation had been completely reversed with the Dutch unemployment rate being a little more than one-third that in Germany and even more importantly, the Dutch unemployment rate<sup>14</sup> being not only lower than the German one but also low by western European standards (see Table 1.1). Given that the inflation rate in the Netherlands fell for most of the 1980s and remained constant for most of the 1990s following closely that of Germany (see Figure 4.2), the New Keynesian framework of analysis suggests that at least in the Dutch case, the decline in the actual unemployment was matched with a decline in the Equilibrium Rate of Unemployment. The difficulties in estimating the ERU notwithstanding, Figure 4.3 suggests that this has been the case, unlike what happened in Germany where the ERU actually increased.

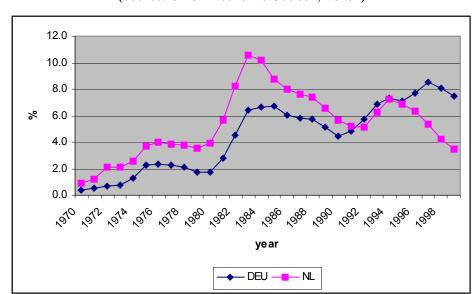


Figure 4.1 Unemployment Rates in the Netherlands and Germany, 1970-1999 (Source: OECD Economic Outlook, Vol.81)

<sup>&</sup>lt;sup>14</sup> This is not measured in full-time equivalents, which, in the case of the Netherlands is an important distinction, given the very high prevalence of part-time jobs.

Figure 4.2 Inflation Rate (CPI) in the Netherlands, Germany and Europe (Source: OECD Economic Outlook, Vol.81)

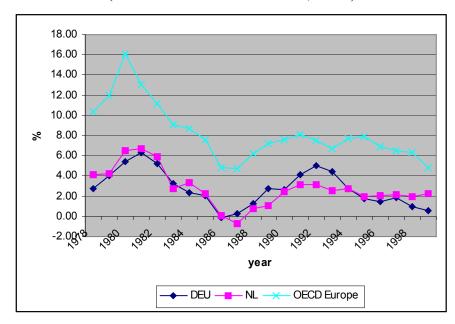
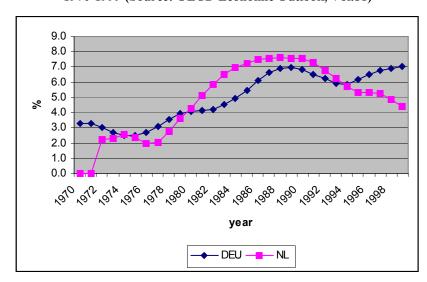


Figure 4.3 Equilibrium Rate of Unemployment (NAWRU) in the Netherlands and Germany, 1970-1999 (Source: OECD Economic Outlook, Vol.81)



The New Keynesian literature would explain the evolution in the respective ERUs by reference to labour market policies and their effect on wage-setting behaviour. As mentioned in the Introduction chapter, policies such as generous non-employment benefits and strict employment protection legislation can increase the ERU by insulating wage-setters from the effects of their wage decisions for

aggregate demand and employment and thereby, increase their bargaining power (Blanchard 2007). This is why, other things being equal, less generous labour market protection policies should lead to lower bargained wages for a given level of unemployment, i.e. a shift of the wage-setting curve downwards (see Figure 4.4).

On the other hand, the institutional political economy literature that was also examined in the Introduction chapter would suggest that shifts in the monetary policy regime and coordination in collective wage bargaining would also change the trade-off between (un-)employment and the bargained wage for wage-setters and shift the wage-setting curve. This is why, other things being equal, less generous labour market protection policies should lead to lower bargained wages for a given level of unemployment, i.e. a shift of the wage-setting curve downwards, while the same should be true if the orientation of monetary policy became more conservative and the coordination of collective wage bargaining increased. In the cases of the Netherlands and Germany in the 1980s and 1990s, we should, therefore, first, expect to see a continuous downward shift in the wage-setting curve of the former and a continuous upward shift in the wage-setting curve of the latter; and secondly, be able to link these shifts to labour market reforms in the direction of deregulation. Has this been the case?

Figure 4.4 Wage-setting and Equilibrium Unemployment Rate in a New Keynesian Framework

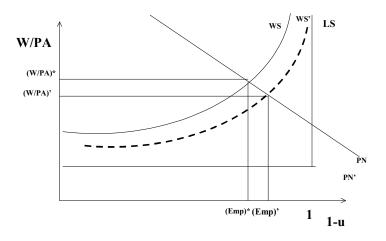


Figure 4.5, taken by Estevao (2005) (see the Appendix for details on how he has calculated these shifts in the wage-setting curves), illustrates the shifts in the wage-setting curve in the Netherlands and Germany from 1970 to 1999. The points in the two lines of this figure are *not* the wage-setting curves in the Netherlands and Germany. Instead they illustrate the *intercept* of the respective wage-setting curve each year and, thereby, the position of the wage-setting curve (see Figure 4.4 above). It should be noted that the shifts in the wage-setting curve suggest that the bargained wage *for given unemployment* rate has changed. Given that the unemployment rate also moves, such a shift does not necessarily mean that the actual bargained wage drops (continuously).

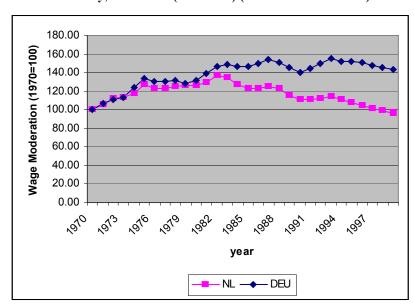


Figure 4.5 Wage Moderation (i.e. shifts in the wage-setting curve) in the Netherlands and Germany, 1970-1999 (1970=100) (Source: Estevao 2005)

Looking more specifically at the Netherlands and Germany, we see that the Dutch wage-setting curve demonstrated a pretty clear downward trend since the early 1980s. The German wage-curve, on the other hand, demonstrates a more cyclical pattern, following an upward trend from 1970 till the early 1980s. Although, the German wage curve did not demonstrate the clear downward trend of the Dutch one, there have, however, been periods, more specifically in the mid- to late-1980s and from 1994 onwards, when it also shifted towards the direction of wage moderation. This is particularly important to note, as the main divergence in

unemployment performance between the two countries appears to have occurred in the 1990s.

The next question to be examined is whether this empirical picture of wage moderation can be linked to patterns of labour market policies and institutions and monetary policy. As it will be seen in chapter 5, by pegging the nominal exchange rate of the Guilder to the Mark, the Netherlands practically adopted the German monetary policy. Therefore, according to the institutional political economy and the New Keynesian literatures were right, then we should expect differences in labour market institutions and policies to account for the difference in unemployment performance between the Netherlands and Germany, particularly in the 1990s.

Table 4.1 reports indicators of the generosity of non-employment benefits and their changes in the two countries between the 1980s and 1990s. At an average level, we see that both countries saw an increase of the replacement ratio of their unemployment benefits. The average unemployment benefit duration remained stable in Germany, whereas it fell in the Netherlands from a level above the German in 1985 to a level below the German in 1999. However, by 1999, the unemployment benefits in the Netherlands exhibited a substantially higher average replacement ratio than in Germany. The German system provided stronger incentives to work for those likely to receive low wages and who had no children than the Dutch system. The opposite was true for those likely to receive low wages with families (CPB-Netherlands Bureau for Economic Policy Analysis 1997, 191).

Table 4.1 Similarities and Differences between the Netherlands and Germany, 1980s-1990s

	DEU		NL	
	1985	1999	1985	1999
Standardised Unemployment	8.0	8.7	9.2	3.2
Rate				
Employment Ratio (15-64)	62.2	65.4	52.2	70.2
Unemployment Benefits	0.38	0.41	0.70	0.78
Replacement Ratio <sup>1</sup>				
Unemployment Benefits	0.60	0.60	0.69	0.50
Duration <sup>2</sup>				
EPL strictness (Regular	2.7 (late 80s)	2.8 (late 90s)	3.1	3.1
Contracts)				
EPL strictness (Temporary)	3.8 (late 80s)	2.3 (late 90s)	2.4 (late 80s)	1.2 (late 90s)
EPL strictness (Collective		3.1 (late 90s)		2.8 (late 90s)
Dismissals)				
Union Density	0.35	0.27	0.28	0.24
Bargaining Coordination	4	4	4	4
(Kenworthy)				
Openness to Trade	0.64	0.59	1.28	1.17
[(exports+imports/GDP)]				

**Source**: All figures come from the IMF dataset (IMF 2003) (generously provided by Xavier Debrun), except for:

The difference between Germany and the Netherlands was starker in disability benefits', replacement ratios, with the German system being more conducive to work. Moreover, Germany apparently had stricter verification procedures for the entitlements of all unemployment, disability and sickness benefit schemes than the Netherlands (CPB-Netherlands Bureau for Economic Policy Analysis 1997). At a first and rough glance, therefore, it seems that the German non-employment benefits were as a rule less generous in their level than in the Netherlands, although the entitlements lasted for longer. It is, therefore, not entirely clear whether the Dutch system of non-employment benefits has been more conducive to work than the German one.

<sup>15</sup> Disability benefits are mentioned here because in the Netherlands mostly the system became an indirect way of subsidising unemployment in the 1980s and to an extent in the 1990s.

-

<sup>-</sup>EPL: OECD (1999a); Bargaining Coordination Index: Kenworthy (2001)

<sup>1.</sup> Gross Replacement Ratio averaged for the first year of unemployment at two earnings levels and three family types (single, with dependent spouse and with spouse at work)

<sup>2.</sup>  $[0.6 \cdot \text{replacement rate in 2nd/3rd year of an unemployment spell} + 0.4 \cdot \text{replacement rate in 4th/5th year of an unemployment spell}], [replacement rate in 1st year of an unemployment spell]. Replacement rate defined as above.$ 

In terms of other labour market policies and institutions, the Dutch employment protection legislation (EPL) (see Table 4.1) was stricter for regular (i.e. the majority of) employment contracts than the German one. On the other hand, regulations on temporary contracts and collective dismissals were stricter in Germany (OECD 1999a, 66). Union density in the two countries was quite low in the late 1990s and at comparable levels whereas expected coordination in collective wage bargaining was similar. Therefore, the differences that emerge from the comparative examination of labour market policies and institutions in the two countries do not seem to justify the large difference in unemployment/employment performance between them at the time.

The above rough comparisons simply confirm what the qualitative comparative analysis of the previous chapter has been suggesting, namely that the Netherlands and Germany seem to have many similarities in terms of labour market protection policies, labour market institutions and monetary policy. The main differences between the two countries are in terms of openness to trade and size of the economy: the Netherlands is smaller and more open that Germany. Of course, another important difference not explicitly accounted for in any of this data is the shock of unification that the German economy went through. One question that the comparative case-study will seek to answer, therefore, is whether and if so, how, given the shock of the unification, the difference in openness and size between the Netherlands and Germany can account for the difference in unemployment performance in the 1990s.

# 4.3.2 Explaining the Dutch and German Unemployment Performance (?): Stylised Accounts

A number of important contributions, namely Visser and Hemerjick (1997), Nickell and Van Ours (2000), Schettkat (2003) and Blanchard and Philippon (2004) have attempted to explain the Dutch performance. Starting with the mainstream economics contributions, Nickell and Van Ours (2000, 166) found that a little more than 60% of the drop in the Netherlands' equilibrium rate of unemployment between the early 1980s and the mid-1990s was due to the improved coordination in

collective wage bargaining<sup>16</sup> following the Wassenaar agreement in 1982, with very little coming from any actual decline in unionisation. The expansion of active labour market policies accounted for about a quarter of the drop and changes in the tax/benefits<sup>17</sup> system only contributed 14% into that change. It should be noted at this point that the effect of reforms in tax and benefits system is a *joint* one, aiming at the 'financial incentives' for choosing employment to unemployment/inactivity. The Dutch government undertook a significant tax reform in the late 1980s, whereas the bulk of its reforms of the non-employment benefit systems concerned their administration and the incentive mechanisms they provided for active job-search (Nickell and Van Ours 2000, 161-2).

Blanchard and Philippon (2004, 6), on the other hand, suggested that the improved quality of labour relations, proxied by the number of strikes and the surveyed perceptions of managers about whether labour relations have been cooperative in their firm, has been critical for the turnaround in unemployment, given other labour market policies, because it facilitated unions to learn faster that profitability had to be restored in the private sector for employment to start expanding again. Finally, Schettkat (2003; 2005), suggests that it was the successful coordination among wage, fiscal and monetary policies that generated favourable macroeconomic conditions in the Netherlands, as reductions of social security contributions and other labour taxes (fiscal policy) combined with the commitment of unions to wage moderation to support the orientation of the Dutch central bank towards maintaining price-stability without provoking adverse monetary policy reactions.

The common characteristic of these explanations is that, although they all acknowledge the paramount role of moderate wage policy in the 'Dutch miracle',

<sup>&</sup>lt;sup>16</sup> It should be noted here that the index of coordination that Nickell and Van Ours used in that paper, sourced from Nickell and Layard (1999) and Belot and Van Ours (2000) measures the degree of intentional harmonisation observed in the wage-setting process and build on the indicators suggested by Soskice (1990b). In that respect, they may also judge the cause (coordination) by the outcome (intentional harmonisation leading to wage moderation) without paying due attention to the factors that make this intentional harmonisation plausible (see Kenworthy (2001) for a discussion of the measure).

they do not explain how it has been made possible in spite of the generous labour market protection policies in the Netherlands. More specifically, although the explanations of Nickell and Van Ours and Blanchard and Philippon are quite plausible, they all consider improved coordination in collective wage bargaining and the quality of labour relations as largely exogenous factors, without linking them to the rest of labour market/welfare state policies and broader (e.g. monetary policy) institutions in the Netherlands. Schettkat on the other hand alludes to the fact that fiscal policy supported the moderation in labour costs, however, he does not explain either why the Dutch trade unions became 'committed' to wage moderation in the first place, given the institutional framework, which was largely unchanged particularly in the early 1980s.

According to the mainstream 'New Keynesian' macroeconomic framework that has been underlying most of the theoretical and empirical literature advocating labour market reforms, generous non-employment benefits and strict employment protection legislation, particularly firing restrictions applying on regular contracts, are likely to increase the bargained wage because they make unemployment less painful and/or strengthen the bargaining power of workers by increasing labour turnover costs to firms (Blanchard 2007, 30). However, as even the aforementioned authors admit, any reforms in these policies, apart from the fact that they followed the Wassenaar agreement, have 'typically not been radical; rather they have reduced some of the distortions associated with a given level of social insurance, rather than decreased that level' (Blanchard and Philippon 2004, 5).

Therefore, given the predictions of mainstream theory about the effects of labour market policies on wage-setting behaviour and the *equilibrium* unemployment rate, the aforementioned accounts leave the question of how wage-setting behaviour changed so dramatically in the Netherlands, in spite of a disproportionately limited reform of these policies. The emphasis that they all seem to place on the role of industrial relations and the system of collective wage bargaining seems to suggest that there can be considerations in the process of collective wage bargaining that can override any non-moderating effects of generous labour market protection policies on wage-setting behaviour.

Visser and Hemerijck (1997) also stress the role of wage moderation in achieving the Dutch Miracle but also attempt to explain this moderation in the context of collective wage bargaining and link it to developments in labour market policies, primarily the non-employment benefits but also employment protection legislation. According to them, the fact that the Dutch unions 'learnt' that they had to contribute into restoring private sector profitability was the outcome of their declining power, in turn caused by the bad macroeconomic performance and soaring unemployment that the temporary policy immobilisation generated. The fact that corporatist governance institutions take time to change afforded unions a context to learn, Visser and Hemerijck argue. The deteriorating macroeconomic performance tilted the balance of power in favour of employers and forced the weakened unions to learn how policies should change in favour of firms (Visser and Hemerijck 1997, ch 3).

Moreover, the Visser and Hemerijck argument goes, wage moderation was exchanged initially for modest working time reductions, whereas later in the 1990s, it was exchanged for reductions in payroll taxes (i.e. social security contributions), made possible by improved public finances and a broader tax base thanks to increased employment in the Netherlands. The latter political exchange had also relied upon labour market reforms, particularly in the disability and sickness insurance systems but also in unemployment benefits aiming at reducing their cost. The political exchange between employers and unions in the 1990s also included the possibility for decentralised collective bargaining on a number of issues, such as working time arrangement, whereas wage bargaining had been decentralised in a coordinated manner from the 1980s already (ibid.).

This account adds to the aforementioned ones of economics literature a political dimension by highlighting the fact that wage moderation was part of a political exchange. The problem with this explanation, however, is that it assumes more than it actually states<sup>18</sup>. The Dutch trade unions, having understood that

<sup>&</sup>lt;sup>18</sup> This is the typical criticism that spurred the growth in the comparative political economy literature strand on the interactive effects of collective bargaining and monetary policy institutions on

employment creation required higher private sector profitability, moderated sharply their wage demands expecting that this would contribute in that direction. However, although moderate wage developments are an important step in that direction, they are not sufficient in an economy as open to international trade as the Netherlands has been with its exposed to external trade sector already accounting for 120% of GDP in 1980. Nominal exchange rate and interest rate developments are equally important determinants of competitiveness and profitability in such an open economy. Therefore, any changes in wage-setting behaviour cannot be considered or explained independently from the context of monetary and fiscal policy making. The argument of Visser and Hemerijck mutes the impact of factors such as monetary policy both on the pressure that trade unions came under in the late 1970s and early 1980s and on the anchoring influence it had on wage and price developments.

To fully understand, therefore, how wage moderation happened in the Netherlands, we also need to take into account the context of monetary and fiscal policy making and how it affected wage-setting behaviour given the Netherlands' openness to trade. This is the hypothesis that was examined in the previous two chapters and this is the first important way in which the case-study of the Netherlands in chapter 5 will add to the existing literature that has been trying to explain the Dutch success. The hypothesis that is suggested here is that the openness of the Dutch economy in combination with the non-accommodating monetary policy and stability-oriented fiscal policy that were consolidated in 1983 contributed to the change of attitudes of the Dutch wage-setters, unions and employers, towards wage moderation. Although this regime had not been as firmly established before 1983, the Dutch central bank had nevertheless made attempts to rein over inflation in the Dutch economy by trying to maintain a stable nominal exchange to the German Mark and its stance contributed to the deteriorating macroeconomic performance.

equilibrium unemployment rates. See (Hall 1994; Hall and Franzese 1998; Soskice and Iversen 2000b; Franzese Jr 2001)

The role of monetary policy institutions and considerations of competitiveness has already been stressed for the case of Germany up until the early 1990s (Soskice 1990b; Hall 1994; Hall and Franzese 1998; Franzese Jr 2001). Highlighting this role for the case of the Netherlands will help put the relation between its wage moderation and labour market policies and institutions into perspective. As in Germany, the threats to competitiveness and employment growth that a non-accommodating monetary policy framework and the openness of the economy to trade posed in case of inflationary wage/price bargaining outcomes were for most of the time since 1975 sufficient to induce wage-setters towards moderation in spite of generous labour market protection policies. maintaining generous labour market protection policies has been a means of keeping unions engaged in cooperative wage moderation (Soskice 1990b; Soskice 1999; Mares 2006). However, while putting the Dutch wage moderation into context helps illustrate some of the conditions under which countries with regulated labour markets can achieve low unemployment, it also seems to reinforce the puzzle of the Dutch contrasting unemployment performance to that of Germany in the 1990s because it stresses one more similarity between the two countries.

Existing accounts on the failure of Germany to lower its unemployment rate in the 1980s and particularly in the 1990s, which acknowledge the fact that wage moderation had not been wanting in principle, suggest that instead it has been high social security contributions that have been undermining the effectiveness of moderate wage bargaining outcomes in supporting employment creation and unemployment decline (Manow and Seils 2001; Mares 2006). Given the limited effectiveness of wage moderation to support employment creation, its viability in Germany has been questioned too.

This explanation contrasts with what happened in the Netherlands mostly in the 1990s, when the government, starting from a healthy financial position, managed to reduce the non-wage burden on labour costs of social security contributions (Visser and Hemerijck 1997; Hemerijck et al. 2000; Nickell and Van Ours 2000). Reduction in labour taxes supported wage moderation and coupled with labour market reforms that facilitated the integration of outsiders into

employment, the argument goes, helped employment expansion (Visser 2000b). Employment expansion secured a broad tax base, so as to maintain the lower payroll tax rates, while it also increased the disposable income of households, thus stimulating domestic demand in the Netherlands, at a time when the rest of the EU area was struggling with deflationary policies.

The comparison of these accounts seems to suggest that Germany maintained more generous labour market policies than the Netherlands, and particularly non-employment benefits, the financing of which required higher contributions by employees and employers. However, as it was stated earlier, the German benefits systems seem to be slightly less generous than the Dutch ones. Moreover, it has not been clear whether Germany has undertaken fewer reforms in order to increase the flows of 'outsiders' from inactivity/unemployment into employment than the Netherlands did. Thus, the only reason for which labour costs in Germany may have been more burdened with social security contributions than in the Netherlands is probably that the base upon which these payroll taxes could be raised was smaller, i.e. employment was lower in Germany due to demand conditions.

Comparing the demand conditions in the Netherlands and Germany in the 1990s is thus the second task of the case-studies that will follow. This will help test the second hypothesis of this thesis, namely that the effectiveness of moderate bargaining outcomes in combating unemployment in open economies with 'regulated' labour markets, a conservative monetary policy and a stability oriented fiscal policy depends on the responsiveness of aggregate demand conditions: demand is more likely to respond flexibly to moderate bargaining outcomes in small and open economies than in large ones.

#### 4.4 Conclusions

This chapter has laid out the rationale behind the selection of cases that will be studied in the following two chapters. These case-studies are necessary for two reasons. First, in order to elaborate on the results of qualitative comparative analysis in chapter 3 on the existence of sufficient conditions explaining the good

unemployment performance of a number of western European countries in the 1990s. These solutions lent some support to the first hypothesis of this thesis but left some questions open. Moreover, the identification of causal configurations that appear to be sufficient conditions for good unemployment performance do not in themselves inform us about how the causal factors that constitute them interact with each other to produce the outcome of interest (good unemployment performance in the 1990s). This is why the qualitative comparative analysis of chapter 3 was only one step in the empirical analysis and not an end in itself (Ragin 2000).

Secondly, case-studies are necessary in order to test the second hypothesis of this thesis, namely that in countries with regulated labour markets, the effectiveness of moderate bargaining outcomes and labour market reforms aiming at supporting them in combating unemployment is likely to be greater in small open economies than in large ones. This is because in the former, given the conservative monetary policy and stability oriented fiscal policies that underpin moderate bargaining outcomes, demand is more likely to respond favourably to moderate bargaining outcomes and reforms thanks to export demand.

Given these purposes of case-studies, Germany and the Netherlands in the 1980s and 1990s were selected for further study. These two countries fulfil a number of requirements that render their comparison suitable for testing the aforementioned hypotheses. First, the qualitative comparative analysis of chapter 3 suggested that the unemployment performance of the Netherlands in the 1990s is fairly well explained by the combination of generous labour market protection policies, coordinated bargaining, its openness to trade and *both* its small size *and* the conservative/stability orientation of its macroeconomic policies. The same analysis suggested that the unemployment performance of Germany is explained by the same factors *except* for the size of the economy, as Germany is large. Therefore, comparing the two countries would help clarify the role of the size of the economy in cases with regulated labour markets in achieving good unemployment performance. Secondly, this difference in size between the two countries would help test the hypothesis that in open economies with regulated labour markets and good unemployment performance, the effectiveness of moderate bargaining

outcomes and labour market reforms aiming at increasing the flows of 'outsiders' from unemployment/inactivity to employment depends on the size of the economy.

### 4.5 Appendix

The aim of this appendix is to provide the technical details on how the shifts of the wage-setting curves in Figure 4.5 were calculated. As mentioned, these data were kindly provided by Marcello Estevao and appeared in a similar form in (Estevao 2005, 13). Therefore, the details that will be provided here are identical to those provided in this source (ibid., 7-9).

In his model, Estevao assumes that wages (W) are set through bargaining between unions and firms, with firms then choosing the level of employment that maximises their profits. Both product and labour markets are imperfectly competitive in that prices and wages are set by price-setters (firms) and wage-setters (workers/unions) respectively rather than the market. Equilibrium (un-) employment is given by the intersection of the price-setting and wage-setting curves. The bargained wage is a decreasing function of unemployment whereas the product price P is a decreasing function of output Y. In the short-run, returns to labour (N) are diminishing, the capital stock (K) is fixed and technology (A) is labour-augmenting. Therefore, Y=Y(AN) and Y'(AN)>0 and Y''(AN)<0. Firms choose employment to maximise their profit function P(Y(AN))\*Y(AN)-W\*N. The first-order condition is then given by

$$\frac{Y'(AN^*)}{\mu} = \frac{W/P}{A} = \frac{w}{A}(1)$$

where,  $\mu$  is a markup over labour costs. This first-order condition suggests that firms choose employment by setting the marginal revenue product equal to the real wage in efficiency units, that is, the real wage divided by the technology parameter, A.

The wage-setting curve, whose shifts were estimated and reported in section 4.2.1, is the result of joint maximisation of the firms' and workers' utility functions, weighted by each party's bargaining power and given the firms' price-setting equation (1). Thus, the wage-setting function can be written as

$$\frac{w}{A} = f(m, b, \tau, u), \text{ with } f_m > 0, f_b > 0, f_\tau > 0, f_u < 0$$

where m is a structural parameter determining the position of the wage-setting curve as a function of workers' relative bargaining power and relative preference for wages vis-à-vis employment, b is the real income that a worker would receive if unemployed (i.e. the reservation wage) and  $\tau$  stands for the ratio of the fiscal wedge on income from work to the fiscal wedge on income when unemployed. The unemployment rate, u, has a moderating effect on wage demands because it increases the probability of longer spells of unemployment and the associated risks and costs to workers. This can be seen in the positive slope of the wage-setting curve.

Shifts in the wage-setting curve reflect changes in any of the underlying structural factors (i.e. other than the unemployment rate) above. Such changes include reductions in the generosity of non-employment benefits, the relaxation of firing restrictions in employment protection legislation, changes in the unions' preferences between wages and employment (e.g. following the Wassenaar agreement in the Netherlands), changes in the workers' bargaining power (due to e.g. a change in the number of vacancies for given unemployment) and reductions in the tax wedge. 'Wage moderation' is defined as a downward *shift* in the wage-setting curve, so that a given rate of unemployment corresponds to a lower bargained wage. Wage moderation thus defined does not necessarily mean that the actual real wage in efficiency units falls but rather that for given unemployment rate, wage demands fall (or alternatively, that when unemployment falls, wage demands increase by less than proportionately).

To measure the shifts of the wage-setting curve, Estevao (2005, 11-2) uses a well-known regularity about the elasticity of the bargained wage with respect to the unemployment rate. He expresses the empirical wage-setting curve as

$$\ln\left[\frac{W_{it}}{CP_{it} * A_{it}}\right] = \xi_{it} - \theta_{i} * \ln(u_{it}) (2)$$

where ln(.) is the natural logarithm of a variable, i represents a country and t represents a year,  $W_{it}$  represents nominal hourly compensation,  $CP_{it}$  represents the deflator of private consumption expenditure,  $A_{it}$  stands for the labour-saving technology,  $u_{it}$  is the unemployment rate and  $\xi_{it}$  represents the position (intercept) of the wage-setting curve.

Given  $\theta_{it}$ , any shifts in the wage-setting curve,  $\Delta \xi_{it}$  can be measured using the above equation (2). The parameter  $\theta$  has been regularly found in empirical work to take a value of (or around) 0.1 and this result has been robust in time and across countries (Blanchflower and Oswald 1990; 1994 pioneered this work). Assuming that  $\theta$ =0.1, Estevao, thus, calculated the shifts in wage-setting curve,  $\Delta \xi$ , in a number of countries for the period 1970-2003. The lines presented in graph, represent the different values that  $\xi$  took for the Dutch and German wage-setting curves respectively. Lower values imply 'wage-moderation', that is, a shift in the wage-setting curve so that for given unemployment rate the bargained wage was lower.

## CHAPTER 5. THE POLITICAL ECONOMY OF UNEMPLOYMENT IN OPEN ECONOMIES WITH REGULATED LABOUR MARKETS: THE CASE OF THE NETHERLANDS IN THE 1980S AND 1990S

#### 5.1 Overview

The aim of this chapter is to study developments in the Netherlands in order to better understand how it managed to reduce its unemployment rate in the 1980s and 1990s even though its labour market remained regulated. Two points will be emphasised. First, it will be shown that the joint moderating effect of coordinated collective wage bargaining, the conservative monetary policy, the credibility oriented fiscal policy and the openness of the economy on wage/price bargainers were stronger than any insulating effect which, according to mainstream new Keynesian economic literature (Layard, Nickell and Jackman 1991; Blanchard 2007), generous labour market protection policies makes them discount the effects of their behaviour for demand and unemployment. Secondly, it will be shown that the labour market reforms that were undertaken in the Netherlands in the 1980s and 1990s, to a large extent in order to support the continuation of moderate wagesetting behaviour under the above conditions by easing the flows of 'outsiders' into employment and thus, reducing the financing costs of generous labour market protection policies, were critically supported in achieving their purpose by favourable aggregate demand conditions. These favourable demand conditions were secured thanks to the size and structure of the Netherlands as a small and very open economy. Favourable aggregate demand conditions were therefore also present in both the late 1980s and the 1990s and were crucial for making a success out of its moderate wage and price developments, in ways that, as it will be seen in the next chapter, did not occur in Germany, even though the two countries largely shared orientations in their policies.

The discussion will be organised as follows. The following section will present the basic characteristics of labour market and monetary policies and institutions as they were by the early 1980s in order to set the stage for the

discussion that will follow. Section 5.3 will establish that the shift of wage-setting behaviour towards moderation and the consolidation of the latter owes more than has been already stated in the literature to the context of monetary policy making that was firmly adopted in 1983, given the openness of the economy. This shift in wage-setting behaviour and monetary policy preceded any labour market reforms, which may have assisted in maintaining moderate wage outcomes. Moreover, during the early 1990s, the Dutch commitment to becoming a founding member of EMU was the important factor dictating moderate wage- and price-setting behaviour. At the same time, however, this commitment increased the tension between wage moderation, external competitiveness and the financial consequences of generous labour market policies. The reforms that followed in the 1990s aimed at easing this tension, given the determination of collective wage bargainers to deliver moderate wage outcomes. Section 5.4 will, therefore, examine the conditions under which these labour market reforms were undertaken and highlight the favourable macroeconomic environment in which they took place. The final section will conclude

### 5.2 The policy and institutional framework shaping wage-setting behaviour

To understand how institutions at the macro-level, such as collective wage bargaining, and the central bank, and the openness of the economy to international trade shaped the incentives of collective wage bargainers or more precisely trade unions towards wage moderation from the early 1980s till the late 1990s, we first need to get a picture of their characteristics and structure and the context within which they can interact.

Collective bargaining takes place predominantly at the industry but also at the company level. The coverage of collective agreements has been high: 85 per cent of employees in the public and private sectors in 1996 were covered by some agreement, while the coverage rate in the private sector reached 82 per cent. More than two-thirds of the private sector employees are covered by industry level agreements and only about 15 per cent are covered by company level agreements (Visser 1998, 303). Given this structure of collective wage bargaining, coordination has been the outcome of a number of traits.

First, the Dutch trade unions have been divided. There have been three main confederations, the Confederation of Dutch Trade Unions (FNV), the Christian-National Union Confederation (CNV) and the Union of White Collar and Senior Staff Associations (VHP), organising workers and employees often across the same sectors (Visser and Hemerijck 1997, 83). Of these, FNV and CNV have a similar internal structure, consisting of 15-20 affiliates that organise across (the same) economic sectors. Union density has traditionally been low in the Netherlands, ranging between 35 per cent in 1980 and almost 21 per cent in 1996, with especially high densities in the industrial, construction and transport and (primarily public) services sectors (Ebbinghaus and Visser 2000, Table NE.16, 492). Although the public servants' union has been the largest affiliate in both the FNV and the CNV, it has been the Industries Union (IB), organising in exposed sectors such as metal, textile and chemical, that has been playing the leading role in wage bargaining (Visser and Hemerijck 1997, 84). In the absence of compulsory membership rules, unions that sign and enforce agreements down their rank-and-file receive a financial contribution from employers (Visser 1998, 294).

Secondly, employers have no obligation to bargain with or even recognise any unions. However, any employer who signs a collective agreement has to apply its conditions to all his relevant employees, regardless of whether they are union members or not, while collective agreements themselves are legally binding. These rules give incentives to trade unions to seek to sit on the bargaining table and avoid exclusion, as none of them has a priori a privileged dominant position. Thirdly, inter-union competition can be limited by the fact that every collective agreement has to be registered with the Ministry of Social Affairs and Employment, whereby the Minister can decide to suspend it (in consultation with the Foundation of Labour StAR) or, in case the agreement covers the majority of workers in a sector, to extend it to all employers in the sector, regardless of their membership to the respective employers' association or not (Visser 1998, 302). These rules provide peak-level bargaining with 'governability' (Traxler and Kittel 2000).

The Dutch employers were well organised until the late 1990s, especially among the larger firms. Organisation reflected the divisions across firm size, with

the merged Federation of Dutch Industry (VNO) and Dutch Federation of Christian Employers (NCW) representing the large and medium-size companies, the MKB-Nederland representing the small (i.e. less than 50 employees) firms, while the agricultural businesses are represented in the LTO Nederland. These three peak organisations have been federated in the Council of Central Business Organisations (RCO), whose aim is to take joint action vis-à-vis the trade unions and the government, although it does not participate in collective wage bargaining (Visser and Hemerijck 1997, 90). The 130 affiliates of the VNO-NCW are organised along industry lines. Among these affiliates, the General Employers' Association (AWVN) has been organising employers in the exposed sector, including the large Dutch multi-national firms. Similarly with the IB union, it has been this association that has been playing an important (and after 1996 exclusive) role in assisting firms in collective wage bargaining (Visser and Hemerijck 1997, 90).

The right of the government to extend concluded agreements which cover the majority of workers in a sector even to employers that have not negotiated and signed them and the legal status of these agreements, generates incentives for employers to participate in the negotiations. Moreover, the relatively high costs of participation in bargaining generate incentives for firms to join the relevant associations to receive support for that purpose. Employers also have incentives to include as many unions as possible to signing any agreement due to the peace clause that binds the signatories. The situation has been slightly different for large, especially multi-national firms which have been concluding their own company agreements, which in some cases set the tone for the whole sector (ibid., 89-90).

Since the early 1980s, the principles of collective wage agreements have been agreed within the Foundation of Labour (StAr, Stichting van de Arbeid), a bipartite body whose governing board consists of representatives of both unions and employers' associations in equal numbers. More specifically, the Wage Committee of StAr hosts the negotiators of the two Social Partners for the principal accords and agreements, while it also meets with Cabinet representatives twice a year: once during the Spring, in anticipation of next year's Budget planning and once before

the new round of wage bargaining is about to begin (Visser and Hemerijck 1997, 91).

From the 1982 Wassenaar agreement onwards, collective agreements concluded at the StAr took the form of recommendations for the industry-level bargains rather than explicit targets. However, industry-level bargains have been taking place under close consultation with the headquarters of the respective organisations. The aforementioned legislation framing collective wage bargaining provides support to unions and employers' associations bargaining outcomes. By potentially, endorsing and extending these agreements, they help reduce competition in favour of agreements that internalise the externalities of bargain. The fact that neither unions nor employers have no monopoly nor legal exclusivity in bargaining wages implies that they can only play their role as long as workers, employers and the member organisations of the federations are satisfied with the outcomes (Hartog 1999). Employers in particular have an incentive to keep bargains outside of the plant level and the domain of work councils so as to not jeopardise the consultation role of the latter (Visser and Hemerijck 1997, 89). Given that unions never had control over wage councils and given their weakness because of that, they have offered stronger guarantees of moderate bargaining outcomes (Hancké 1996). This system of collective wage bargaining, however, did not always manage to deliver moderate bargaining outcomes and the following sections will explain why this was the case and how the situation changed.

As mentioned in the previous chapter, labour market protection policies, i.e. non-employment benefits' systems and employment protection legislation have been relatively generous in the Netherlands both before and after the reforms of the late 1980s and 1990s. To understand the effects of these policies on wage-bargaining outcomes as well as the motivation behind their reform, a few explanatory comments on their structure are on order.

Non-employment and other welfare benefits are provided under social insurance and social assistance systems. Social insurance includes two pillars, namely employee insurance schemes and general insurance schemes. Social

assistance includes welfare provisions for those who neither can provide for their own means of subsistence nor are eligible for any social insurance benefits, and includes benefits such as unemployment assistance, public assistance, public assistance social employment service and assistance to senior or partially disabled, employed or self-employed persons. Social assistance benefits are financed by general taxation. Social insurance schemes, on the other hand, are financed through mandatory contributions by employers, employees and the self-employed. Moreover, social insurance schemes were until the mid-1990s administered by Industrial Associations that in turn were managed by employers and unions. Employees' insurance covers work-related risks, such as unemployment, sickness and disability, while also covering the costs of medical care. General insurance schemes cover risks of old age, disability, exceptional health costs, which are not covered by the health cost insurance, as well as child allowances and provisions for widows and orphans (Stigter 1997, 9-10).

The guiding principles underlying these benefits systems are mutual solidarity and the responsibility of the government to protect its residents from poverty. Thus, the primary functions of these benefits are wage replacement and the guarantee of a minimum income. Essentially, both these functions follow from the principle of solidarity, as wage replacement is a form of solidarity between employers and workers. Up until the early 1990s, the main focus of the social insurance system was unevenly distributed in favour of income replacement as opposed to the activation/re-integration of beneficiaries into the labour market and employment, thus defending the traditional family and the promoting of the central role of the male-breadwinner (Esping-Andersen 1990, 127; Visser and Hemerijck 1997). In spite of the distinction between social insurance and social assistance, the two systems have been linked. Thus, social assistance entitlement often follows once the entitlement to insurance benefits has expired and the beneficiary has not managed to re-integrate himself into employment so as to earn his own income. Moreover, from the early 1970s onwards the level of the social assistance benefits was linked to the statutory minimum wage, itself the outcome of collective wage bargaining.

Employment protection legislation that covers regular contracts has been relatively strict even until the late 1990s, thus making dismissals costly for firms. The main characteristic of the Dutch dismissal law has been its duality with two institutions enforcing it, namely a public body offering an ex ante check on dismissal and the courts offering ex post control. This legislation has been especially protective of older workers, especially following modifications in 1968 and 1976. In 1976, the principle of Last-In-First-Out (LIFO) was introduced for collective dismissals (Deelen et al. 2006, 65). In terms of New Keynesian theories of unemployment, this is exactly the kind of legislation that generates distinctions in the workforce between insiders and outsiders (Blanchard and Summers 1986; Lindbeck and Snower 1988), thus, other things being equal, increasing the bargaining power of bargaining unions whose main concern is to strike bargains that maximise the interests of their median member. As mentioned in the previous chapter, EPL remained relatively strict for regular contracts for which it provided high severance payments for workers with long tenures, high procedural inconveniences and above average inconvenience of dismissals even in the 1990s, while it became relatively lenient for temporary employment contracts (Deelen, Jongen and Visser 2006, 65-6). Although unions and employers promoted the flexibilisation of employment contracts and working-time arrangements from the early 1990s in practice and with the Flexicurity memorandum in 1996, the change in legislation adopting the proposals of this agreement only came to force in 1999.

The Dutch Central Bank had been granted almost complete operational independence to protect the Guilder from political interference since 1948. This did not spare the Bank from the requirement to have monetary policy decisions politically sanctioned for the sake of good coordination between monetary and fiscal policy. Thus, the Minister of Finance had the ultimate parliamentary responsibility for monetary policy. In this context, the Minister maintained a right to give directions to the monetary policy authority in order to facilitate the coordination with fiscal policy, a right, which was, however, never invoked in the post-war period (De Greef et al. 1998, 7). The Dutch Central Bank actively participated in the country's post-war consensus model through the so-called Bank Council, a

platform which was used for the exchange of information on issues of monetary, fiscal and wage policies among representatives of not only the government and the Bank but also of employers, trade unions, the financial sector and others (De Greef, Hilbers and Hoogduin 1998, 8).

Given this institutional framework, the Dutch monetary policy was characterised as 'moderate monetarism'. Although money supply policies were central in the Dutch monetary policy making, they were combined with a strong preference for stable if not fixed nominal exchange rate for the Guilder. Moreover, the policy was not based on the presumption of a stable money demand function nor of an inherently stable market economy. As the Dutch Central Bank gradually saw its policies aiming at stabilising the business cycle becoming less effective, given the size and high openness of the Netherlands and its adherence to fixed exchange rate regimes, it shifted its emphasis more towards maintaining price stability. With this shift also came the reorientation of monetary policy towards Germany. This reorientation also saw the nominal exchange rate to the Mark becoming the most important intermediate target for the Dutch monetary policy, following the changes in the financial system and its deeper international integration. In the Dutch Central Bank's view fiscal and wage policies should support its policies for controlling inflationary pressures or else bear the consequences (De Greef, Hilbers and Hoogduin 1998), which as it will be seen below is what happened in the 1970s.

#### 5.3 The determinants of moderate wage bargaining outcomes

Having introduced the main institutions, actors and policies that are relevant for collective wage bargaining, the aim of this section is twofold. First, it will highlight the role of monetary policy institutions for shaping incentives for wage moderation in addition to coordinated collective wage bargaining and the openness of the economy to trade. The role of the credibly stability-oriented monetary and more generally macroeconomic policy has been largely neglected in the existing literature seeking to explain the 'Dutch Miracle' of the 1980s and the 1990s (with the exception of Schettkat 2003; 2005). Secondly, this section will illustrate how labour market reforms towards deregulation actually followed the shift in wage-setting behaviour both in the 1980s and in the 1990s. This will suggest that labour market

reforms towards deregulation have not been the critical factors for the shift in wage-setting behaviour, itself a necessary condition for a reduction in ERU, as the New Keynesian theory implies (Blanchard 2007)<sup>19</sup>. The discussion of this section will be organised around the two main instances in 1982 with the Wassenaar agreement and in 1993 with the New Course agreement, at which the intention to pursue moderate wage/price developments was affirmed. The role of the framework of monetary policy making, the openness of the economy to trade and the labour market reforms that followed these agreements will be henceforth analysed.

The Wassenaar agreement has been largely credited as a milestone for the improvement of the Dutch macroeconomic performance from the 1980s onwards (Visser and Hemerijck 1997; Nickell and Van Ours 2000; Blanchard and Philippon 2004). The agreement consisted of a set of central recommendations on aspects of employment policy rather than specific figures on agreed wage growth rates. More specifically, these recommendations suggested nominal wage increases below inflation and the suspension of indexation in exchange for working time reductions. At the same time, it provided for a shift away from centralised towards decentralised, yet highly coordinated system of collective wage bargaining (Visser and Hemerijck 1997, 81-2), with coordination taking place within the union confederations and employers' associations (Traxler, Blaschke and Kittel 2001, 150).

In reality, the Wassenaar agreement itself did not mark the beginning of adjustment of wages in the private sector, as they had already started declining in 1980 (Salverda 1999). It did, however, mark the willingness of unions and employers to keep the negotiation of adjustment beyond the reach of the government and the rigid solutions that it was considering to impose on them through the wage freezes it had been practicing in the 1970s. Moreover, the agreement clearly signalled the change of attitude of private sector unions, which

<sup>&</sup>lt;sup>19</sup> Analyses such as Layard et al. (1991) and Nickell and Van Ours (2000) stress the role of collective wage bargaining in achieving outcomes favourable to reducing the ERU. My analysis, however, puts the effects of collective wage bargaining into a broader perspective by accounting for the broader macroeconomic context in which it took place and which the comparative political economy literature has proved to be important in that respect (Hall 1994; Hall and Franzese 1998; Iversen 1999; Soskice and Iversen 2000b; Franzese Jr 2002).

acknowledged that restoring the profitability of private sector firms had become a necessary condition for fighting unemployment. The context of monetary policymaking and the openness of the economy in combination with the existing infrastructure for intra-associational coordination were paramount for leading to this change of attitude.

Moderate wage bargaining outcomes had been eluding the Dutch economy since the mid-1960s, in spite of the fact that the institutions of collective wage bargaining and the labour market protection policies of the early 1980s were already in place. As it was mentioned in the previous section, monetary policy in the Netherlands had a longstanding moderate monetarist orientation with the stability of the nominal exchange rate being an important target, given the relatively high openness of the economy to trade (De Greef, Hilbers and Hoogduin 1998). Under the conditions of relative price stability and high output growth rates of the Golden Age, the orientation of monetary policy did not generate any grave consequences for employment. Moreover, under these conditions, the financing of policies aiming at income redistribution and protection could be expanded as they did in the 1960s without (immediately) facing tight constraints.

Yet, as these conditions started unravelling in the late 1960s, they contributed to the rise of a price-wage spiral in the Netherlands. The slowdown in productivity growth and the oil-price hike of 1973, and government policies prioritising the protection of income equality over macroeconomic stability all contributed to this price-wage spiral. As inflation became increasingly imported into the very open Dutch economy from the late 1960s already, the Dutch trade unions managed to secure the introduction of an automatic price-indexation mechanism in 1967 to protect the purchasing power of employees. In 1974 and in the face of the economic slowdown, the left-of-centre government linked the public sector wages and the value of social benefits through the minimum wage to private sector wage developments, in its, as it proved unsuccessful, attempt to secure unions' moderate wage claims in exchange for its fiscal expansion, itself aiming at reflating the economy. In that sense, generous labour market/income protection policies may have obviously insulated wage-setters from the adverse consequences

of their claims for demand and employment, thus leading them to escalate their wage bids, however, the macroeconomic policy priorities did not credibly and clearly emphasise the need for price stability at the time, with a tension emerging between the goals of fiscal and monetary policy.

Thus, the consequences of the emerging price-wage spiral for external competitiveness were felt once the economies of the Dutch main trading partners were hit by recession in the early 1970s, in spite of the government's attempt to control the growth of wage costs by imposing wage freezes. These consequences were aggravated by the appreciation of the Guilder. Following the collapse of the Bretton-Woods system, the Dutch monetary authorities opted for a close link to the German Mark from early on, by joining first the Snake and later on the Exchange Rate Mechanism of the EC. Given the dominance of the German Mark in the European currency mechanisms, targeting the nominal exchange rate of the Guilder to the Mark implied that the Dutch Central Bank had to follow closely the policies of the German Bundesbank. At the time, the German Central Bank, relieved from the obligation to support the US dollar, had seized the opportunity to switch to a very tight monetary policy in order to rein over inflationary pressures in the German economy, in spite of the fact that recession had hit Germany as well (Manow and Seils 2001, 272).

The combination of policy and strong gas exports generated indeed a strong currency appreciation for the Guilder, whose effective nominal exchange rate appreciated by 30% between 1973 and 1977 (Hemerijck, Unger and Visser 2000, 213). The sharp appreciation of the Mark and the Guilder vis-à-vis the other main currencies put strong pressure on the competitiveness, profitability, investment and consequently, employment in the private Dutch manufacturing sectors in the 1970s, which were largely exposed to international trade competition. Sustained employment decline in these sectors fed into the system of social transfers, thus increasing its expenditures. As the Dutch government decided to slow down its exploitation of the country's natural gas reserves, this implied that the financing of social transfers would have to come from increased taxes. This was because prolonged spells of unemployment led to an increase in the recipients of social

assistance benefits, which were financed through general taxation. This added to non-wage labour costs, generating further pressures against wage moderation, increasing the production costs of firms and further deteriorating their international competitiveness.

The adverse employment consequences of the deteriorating external competitiveness led the main union that organised across exporting manufacturing sectors in the Netherlands, the IB-FNV, to reconsider its stance vis-à-vis wage moderation and income redistribution already in 1977-8 (Visser and Hemerijck 1997, 98). Therefore, although it is true that the soaring unemployment rates of the late 1970s and very early 1980s weakened trade unions, which subsequently had to 'learn' that restoring private sector profitability was a necessary condition for employment creation (ibid.), monetary policy and more specifically the exchange rate policy in combination with the high openness of the Dutch economy to trade played a very important role in generating this pressure by determining the conditions under which the private sector firms' profitability was defined.

By the early 1980s, with the public deficit and debt and unemployment rates soaring, it was clear that the price-wage spiral had to be broken. Resolve was a necessary condition for that, however, price expectations would also need to be anchored firmly for the same purpose. The Christian-Democrat/Liberal Lubbers administration upon its arrival in late 1982 made clear its intentions to consolidate public finances and rein over inflation, while making the recovery of the private sector's profitability and external competitiveness the main vehicle for the economy's recovery. To these ends, the government also announced its intention to suspend the price-indexation mechanism. This proclamation signalled its determination to eliminate the factors that fuelled the price-wage spiral. Wassenaar agreement, the outcome of several months of negotiations between unions and employers even before the elections, was announced within three days from these declarations, recommending the suspension of the price compensation payments in exchange for job redistribution and working hours reduction (Visser and Hemerijck 1997, 101).

The government's resolution to rein over the price-wage spiral, however, was sealed by its announcement in March 1983 that, following a nominal devaluation of 2%, the Guilder's nominal exchange rate to the German mark would be henceforth pegged to the German Mark. The peg essentially firmed up the policy strategy that had been adopted in 1973 and again in March 1979, when the Guilder joined the first the Snake and then the Exchange Rate Mechanism at a +/- 2.25% band around other participating currencies, including the Mark<sup>20</sup>.

Given thee credibly conservative policy stance of the Bundesbank, the peg strongly signalled to the Dutch wage- and price-setters but also the financial markets that price stability was becoming a priority in the Netherlands as well, while providing a nominal anchor, namely the German inflation rate. That should help shape expectations in wage- and price-setting accordingly and help break the wage-price spiral but also help reduce any risk premium on the interest rate at which Dutch firms and the government could borrow. As the Mark was a hard currency, maintaining a stable exchange rate with it would also mean that imported inflation would be limited for the Netherlands. With Germany being the Netherlands' main trading partner, the peg promised that if the Dutch unit labour costs grew more slowly than the German ones, there would be a real exchange rate depreciation that could give a significant boost to the Dutch private sector profitability. In that sense, this shift in monetary policy shaped the conditions under which the profitability of private sector firms was determined.

The government, as the public sector employer, pulled its weight to support the Wassenaar agreement and the peg by promptly freezing the public sector wages, as well as the social benefit levels, thus removing the incentives for wage drift and attempting to ease the pressure on labour costs from the ever-increasing social expenditure. The reduction of the collective burden (i.e. the sum of taxes and social security contributions as a share of GDP) was seen as a necessary condition for restoring and preserving moderate wage developments. In turn, wage restraint was

<sup>&</sup>lt;sup>20</sup> Between 1979 and early 1983 the Guilder had only depreciated vis-à-vis the Mark once, in September 1979 (by 2%), whereas it had appreciated along with the Mark vis-à-vis the other currency-members by 5.5% in October 1981.

considered an important tool for improving the very low profitability of private sector firms (OECD 1984, 25)<sup>21</sup>. Last but not least, the announcement of the peg of the Guilder to the Mark made moderate wage and price developments crucial for its credibility. Any deviations would imply higher interest rates and risk premia in the financial markets, which would, other things being equal, make the government's debt servicing more costly and leave less space for public expenditures.

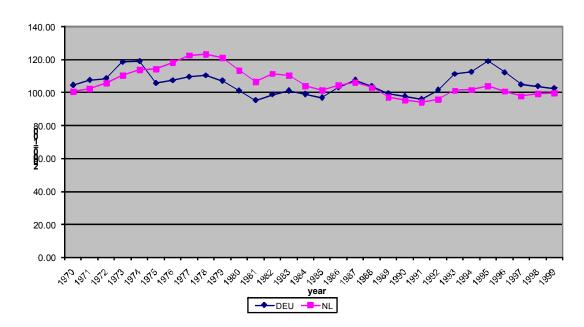


Figure 5.1 Real Effective Exchange Rate vis-à-vis EU-15 (double weights) (Source: AMECO)

In the next few years, the Dutch inflation rate matched and even fell below the German one. The main driver for the favourable inflation performance vis-à-vis Germany at the time was the evolution of producer prices in the manufacturing sector. What is more, the central role of employers and unions in the exporting sectors in the collective wage bargaining process and their interest in maintaining

<sup>&</sup>lt;sup>21</sup> A number of reasons were offered on why wage restraint would be a superior tool to fiscal redistribution of primary incomes in favour of industry for restoring the latter's profitability. Wage restraint would spread the burden of transferring income from labour to business more evenly across households, whereas it could also be more compatible with stable or lower taxation of personal incomes, which was already too high. Wage moderation would also support employment expansion, as it would weaken incentives to economise on labour, whereas it could also stimulate net exports by improving price competitiveness and/or attracting resources from other sectors in the economy. Given the decision of the Dutch governments to scale down the exploitation of the country's natural gas reserves, enhancing exports would support the external account, an important development, given the country's dependence on imports for its production (OECD 1984, 25).

and strengthening the external competitiveness of Dutch exports, given the adopted exchange rate regime, served to create strong favourable expectations about its sustainability. The peg to the Mark provided wage- and price-setters with a visible target, namely German unit labour costs. Inflationary pressures eased dramatically in the Dutch economy, making the Netherlands the champion of low inflation among the OECD members from 1984 to 1988 (OECD 1986; OECD 1988). As the German inflation rate was way below the average in the OECD (and in the OECD-Europe area), targeting German unit labour costs helped the Netherlands achieve favourable for its competitiveness inflation developments in the OECD area, thus making competitiveness gains vis-à-vis the rest of its trading partners as well after 1987 (see Figure 5.1). Given the high openness of the Dutch economy, improved competitiveness provided a sizeable aggregate demand expansion.

While the centre-right government demonstrated strong will in imposing a freeze on public sector wages and decoupling the growth of benefits levels from developments in the private sector wages, it proceeded only incrementally in reforming unemployment and social benefit policies and minimum wages to avoid provoking conflicts, which might reverse the policy of retrenchment (Visser and Hemerijck 1997, 135). Thus, following the initial freeze in social benefits, the government introduced a 3 percent cut in 1984. By that time, inflation had been tamed and real wages in the private sector had already started declining, thereby limiting the effective decline in the generosity of unemployment benefits and the insulation they could offer to wage-setters from the consequences of their decisions. In 1987 the government 'reorganised' the unemployment insurance system: the eligibility criteria were tightened and the benefit levels and duration of entitlement were shortened with the aim of making the much expanded by then system less costly<sup>22</sup> (Visser and Hemerijck 1997, 136). The disability insurance scheme was

<sup>&</sup>lt;sup>22</sup> A requirement of employment for at least 26 weeks in the 12 months preceding the unemployment spell was introduced; benefits were reduced from 80 to 70 percent of the last earned wage whereas their duration was still between 6 months and 5 years depending on age and experience (Visser and Hemerijck 1997, 136).

also reformed at that time, although more modestly<sup>23</sup> (Visser and Hemerijck 1997, 136), with the replacement ratio of its benefits lowered to 70%.

To put the role of these reforms in altering wage-setting outcomes into perspective a couple of observations are on order. First of all, these reforms took place well after unions and employers had established wage moderation in collective wage bargaining in the early 1980s. Secondly, the extent to which these reforms limited the 'outside options' of bargaining workers and thereby, the insulation that non-employment benefits offered them from the consequences of their wage bids on demand and employment is debatable. In spite of these reforms, the disability insurance system came under increased pressure following the reorganisation of the unemployment benefits system in the late 1980s. Due to the relatively stringent employment protection legislation for regular contracts, firms, especially in the exposed sectors, with the complicity of trade unions used the disability benefits system as a relatively cheap channel through which they shed their least productive workers in order to improve the productivity and competitiveness of their firms. This practice suggested that the generosity of the disability benefits remained high. Thus, although by the late 1980s and thanks to the strong international boom, the Dutch unemployment rate had declined substantially from the levels it reached in the early 1980s, the inactivity rate remained high, as did the dependence ratio (i.e. the ratio of tax/contributions payers to benefit recipients). Thirdly, therefore, the reforms of the non-employment benefits in the late 1980s did not even succeed in substantially curbing the growth of non-wage costs they imposed on employment.

Thus, to sum up the discussion so far, it has been argued that the it was the framework of credibly stability-oriented monetary policy in combination with the openness of the economy and coordinated collective wage bargaining that critically conditioned the trend of wage moderation that emerged in the Netherlands in the early 1980s. The orientation of Dutch monetary policy towards maintaining price

\_\_\_

<sup>&</sup>lt;sup>23</sup> The distinction between disability and 'unemployability' was somewhat sharpened with the latter facing tighter eligibility criteria. It should be noted that the emphasis in tightening eligibility criteria for benefit entitlement was stronger for younger workers than for those above 57 years old (Visser and Hemerijck 1997, 152 fn.)

stability by trying to keep a relatively stable nominal exchange rate of the Guilder to the Mark, along with high exports of natural gas, generated an exchange rate appreciation which, combined with the domestic price-wage spiral, put heavy pressure on competitiveness, profitability and employment in the large private exposed sector. Soaring unemployment weakened the trade unions in the late 1970s and forced them to accept the suspension of wage indexation and give precedence to restoring the profitability of private sector firms to income growth in the early 1980s. However, it was again the firming up of the stability orientation of monetary policy following the peg of the Guilder to the Mark, which framed the conditions under which this profitability would be restored while it also provided a clear target for wage and price developments that could generate employment gains. Labour market reforms in the mid- to-late 1980s had a lesser role in that direction both because they followed the shift of wage-setting behaviour and because they were not as successful in reducing the non-wage labour costs that generous income protection policies imposed.

The strong international boom of the late 1980s, the reduction of unemployment rate and the upturn in union membership increased pressures for recovering the real income losses of the early 1980s. Thus, the Dutch unit labour costs started rising again after 1989, however, thanks to the strong demand and some measures relieving employers from their social security contributions that the government put forward, this surge did not have immediate consequences for employment. The German reunification in 1990 kept demand for Dutch exports strong. However, the mounting inflationary pressures in Germany, the failure of the ERM members to agree on a realignment of the nominal exchange rates (i.e. an appreciation of the German Mark) and the sharp reaction of the Bundesbank led to the ERM crisis in September 1992 and to the German economy's abrupt slow down. Although, thanks to its by then well-established credibility, the Dutch Central Bank did not have to face any speculative attacks against the nominal exchange rate of the Guilder to the Mark, the Dutch eventually economy followed the German one in slowing down and the effects of the growing Dutch unit labour costs were felt immediately once the extraordinary demand from the main trading partner slumped.

Jobs were lost again, including in the large multinational Dutch firms (Visser and Hemerijck 1997).

At first, the unions, employers and the government did not seem to agree on what had to be done to help the economy's growth pick up again. The unions blamed the employers for requesting more wage moderation when their profits had been expanding. Employers blamed the government for not having cut down the fiscal burden on labour costs. The government contemplated far-reaching changes in the labour market by eliminating the legislation that helped extend the bargaining wage outcomes even to employers that had not taken part in the negotiation and by overhauling the management of social insurance funds. Yet, it is argued here that the monetary policy context shaped developments in the wage-setting front.

In 1991, the Maastricht Treaty was signed and the Netherlands committed to becoming a founding member of the EMU to be launched by 1997 or 1999. The treaty provisions for preparing the aspiring members evolved around making their monetary and fiscal policies converge in principle and priorities to match those of the future European Central Bank, which was modelled after the Bundesbank. Essentially, given the dominance of the Mark within the ERM, the Maastricht plan was about to extend the external constraints that the Dutch government had imposed to the country's macroeconomic policy making and wage bargainers from 1983 already to the aspiring EMU members.

In defiance of the Dutch government's threats to withdraw its support from the collective wage bargaining system, a move which would most likely strip unions and employers from their capacity to achieve effective coordination, the unions and employers signed a new accord in 1993, the *New Course*, which sought to renew their commitment to pursue wage moderation while pre-empting any government moves that would reduce the 'governability' (Traxler and Kittel 2000) of peak-level coordination. This agreement has been considered as the second milestone for the Dutch record of moderate wage developments in the 1980s and 1990s. It provided for an exchange of concessions in some policy fronts, most notably the *organised* 

decentralisation of collective bargaining and the pursuit of measures that would encourage activation in rather than exit from the labour market.

The goals, apart from wage moderation, stated in the New Course reflected the broader policy orientation that had emerged in the early 1990s, namely that increasing the rate of active labour force participation was paramount for maintaining the generous labour market and income protection policies. This is because with relatively low employment rates and thereby people on the payroll, the cost of financing the social benefits generated a high non-wage component for labour costs, thus making effective wage moderation difficult (cf. Scharpf and Schmidt 2000; Hassel and Ebbinghaus 2001; Mares 2004). To that end, the coalition government of Christian-democrats and social-democrats that was formed in 1989 took a number of measures.

First, following the insistence of social-democrats the link between benefits and the growth of the minimum wage growth was restored conditionally upon the maintenance of the inactivity/activity (I/A) ratio below a specified figure. Secondly, following a public inquiry, which revealed that both employers and unions had been managing the various social insurance funds that they were in charge of in a way that was conducive to their abuse, the government took measures that would limit if not eliminate the incentives that aimed mostly at closing loops that permitted this abuse. The goal was to reduce the number of inactive people of working age. The now famous 'Flexicurity' agreement that was reached between unions and employers in 1996 thus fitted with this policy philosophy. This agreement proposed the extended normalisation of atypical forms of employment and the flexibilisation of working-time arrangements, so as to encourage the active labour market participation of women and younger workers (Visser and Hemerijck 1997). The changed employment protection legislation that implemented it came into force in 1999.

In that sense, the reforms that took place in the Netherlands in the 1990s were in the direction suggested by the OECD Jobs Strategy and their pace accelerated. However, many of these reforms took, again as in the 1980s, place

after the unions and employers had agreed to return to moderation, while elements of these labour market protection policies which could insulate bargaining workers from the consequences of their wage bids for demand and employment were not altered substantially. Even following these reforms, the generosity of the Dutch social benefits remained well above the western European and OECD average, whilst the protection of regular contracts of employment changed little (see Table 4.1). In that sense, it would be far fetched to attribute the reaffirmation of the wage moderation strategy in 1993 to these reforms.

Moreover, although it is true that the Dutch unions were weak, the slow down of the Dutch economy in the early 1990s was nowhere near the crisis it emerged from in the early 1980s. Unemployment did not rise dramatically in the early 1990s, while even union density had picked up. The Dutch unions agreed to pursue moderation from a clearly stronger position than in 1982. The Dutch employers also pulled their weight in defending the system of collective wage bargaining in front of the government's threats to dismantle it. I argue here that the context of monetary policymaking and the openness of the Dutch economy decisively framed these developments by providing the appropriate incentives to wage- and price-setters and that in fact, the labour market reforms that were undertaken in the 1990s aimed at safeguarding the basic principles of generosity of the Dutch labour market protection policies by ensuring that their financing does not conflict with achieving high employment rates.

All this does not mean that the labour market reforms of especially the 1990s did not contribute at all to the recovery of labour market performance in the Netherlands during that decade. However, their role was not so much that they weakened the protection of regularly employed workers/wage bargainers but rather that they helped increase the activity rates in the Dutch labour market by helping reintegrate groups of working age population at the fringes of the labour market. This created the conditions for easing the non-wage labour costs that financing these labour market protection policies, especially benefits, imposed on the use of labour, while at the same time it facilitated nominal and real wage moderation by allowing increases in real consumption wages. Yet, these reforms did not manage to have

these effects alone. The next section examines the conditions under which this was made possible.

# 5.4 Aggregate demand conditions and the effectiveness of moderate bargaining outcomes and labour market reforms in combating unemployment

This section will shed light to the aggregate demand conditions under which wage moderation was pursued and labour market reforms took place in the Netherlands in the 1980s and 1990s. It will be shown that these conditions were especially favourable for most of the time and their source will be identified with particular reference to monetary and fiscal policies. As the case of Germany in the next chapter will show, favourable aggregate demand conditions significantly framed the effectiveness of the reforms in labour market protection policies that took place in the 1980s and the 1990s in increasing active labour force participation in the Netherlands. Moreover, as this section will show, specific structural characteristics of the Dutch economy, such as its high openness to trade and its small size in the EU area were important for the determination of favourable aggregate demand conditions, given the framework within which wage moderation was secured.

Aggregate demand conditions in the Netherlands were very subdued in the early 1980s and only started picking up from 1984. From the mid-1980s onwards, the international economy entered a boom period, which substantially benefited the Dutch economy through its exports. Thanks to the strong wage moderation, the peg of the Guilder to the Mark and the initially relatively low profitability of Dutch firms, exports were the main driver of output growth in the Netherlands between 1984 and 1988. The impact of export growth on aggregate demand was substantial given the very high openness of the economy<sup>24</sup>. Subsequently, the expanding profit margins and the optimistic international outlook helped private investment flows accelerate in the Netherlands from 1985. The stability-oriented monetary policy was backed not only by wage and price moderation but also by the government's management of public finances.

150

<sup>&</sup>lt;sup>24</sup> In the 1980s already, more than 100% of the Dutch GDP was produced in sectors exposed to international trade.

As mentioned in the previous section, the first reforms in the systems of non-employment benefits took place between 1984 and 1987. The main stated goal of these reforms was to reduce the financial costs of the system so as to both ease non-wage labour costs and to support the government's endeavour to consolidate the public finances. General government spending as a share of GDP fell from 54% in 1983 to 52.4 in 1986 to 50.3 in 1989 (OECD 1989, 35, 1990, 22 and 1998, 51)<sup>25</sup>. The government's wage bill, (social security) transfers and public sector investment accounted for the largest part of this drop. The public sector wage bill declined only thanks to reductions in real wages as the number of public servants kept increasing till the early 1990s. Expenditure for social security benefits declined by c. 2.5 p.p. between 1983 and 1986 and then more or less stabilised until 1993 when it resumed its declining trend. The decline in social benefits expenditures was also due to cuts in the level of benefits as the number of recipients continued to rise, although, thanks to the favourable demand conditions, at a slower rate after 1985 (OECD 1989).

As the government started cautiously taking more structural measures to economise in public transfer expenditures (see previous section), it also began to channel some of the gains back towards collective wage bargainers in the form of reductions in payroll taxes. Initially, it administered most of its tax rate reductions to the business sector (a total of ¾ of GDP over 1984 and 1985) hoping that it would improve its profit and labour cost position of private sector firms (OECD 1984, 36). Helped by strong export demand these tax cuts to private business did not lead to a higher budget deficit, debt and interest payments for the government. The unexpectedly strong demand conditions of the late 1980s and immediately after the German reunification and the extra tax revenues they generated were used to finance tax cuts on both labour and capital, which culminated in 1990 with the introduction of the Oort tax reform (OECD 1991, 47). The tax cuts especially for labour helped sustain moderate labour costs growth in the late 1980s, while at the same time they increased households' disposable income and thereby contributed to stimulating private consumption and with it aggregate demand. Thanks to the combination of

-

<sup>&</sup>lt;sup>25</sup> The data refer to current disbursements for general government.

favourable aggregate conditions and the changes in the expenditure programmes, the Dutch government met its target for deficit reduction in 1989 (OECD 1989, 33).

Around the early 1990s, it also emerged that the results of labour market policy reforms of the late 1980s were rather mixed in terms of economising in public expenditures: although they had produced some savings and social expenditures stabilised from 1985 onwards, it was also becoming clear that this was more a cyclical phenomenon. Once recession kicked in, these expenditures started rising again. The problem was that stricter eligibility criteria in the unemployment insurance system had put pressure on the disability system. As mentioned in the previous section, this system became a popular channel of subsidised labour market exit for the least productive workers in order to help maintain the competitiveness of Dutch manufacturing firms, especially in the face of a hard Guilder. Thus, by the early 1990s, it became clear that a negative spiral had been occurring in the Dutch economy, whereby increasing inactivity rates were adding to the expenditures of social benefits, which in turn put stronger pressure on competitiveness and induced firms to apply more of the same solution (Visser and Hemerijck 1997).

These realisations led to the more substantial reform in the administration and eligibility criteria of non-employment benefits in 1993-1995 with the aim of eliminating the incentives of firms to offload their least productive workers to these systems and increasing the Dutch labour market activity rates. The normalisation of part-time employment and of other atypical forms of employment had the same purpose, especially for Dutch women (working mothers) and younger people (e.g. university students, of which the Netherlands has come to have one of the highest employment rates (Salverda 1999). However, these labour market reforms did not spur employment creation alone, as the economy's downturn of the early 1990s was not a deep one.

With the credibility of the peg of the Guilder to the Mark well established by then, the primacy of the price stability goals had been confirmed in a number of fronts (wage/price setters, fiscal policy makers and markets). From 1994 to 1999, while wage and price developments remained modest, the Dutch inflation rate was

equal to or slightly higher than the German one, reflecting the different phase of the business cycle. This inflation differential did not fuel any expectations about medium-term accelerating inflation though and for that the Dutch *real* interest rates remained lower than the German one, thus fuelling a boom in the housing market and private investment. During that period, it was thus mainly domestic demand that drove aggregate demand and output growth in the Netherlands, given that the German economy had plunged into recession following the tightening of monetary policy, while a number of other EU members were struggling to meet the Maastricht criteria, by pursuing tight macroeconomic policies.

By contrast, in the Netherlands it was primarily investment and private consumption that led the recovery. House prices rose by more than 30% in the Netherlands between 1994 and 1996. The Central Planning Bureau (CPB) estimated that about 10% of such gains are used to finance extra household consumption, with the wealth effect on private consumption being around 1.25 % spread out over time (CPB-Netherlands Bureau for Economic Policy Analysis 1997). Both developments helped bolster consumer confidence. Monetary policy was crucial in that respect, as low interest rates spurred mortgages, which amplified the wealth effect of soaring house prices, while at the same time they gave a push to stock prices, creating an extra, albeit smaller, wealth effect for households and thus, leading to buoyant private consumption demand. The AEX index of Dutch bluechip stocks rose more than tripled between 1993 and 1997, with stock prices rising by more than 30% in 1996 and 40% in 1997 (OECD 1998, 21). consumption was driven by the strong job creation and by capital gains thanks to the sharp increase in house and share prices. Strong job creation mainly took place in the services sectors (Visser 2000a), the outcome of, among other things, the tax and social security contributions cuts that the government had been effectuating since 1990.

Moreover, the relatively loose monetary policy conditions, along with the strong demand, high profitability and capacity utilisation boosted private investment demand. Low mortgage interest rates also underpinned residential investment, particularly after 1996. The expansion of business capacity, apart from fuelling

aggregate demand, also prevented the Dutch economy from running into bottlenecks that would spur inflationary pressures and prompt a monetary tightening (OECD 1998, 20-22). As terms of trade started improving again after 1995, with the Guilder's real effective exchange rate depreciating, private sector profitability, particularly for firms in the exposed sector improved pushing investment demand upwards. Moderate wage- and price developments also

In sum, a number of factors permitted these favourable aggregate demand conditions. The credibility of the peg of the Guilder to the Mark provided a firm nominal anchor for inflation expectations thanks to the close trade links between the two economies and the high openness of the Netherlands. The coordination of collective wage bargaining, where IB, the exporting/manufacturing sectors' union, dominated given its stakes to maintaining external competitiveness, contributed to maintaining unit labour cost developments which did not challenge the credibility of the peg, while keeping external competitiveness of Dutch exposed sectors strong. The relatively low real interest rates reflected to a large extent the credibility of the orientation of the Dutch monetary policy towards stability. The housing boom, which low interest rates fuelled in turn contributed to strong growth of private consumption demand. Under these conditions, the labour market reforms, which aimed at increasing the labour force participation rates in the Dutch economy, fell onto fertile ground. The tax cuts that the governments delivered were to an important extent made possible by the fact that the taxpayers' pool thus grew, the savings in the costs of social benefits notwithstanding. These tax cuts did not only support moderate wage growth but also supported job creation in low productivity growth services sectors, i.e. sectors which are a great employment destination for women and young people, that is, the very groups which activation policies mostly targeted.

How much of the credit can labour market reforms towards deregulation take for easing non-wage labour costs and thereby, support moderate wage/price outcomes in the Dutch economy as Mares (2004; 2006) suggests? The comparison of the Netherlands to Germany in the next two chapters will provide a fuller answer to this question. At this point, however, suffice to say that a rough comparison of

the developments in the Dutch economy alone between the 1980s and 1990s suggests that favourable aggregate demand conditions are at least as equally important as the reforms themselves in economising costs. The reforms in the benefits systems of 1984-1987 touched mostly upon the level of benefits, that is, the one of the two dimensions of generosity that is normally included in empirical investigations of the effects of generous benefits on unemployment<sup>26</sup>. As it was mentioned earlier these reforms did not prove particularly effective in curbing the financing costs of the system and it was instead the unexpectedly favourable demand conditions of the late 1980s that achieved this goal. On the other hand, the rationalisation of the eligibility criteria and the management of the benefits systems in the early 1990s so that their use reflected more closely the aims for which they had been established proved more successful again in combination with favourable demand conditions though.

#### 5.5 Conclusions

This chapter has studied the case of the Netherlands in order to illustrate the conditions under which there was a shift in the wage-setting behaviour from the early 1980s onwards. The case study sought to make two points. First, that the orientation of monetary policy making (and of macroeconomic policies more generally) towards stability in combination with coordinated collective wage bargaining and given the high openness of the Dutch economy to trade were the crucial factors rather than labour market reforms underlying the trend of wage moderation that characterised the country since the early 1980s. In that sense, the case of the Netherlands seems to confirm the insights of the comparative political economy literature on the potentially benign interactive effects of monetary policy, the structure of collective wage bargaining and its sectoral composition on mediumrun unemployment and seems to be no different than countries such as Germany (Franzese Jr 2004). Its case also suggests that the openness of the economy to trade can be crucial for the shaping the incentives of the government, as the public sector employer, to moderate wage outcomes in that sector (cf. Franzese Jr 2001).

\_

<sup>&</sup>lt;sup>26</sup> The other dimension is the duration of the benefit entitlement. See Baker et al. (2005) for a review.

The second point that this chapter sought to make was that the labour market reforms in non-employment benefits and employment protection legislation that took place in the Netherlands in the 1980s and the 1990s and which aimed at increasing activity rates succeeded in their aim because they were combined with favourable aggregate demand conditions. Thanks to these favourable aggregate demand conditions, there was employment creation, which was facilitated by these reforms. This in turn allowed for the financing costs of non-employment benefits on labour and firms to be reduced because the pool of contributions' and taxes' payers expanded. Thereby, the costs of generous labour market protection policies did not impede moderate wage developments (Mares 2004; 2006), while they also removed impediments on employment expansion in sheltered stagnant services sectors (Hemerijck, Unger and Visser 2000).

In illustrating this second point, it was noted that the structure of the Netherlands as a small and very open economy was important in determining these favourable demand conditions. By setting as the nominal anchor the exchange rate of the Guilder to the Mark, i.e. the currency of its main trading partner, the Dutch macroeconomic policy makers provided a clear incentive structure for wage/price bargainers in exposed sectors: by targeting, if not undershooting wage/price developments in Germany, they could preserve the competitiveness of their goods and thereby their profitability and jobs. Moreover, given the relatively high openness of the small Dutch economy, competitiveness gains would have potentially pronounced effects on the aggregate demand of the economy (even if that meant limiting the leakage of any domestic demand stimuli towards import The small size and openness are not characteristics of all economies demand). in Western Europe. In that sense, therefore, the experience of the Dutch economy in terms of whether and how its labour market reforms contributed to combating unemployment seems to be dependent on its size and openness.

The following chapter will present the case of Germany along the same lines in order to test the extent to which this is true.

### CHAPTER 6. THE POLITICAL ECONOMY OF UNEMPLOYMENT IN OPEN ECONOMIES WITH REGULATED LABOUR MARKETS: THE CASE OF GERMANY IN THE 1980S AND 1990S

#### 6.1 Overview

This chapter offers a case-study of Germany in the 1980s and the 1990s. The purpose is twofold. On the one hand, the case-study will elaborate on the results of the qualitative comparative analysis of chapter 3 on the sufficient conditions for good unemployment performance in the 1990s. On the other hand, this case-study and its comparison with the Netherlands that will follow in chapter 7 will test for the hypothesis that in open economies with conservative monetary policy and a stability oriented fiscal policy, moderate wage bargaining outcomes and labour market reforms in support of them will be more effective in combating unemployment when the economy is small than when it's large.

It will be shown how the German collective wage bargainers delivered moderate outcomes under the credible threat of the conservative Bundesbank and for as long as fiscal policy was on a stability-oriented course. Generous labour market protection policies did not hinder wage moderation. It will be shown how export performance and the demand stimulus it created supported the good German labour market performance in the 1980s and how this was no longer the case in the 1990s. As most western European countries started preparing to join the EMU, they started shadowing monetary policy and price/wage developments in Germany, their main trading partner. Moreover, the unification under the conditions it took place, had put the German economy under a lot of strain by increasing the cost of its social protection (including benefits) systems.

The discussion of this chapter will be structured as follows. Section 6.2 will present an overview of the labour market policies and institutions that are usually blamed in the literature for the dismal German labour market performance. Section 6.3 will show how the combination of coordinated collective wage bargaining and conservative monetary policy led to moderate bargaining outcomes when fiscal policy was also on a stability-oriented course, while pointing out how labour market

reforms cannot really account for these bargaining outcomes. Section 6.4 will examine the aggregate demand conditions that prevailed in the German economy in the 1980s and 1990s. Section 6.5 will conclude.

## 6.2 The Policy and Institutional Framework Shaping Wage-Setting Behaviour

The aim of this section is to provide a brief overview of the main policies and institutions that are hypothesised to bear upon wage-setting behaviour as they looked like in the early 1980s. The structure of collective wage bargaining, labour market protection policies and the institutions of monetary policy making will be presented. This is necessary in order to set up the stage for the discussion of the conditions that shaped moderate bargaining outcomes in Germany and the conditions that determined the effectiveness (or lack thereof) of moderate wage outcomes and labour market reforms in combating unemployment.

Collective wage bargaining has been free from government intervention in Germany (the principle of 'Tarifautonomie') and taking place between trade unions and employers. The right of both employees and employers to organise themselves in unions and associations has been guaranteed by the German constitution (Schettkat 1995). The German workforce has been organised mostly along industry lines into 16 unions, which constituted the DGB confederation (Deutscher Gewerkschaftsbund). Employers have been organised along similar lines, with collective wage bargaining taking place mostly at the industry level (Jacobi et al. 1998).

Unions and employers' associations have traditionally had strong leverage upon their rank-and-file thanks to their control of access to a number of resources, which are important to their members (e.g. vocational training schemes). The German legislation stipulates that only legally recognised unions can conclude collective agreements, while it provides for the extension of sectoral agreements to cover all companies in the industry as long as the union, the employers' association and the regional government agree to that end. Thus, even though union density has never been particularly high, unions have been powerful actors in collective wage bargaining. Moreover, unions are well represented in the elected works councils in

the manufacturing sector, which normally negotiate local working conditions and arrangements affecting pay and pay structures (Hall 1994, 9-10).

Even though the German unions are members of the DGB, the confederation itself has not been coordinating the collective wage bargaining process. Instead, coordination is achieved in Germany through pattern-setting, whereby the collective agreement in a key-sector, sets the pace of wage increases for the rest of the economy (Traxler, Blaschke and Kittel 2001). For most of the postwar period, the metal sector has been the key-sector that set the pattern for the rest of the industries with the IG Metall union playing an important role, although the public sector trade union OTV also undertook this role on a few occasions (Iversen 1999). IG Metall's leading position has been attributed to a number of reasons, including its large size and relative organisational strength, as well as the fact that it has been organising workers in the sectors that have been most important for Germany's good industrial The (western) German economy developed a strong export performance. orientation with a very high share of employment in manufacturing, which remained relatively high even when the industrial sector had started declining in many other countries (Manow and Seils 2001, 271).

Given these characteristics, it has been common knowledge among the other unions that they were rather unlikely to achieve higher wage increases in their collective agreements, thus consolidating IG Metall's position as the leading bargaining union (Hall 1994, 10). The pattern-setting mode of coordination (see Traxler and Kittel 2000 for a definition of the mode) does not imply that variation has been lacking in wage levels and wage increases across industries (Schettkat 1995, 321). However, as Traxler and Kittel suggest, with pattern-setting, distributional issues fall by the wayside, thus facilitating the achievement of moderate wage outcomes, provided that there are incentives for wage-setters to deliver them.

Germany has been characterised by generous labour market protection policies, including non-employment benefits and employment protection legislation. These policies have been intricately linked to the workings and outcomes of the

German labour market. The main purpose of the non-employment benefits systems has been to cover the risks associated with the loss of income by male industrial wage earners and they have been mostly financed via payroll taxes with only limited contributions from the Federal and local budgets (Manow and Seils 2001, 269-71).

The unemployment insurance scheme offers income replacement and finances training and active labour market policies. The length of the contributions period and the age of the benefit claimant determine the duration of entitlement to the benefit. The Federal Employment office has been managing the scheme with its funds coming from primarily payroll taxes. The federal budget undertakes to finance any deficits in the scheme. If the entitlement period expires and the worker is still unemployed then she qualifies for means-tested and entirely federally funded unemployment assistance. The replacement ratio for unemployment benefits was at least 73 percent of wage level in 1983, depending on the family circumstances and work experience of the unemployed person. For single earners with two children, potentially earning the minimum wage, the benefit replacement ratio reached 115 percent of the minimum wage (CPB-Netherlands Bureau for Economic Policy Analysis 1997).

In thinking about the potential effects of welfare state/labour market policies on the equilibrium rate of unemployment, one needs to take into account the schemes encouraging the exit from the labour market in Germany, such as early retirement. These schemes are important in that they reduce the effective labour supply, whereas they can also generate pressure on labour costs and public finances, because they are funded by payroll taxes. Labour market exit has also been a popular strategy for dealing with economic crises in Germany (Manow and Seils 2001). In that respect schemes encouraging labour market exit have been complementary to unemployment insurance.

Early retirement and other means of exiting the labour market (e.g. disability schemes) have helped manufacturing firms adjust their workforce relatively costlessly, as they allowed them to shed workers without having to bear the full cost of severance payment while they also curbed the resistance of works councils

against dismissals. German governments had been encouraging this practice, as, combined with moderate wage-price behaviour, it also helped maintain productivity growth high in those sectors where international competitiveness was important (Manow and Seils 2001).

Employment protection legislation has overall been relatively strict in Germany. According to OECD data, Germany had one of the most restrictive legislations among its members in the late 1980s, particularly in the area of temporary employment and even though there had been an important reform in 1985 that induced some flexibility (OECD 1999a, 66). As with the welfare state policies, the protection of stable employment relationships and the restrictions over employment forms that provided sub-optimal entitlements to insurance and pay schemes contributed to the coherence of the production regime in Germany (see Soskice 1999; Estevez-Abe, Iversen and Soskice 2001). Works councils played an important role in the dismissal of workers, particularly in the large firms (Hunt 1994).

Before 1985, collective dismissals regulations only applied to firms with 20 employees or more. The works council of the firm had to be consulted in such cases whereas the state employment office had to be informed as well (CPB-Netherlands Bureau for Economic Policy Analysis 1997, 287). The works council had a saying on which persons will be dismissed and could negotiate a social plan with the employer that includes a severance payment and retraining measures. Regarding atypical forms of employment, prior to 1985, a fixed-term contract could only be used for up to 6 months and provided that the employer demonstrated that the nature of the work was also temporary. The number of workers on fixed-term contracts was consequently very low, at 4.0 percent of employment in 1984 (Hunt 1994, 4).

Turning to macroeconomic policy institutions, the most important mention that should be made is that of the central bank. According to the Federal Bank Act, monetary policy in Germany was the responsibility of the Bundesbank, which was the most politically independent central bank in the world before the establishment of the European Central Bank in 1999. The German central bank targeted money

supply to achieve its goal of maintaining price stability. Although the exchange rate policy was by law under the federal government's jurisdiction during the Bretton-Woods system, the Bundesbank effectively took over its control once the Mark's nominal exchange rate was allowed to float in 1973 via its interest and money supply control and the consequent effects they had on the currency markets (Scharpf 1991, chapter 7).

### 6.3 The Determinants of Moderate Wage Bargaining Outcomes

The aim of this section is to illustrate the conditions that have been underlying moderate wage bargaining outcomes (or lack thereof) in Germany in the 1980s and 1990s. The qualitative comparative analysis of chapter 3 suggested that in an open economy like Germany the combination of a conservative monetary policy, with a stability-oriented fiscal policy, generous labour market protection policies and coordinated collective wage bargaining was necessary but not completely sufficient to explain the country's unemployment performance in the 1990s. These conditions did not account for the implications of the unification and the circumstances under which it took place.

This subsection will, therefore, show how these factors worked together to induce moderate wage/price outcomes not only in the 1990s but also in the 1980s. Moreover, this section will illustrate the labour market reforms that took place in Germany in the 1980s and 1990s to show that they were not the crucial factors behind moderate bargaining outcomes in the 1980s and that, in spite of what is often suggested, Germany actually did undertake labour market reforms along the direction suggested by the OECD Jobs Strategy in the 1990s. The reasons why these were not as successful in combating unemployment will be discussed in the following section.

By the early 1980s, the Bundesbank had signalled to collective bargainers and the federal government the lengths it was prepared to go to in order to preserve price stability and had created a mechanism for issuing clear guidelines for wage and fiscal policy developments, to which if collective bargainers and the government failed to adhere, they should expect an adverse monetary policy

reaction. In 1974, the German central bank proved that, in its pursuit of price stability, it could go as far as neutralising any fiscal stimuli and generate unemployment on its own: following the tightening of its policy in response to inflationary pressures, the average yearly number of unemployed people more than quadrupled between 1973 and 1975, 273,000 to 1.1 million (Scharpf 1991, 137). Moreover, shortly after that episode, the Bundesbank started announcing its intended money supply growth, based on its predictions on the potential real output growth, a year in advance of the beginning of wage bargaining and the publication of the federal government's budget. In this way, it gave itself a position of authority and a 'first-mover advantage' in the process of coordination among monetary, fiscal and wage policies (ibid., 138).

The way in which the Bundesbank's commitment to price stability and credible threats interacted with coordinated export-sectors-led collective bargaining, produced moderate wage outcomes has been well documented in the literature (Scharpf 1984; Scharpf 1991; Hall 1994; Streeck 1994; Hall and Franzese 1998; Franzese Jr 2001). The German central bank's commitment to price stability was manifested in, among others, its preoccupation against letting the German Mark weaken for fear of importing inflation (Scharpf 1991). The metal sector negotiation outcomes set the pace for wage developments in the rest of the economy. The evolution of the nominal effective exchange rate of the Mark to the rest of the EU-15 currencies and the real effective exchange rate (based on unit labour costs) for the same group (see Graph 6.1) suggests that the pattern-setters in the German economy ensured that unit labour costs grew at a pace that maintained if not improved the competitiveness of German exports for most of the period between 1970 and 1999.

The presence of generous labour market protection policies (non-employment benefits and employment protection legislation) during that period did not hinder wage bargainers from internalising the credible threats of the German central bank and delivering moderate bargaining outcomes in the late 1970s and 1980s. In fact, as Mares (2006, 158) suggests, the 1970s, that is, the period when the Bundesbank demonstrated its resolve to prioritise price stability was also a time

when the German government devised generous labour market exit programmes in the form of early retirement for elder workers. Although the costs of these programmes did not seem to be internalised in bargaining wage outcomes (ibid.), they certainly did not seem to insulate wage-setters from the consequences of their wage-setting behaviour and induce them to generate bargaining outcomes that fuelled inflationary pressures as the New Keynesian literature on the effects of generous labour market protection policies would have suggested.

On the fiscal policy front, the widening federal government deficit in the early 1980s, itself the outcome of a fiscal expansion (the 'locomotive' strategy) in the late 1970s and the slowdown of the early 1980s created pressures for fiscal consolidation, given the firm orientation of monetary policy. Although the process started already under the Schmidt government, it was stepped up when the conservative-liberal coalition under Helmut Kohl came into power in 1982. Its goal, similar to its Dutch counterparts at the time, was to reduce the budget deficit and subsequently provide tax relief to firms and individuals. Moreover, the government aspired at reducing the rate of social security contributions for employees and employers. A number of measures were taken to that end, not all of them towards the direction of cutting costs. Some of these measures involved changes in the generosity of non-employment benefits systems while some others had to do with shifting their financing burden away from the government budget to the insurance funds (Manow and Seils 2001, 278). Interestingly, some of these measures were effectively overturned once the macroeconomic conditions improved in the late 1980s.

More specifically, in 1984, the replacement rates of unemployment insurance and assistance benefits for single persons were cut down by a couple of percentage points each<sup>27</sup>. During the same year, the eligibility criteria for disability pensions were tightened, while they were relaxed for old-age pensions, especially for women at age 60. These reforms moved in the direction of limiting the 'outside options' of wage bargainers on the employees' side as the OECD Jobs Strategy

\_

<sup>&</sup>lt;sup>27</sup> In the case of unemployment insurance benefits the replacement rate went down from 68 to 63 per cent while for unemployment assistance it went down from 58 to 56 per cent.

would have prescribed a few years later (OECD 1994). At the same time though, the government introduced a new Pre-Retirement Act (which expired in 1988), which provided a means for facilitating the labour market exit of workers at the age of  $58^{28}$ . Once the macroeconomic conditions improved towards the late 1980s, however, the government introduced measures, which partly restored aspects of generosity in non-employment benefits. Most notably, in 1987 the duration of benefit entitlement for unemployment insurance was extended to reach 32 months, up from 12 (Mares 2006, 311-2). This measure combined with the aforementioned Pre-Retirement Act practically allowed workers to enter the subsidised labour market exit path as early as aged 57 (Manow and Seils 2001, 278-84).

Reforms in the non-employment benefits systems were not the only policy area in which reforms were undertaken in the 1980s. In the area of employment protection legislation, a law that reformed parts of it was passed in 1985. The most important provisions of the new law included the relaxation in the terms of using fixed-term contracts and the raising of the threshold above which collective dismissal rules applied. This law also permitted the use of fixed-term contracts of up to 18 months to 2 year under certain circumstances (up from 6 months before 1985) while it eliminated the obligation of employers to justify the use of fixed-term contracts by showing the temporary nature of the job for which they offered them. There were indications that the share of workers on fixed-term workers increased from 4 percent in 1984 to 6.3 percent in 1986, with most of them being blue- rather than white-collars. The law increased the duration for which firms could use temporary agency workers from 3 to 6 months. Finally, the law stipulated that the threshold for characterising dismissals as collective was raised from 5 workers to 6 (Hunt 1994, 3-4).

This brief overview of the reforms in labour market protection policies that were undertaken in the 1980s suggests that crediting them with inducing the well-documented moderate wage-setting behaviour during that period (see e.g. Manow and Seils 2001; while Mares 2006 quotes Bundesbank reports of the time praising

\_

<sup>&</sup>lt;sup>28</sup> The Pre-Retirement Act provided that employers had to pay 65 per cent of what would have been their salary for up to two years, while the government offered subsidies for re-employing them.

wage-setters for their moderate behaviour) would be questionable. This is because it is rather unclear whether overall they reduced the insulation that labour market protection policies provided to bargaining employees from the effects of their wage aspirations on demand and employment. Reforms in non-employment benefits moved in opposite directions with regards to their generosity, while reforms in employment protection legislation took place 'at the margin', thus possibly creating a 'buffer' of workers with temporary and for that more precarious jobs that were most likely to bear the brunt of numerical adjustments in the workforce (see Bentolila and Dolado 1994 for a similar example of this 'buffer' effect in Spain in the 1980s). The fact that these reforms apparently failed to contain the growth in costs of such benefits policies even in the face of improved macroeconomic conditions also suggests that generous 'outside options' remained available for wage bargainers (Mares 2006). These reforms, however, did signal the fact that the generosity of benefits was not exogenously fixed in any way.

In fact, maintaining generous labour market exit options was in the intentions of the government as part of its strategy to help firms cope with the recession and the increasing pressures on their international competitiveness (Manow and Seils 2001). This was, however, in conflict with its goal of consolidating its finances, as the rise of benefit recipients put pressure onto its expenditures. For that, the federal government recurred routinely to shifting parts of its financial obligations onto the various insurance funds, whose deficits had then to be covered by higher contribution rates on firms and employees (Manow and Seils 2001). As a result by the late 1980s, even following the strong international boom, the number of benefit recipients (particularly various forms of early retirement) had increased while the labour force participation of particularly elder workers kept declining (Manow and Seils 2001, 277-81). Consequently the base from which payroll contributions were paid from kept shrinking, thereby, increasing the burden per taxpayer.

Still, as mentioned above, moderate wage outcomes were achieved in the 1980s even in the face of these policies, thanks to the credible threats of the German Bundesbank and the coordinated collective wage bargaining under the leadership of

the export-oriented sectors. Such moderation was all the more important in the mid-to-late 1980s as the nominal exchange rate of the Mark appreciated, thus putting pressure on the relative price of German exports, which nevertheless did not suffer as a result of competing in international markets on their quality rather than cost (Carlin and Soskice 1997). Thus by 1989, the resilient wage restraint in combination with the strong international boom had led to substantial employment gains in (West) Germany, which helped balancing the federal government budget (Manow and Seils 2001). On the other hand, the unemployment and old-age insurance funds (in West Germany) were in surplus at the onset of the 1990s, unlike the sickness insurance fund which had a deficit of -5.6 per cent in 1991 (Mares 2006, 168-9).

In the early 1990s, wage moderation eluded the German system of collective bargaining. The unification in 1990 marked the beginning of some turbulence in the conditions under which wage moderation had been achieved during the 1980s. The public sector union OTV took over as the pace setter in sectoral wage negotiations, with the aim of making up for the relative wage losses that its members had suffered during the 1980s and which, according to a study, had amounted to 10-15percent. Consequently, they demanded wage increases of 6percent for 1991, which they managed to get, while their relative low political power meant that, unlike in the case of IG Metall, unions in other sectors managed to achieve even higher increases, bringing the aggregate wage growth for Germany to 6.6 percent that year (Mares 2006, 169-70). As mentioned earlier, the threat of a monetary policy tightening is not as severe for public sector unions, because the consequences of such a reaction cannot be as directly/immediately grave for their employment prospects (Franzese Jr 2001). In chapter 2 of this thesis, it was suggested that this is especially the case if the government, as the public sector employer, does not align its fiscal policy with the constraints of a stability-oriented monetary policy (cf. the case of the Netherlands in the previous chapter).

The German government did exactly that, as it decided to finance the unification through an extensive fiscal expansion aimed at rebuilding infrastructure and promoting investment at the eastern states, while about 40 percent of the

planned expenditures concerned labour market and social programmes. The terms under which the transition to the unified Germany was arranged also proved to be disastrous. In addition to the monetary union between the West and East Germany, unions and employers agreed that wages in the eastern parts would converge to those of the western by 1994. This resulted in a massive supply shock in the eastern part of the economy, which the increased consumption power of its residents did not manage to outweigh in terms of demand expansion.

Moreover, in order to assuage the western Germans' fears about massive economic dislocation of eastern Germans, the benefit entitlements and training policies of the western systems were expanded to the east, while the social insurance institutions of the two countries were merged. While this expansion did not increase the benefits and other labour market protection that western German workers enjoyed, it added immense pressure to the cost of these policies, especially as given the aforementioned supply side shock in the east, unemployment rates, already at 10 per cent in 1991, soared (Mares 2006, 168). The old-age and unemployment benefits systems were the ones, whose financial situation deteriorated the most.

There had been no prior agreement concerning the distribution of financing costs of this expansion in policies aiming at insuring against labour market risks. The government and employers expected employees to demonstrate moderation in their wage claims and bear most of the burden, an option that, however, did not go down well with the unions. This was due to two reasons. First, the unions found this distribution of costs inequitable, particularly on the face of soaring demand and profitability of firms in the western part of Germany (Mares 2006). Secondly, the 1980s governments' dual strategy of on the one hand encouraging labour market exit and on the other hand, offloading its own financial responsibilities in the social insurance benefits systems, had already generated relatively high non-wage labour costs which payroll taxpayers had to shoulder (Manow and Seils 2001). These costs grew substantially with the massive inflow of eastern German beneficiaries into the benefits systems as the aforementioned supply-side shock hit eastern Germany. Thus, the fiscal expansion fuelled a price-wage spiral, in spite of the warnings of the Bundesbank against the overheating of the economy.

Wage moderation was eventually restored from 1994 onwards (see Figure 4.5). The tightening of monetary policy and the effects it had for unemployment and the coordinated influence of employers in the exporting sectors (Gesamtmetall) were paramount for this development, given that collective bargaining remained conflictual until 1996. The fact that the government, under the burden of soaring numbers of benefit claimants and the tight monetary policy, had no choice but to increase the contributions of employers and employees, thus putting further pressure on take-home pay did not help ease the tension. Still, wage moderation persisted and even became more pronounced from 1994 onwards, even though non-wage labour costs kept increasing, thus putting pressure on consumption wages, whereas calls for and the actual curtailment of labour market protection policies emerged.

The German government introduced a number of reforms that aimed at increasing active labour force participation, particularly for rather disadvantaged labour force groups, along the lines of the OECD Jobs Strategy recommendations (see OECD 1999b for the recommendations). These measures concerned the generosity, eligibility criteria and administration of non-employment benefits and aspects of employment protection legislation. Thus, in the mid- to late-1990s, there were changes in the unemployment insurance benefits in order to reduce their financial costs. Their administration was tightened in order to ensure that adequate levels of job-search effort by the benefit recipients. More specifically, the conditions under which benefit recipients could turn down job offers became more stringent with regards to the definition of the 'acceptable' wage and the qualifications of the job-seeker as reasons for refusal. The minimum age at which unemployment benefits could be received was raised by three years (see OECD 1998, 131-3 for details). Moreover, the replacement ratio of the sickness benefit was reduced from 100 to 80 per cent prompting the IG Metall to organise one of the largest protests in the postwar period (Mares 2006, 172). Lastly, the eligibility criteria of invalidity pensions were tightened during that period.

On the employment protection legislation front, the dismissal laws were somewhat relaxed, as the exemption from general dismissal law was widened and the social criteria for dismissals relaxed. The use of fixed-term contracts became more flexible as the renewal period and admissible frequency of renewals for these contracts were increased, whereas the scope for secondments was extended.

Further, more flexible work (i.e. part-time) arrangements were introduced for the public sector, as well as subsidies for the part-time (private sector) employment of elderly workers. In an attempt to reduce the financing costs of social benefits, the government also changed the legislation so that the redundancy payments paid by firms began to be credited against the unemployment benefits to be received. There were also some spending cuts in the pension and health funds as well as in the Federal Employment Office (running the unemployment insurance scheme). (OECD 1998, 132). Given that these changes were concentrated at the margin, whereas not even all of them increased flexibility in the labour market (e.g. subsidies to part-time work of elderly), it would be rather far-fetched to claim that they largely accounted for the consolidation of the downward shift in wage-setting curve from 1996 onwards (see Figure 4.5).

Table 6.1 below suggests that it is not the case that the Dutch reform effort was stronger than that of Germany. This table presents measures of the extent to which the country-specific recommendations issued by the OECD Jobs Strategy were followed between 1994 and 1999 (the information used was found in OECD 1999b)<sup>29</sup>. These 'follow-through' indicators are weighted sums of the degree of implementation of individual policy recommendations (weights provided by the OECD) and have been normalised for the number of recommendations received (cf. Brandt et al. 2005). The figures suggest that the German reform effort was in no way smaller than that of the Netherlands in the areas of non-employment benefits and employment protection legislation, i.e. the policies that according to the

-

<sup>&</sup>lt;sup>29</sup> The OECD provides for each country qualitative indications of the extent to which its recommendations in each policy area were followed completely, partly, not at all or whether policy reforms moved in the opposite direction, along with indicators of the relative importance of each policy area and domain. The extent of implementation was coded with 100, 50, 0 and –50 for each of the aforementioned four cases of action, while the sums of these scores were weighed with the relative importance of each measure. The overall scores for each country were also normalised to account for the share of possible recommendations that the OECD gave to a country. The implicit assumption was that the OECD Jobs Strategy promoted a model of deregulated labour markets and for that, the heavier the regulation of a country by the early 1990s, the more recommendations it would have received. The 'N/a' indicators suggest that no recommendations were handed, i.e. that the particular policies were deemed sufficiently market/employment friendly.

accounts above have been responsible for high non-wage labour costs. Schettkat (2003, 778 and 781) also suggests that the generosity of non-employment benefits in the two countries was not that different by the end of the 1990s. As regards, employment protection legislation, the German legislation was looser than the Dutch in the regular contracts, which is the majority, while the Dutch was looser in atypical/flexible contracts, in spite of the fact that Germany appears to have taken more deregulatory measures in that respect.

Table 6.1 Reform Effort (OECD Jobs Strategy) in the Netherlands and Germany, 1994-1999

	NL	DEU
Non-employment benefits	50	700
Reduce Level &Duration	-100	100
Tighten Eligibility and Work	150	400
Availability Conditions		
Reduce Generosity of Early	100	100
Retirement & Invalidity Benefits		
EPL & Working Time	350	400
Loosen General Stance	50	50
Loosen Restrictions on Regular	50	100
Contracts		
Loosen Restrictions on Temp	200	100
Contracts		
Render Working Time and Part-	N/a	100
time regulations more flexible		
Tax Wedge	100	0
Reduction in Tax Wedge	N/a	0
Targeted Tax Wedge Reduction in	100	0
low incomes		
Active Labour Market Policies	150	0
Public Employment Services	150	50
Offices		
Increase Targeting of Activation	N/a	-50
Programmes		
Wage Formation	150	-100
Decentralisation	N/a	-50
Increase Relative Wage Flexibility	100	-50
Minimum Wages	-50	N/a

<sup>&</sup>lt;sup>1</sup>The above figures represent 'follow-through' rates of the recommendations made in the context of the OECD Jobs Strategy to each country and cover the period 1994-1999. These indicators are calculated on the basis of data and relative weights for each policy area provided by the OECD (1999b).

All in all, the German government undertook labour market reforms that aimed at reducing the costs of labour market protection policies and increasing the active labour force participation especially of groups at the fringes of working age population, i.e. young and elder workers. Although as suggested above, a multitude

of measures were taken, some of which (most notably the reduction in the sickness benefit replacement ratio) caused strong protests, hardly any of these measures can be thought of as having radically changed the generosity of labour market protection policies in Germany. Moreover, the fact that moderate wage bargaining outcomes re-emerged thanks to the coordinated pressure of employers in the negotiations and even before these reforms culminated casts doubt on whether these reforms and the way in which they reduced the insulation of unions and their members from the consequences of their wage-setting behaviour can be credited with the moderate wage-setting behaviour from 1994 onwards. After all, the German trade unions had been champions of wage moderation from the 1980s already without these reforms and without even having been in an as weakened position as that of their Dutch counterparts in 1982.

The reason why in the early 1990s the German unions became especially militant was the fact that they were unwilling to shoulder any more of the non-wage labour costs of financing non-employment benefits, especially as they considered that these costs, enlarged by the unification, were inequitably distributed at the expense of labour (Carlin and Soskice 1997; Mares 2006). That these costs had been growing out of proportion, even before the unification, was the outcome of the strategy of limiting labour supply and encouraging labour market exit as a means of supporting competitiveness improvements in the exporting manufacturing firms (Manow and Seils 2001). In that sense, the German economy, the unification shock notwithstanding, faced a problem similar in nature and inflated by the circumstances to the Netherlands in the early 1990s. The reforms in the German labour market policies as mentioned above moved in a similar direction to those of the Netherlands. The next section will examine whether the demand conditions under which these reforms took place were conducive to their success.

# 6.4 Aggregate Demand Conditions and the Effectiveness of Wage Moderation and Labour Market Reforms in Combating Unemployment

The aim of this section is to illustrate whether and if so, why aggregate demand conditions supported the effectiveness of moderate bargaining outcomes and labour market reforms in combating unemployment in Germany in the 1980s and the 1990s. As stated in section 6.3, labour market reforms were undertaken during that period in order to help the government balance its budget and subsequently reduce the burden of taxation on households and firms (Manow and Seils 2001, 277). The means through which these reforms were supposed to achieve this was by increasing the incentives for active labour force participation rather than subsidised exit. If these reforms had been successful, then they would have helped increase household income and consumption, while also reducing labour costs for firms, which, other things being equal, should have helped the competitiveness of German exports. To the extent that moderate bargaining wage outcomes were also geared towards supporting the German competitiveness, these reforms, if successful, would have also helped wage moderation in its goals.

It will be shown that demand conditions were barely favourable for these purposes in the 1980s but not at all so in the 1990s. In the 1980s, the combination of moderate bargaining outcomes and strong international boom allowed German exports to boost aggregate demand in the economy and lead output growth in spite of the subdued domestic and especially private consumption demand. In a context of moderate unemployment rates, this boost helped the consolidation of public finances that the German government pursued since the early 1980s and generated some conditions that could have possibly permitted lowering the increasing burden of benefits systems on labour costs.

However, in the 1990s, the unification and the circumstances under which it took place generated a massive supply-side shock for the German economy and generated immense pressure on the benefits systems. The conservative policy of the Bundesbank and the position of Germany, as the main trading partner whose monetary policy set the pace for wage/price developments within the future Euroarea in the run-up to EMU generated dismal demand conditions that did not support neither the moderate bargaining outcomes after 1995 nor the labour market reforms that the government took from 1994 till 1999 to achieve their goals of combating unemployment.

Very similarly to the Netherlands, aggregate demand was weak in Germany in the early 1980s as a result of monetary and fiscal tightening and the internationally unfavourable macroeconomic conditions that prevailed at the time. Demand in Germany only started recovering modestly from 1983 onwards, following the gradual loosening of monetary policy from the summer 1982 and eventually the international boom. By that time the unemployment rate had peaked at a postwar high just above 6 per cent, before it started declining again in 1985.

Weak private consumption growth, following strong wage moderation and increasing unemployment, and depressed construction investment were the factors behind this initial weakness (OECD 1986, 27). The public spending cuts took their toll on the non-wage income of households with lower social benefits and a strong fiscal drag, thus contributing to their weak spending pattern. Private consumption remained subdued till the late 1980s. Higher consumer prices towards the late 1980s contributed to that, while the saving ratio also increased. According to the OECD, the persistently high level of household saving during that period may have been related to the continuing shifts of income distribution towards non-wage incomes (OECD 1989, 18).

The export performance of the German economy was a main driver in the recovery of macroeconomic conditions until the late 1980s. Price/wage developments, the specialisation of German exporting sectors in diversified high quality production but also the very strong international boom from the mid-1980s onwards were the determinants of strong exports demand and the reason why some of the unemployment losses of the early 1980s were reverted (Carlin and Soskice 1997; Manow and Seils 2001; Mares 2006). By 1990, Germany had one of the lowest unemployment rates in the EU at 6.2 percent.

As mentioned in the previous section, in the context of its fiscal consolidation endeavours, the Kohl governments of the 1980s also undertook some reforms of the non-employment benefits systems from 1983 onwards. The aim was to halt the growth rate of social security contributions of workers and employers. To that end and apart from cutting down on the generosity of benefits, the Kohl

administrations also took measures that should have increased the incentives of benefits recipients to become more active in the labour market. Unlike the government budget consolidation, these attempts were not really fruitful, as between 1982 and 1989, the rate of contributions for unemployment, old-age and sickness insurance increased from 34 to 36 percent of the wage bill (Mares 2006, 161).

The government had a share of responsibility for this, as in its attempt to curtail its own financial liability under the pressure of the Bundesbank policy, it shifted some of the benefits expenses it was responsible for onto the insurance funds themselves. The resulting deficits had then to be financed by higher social security contribution rates (Manow and Seils 2001). Moreover, as mentioned in the previous section, these attempts were not consistent in that reforms aiming at reducing the incentives for labour market exit were overturned as soon as the macroeconomic conditions improved, as the government also wanted to support private sector firms, especially in the exporting sectors, to adjust to international competitive pressures. The declining evolution of employment rates of senior workers during that period suggests that the strategy of subsidised labour market exit continued (Manow and Seils 2001, 282). This also ran against the goal of eventually lightening the burden of social security contributions on labour costs. This failure did not facilitate the delivery of moderate bargaining outcomes, as the pressure on net wage growth remained strong.

In that sense, Germany right before the unification, found itself in a position very similar to that of the Netherlands with a balanced government budget, a lower unemployment rate but quite high non-wage costs per employee. The shock of the unification added an immense strain on the German economy because of both the increase in unemployment and the pressure that it generated for the non-employment benefits systems and the public finances. Although collective bargaining failed to produce moderate wage outcomes following the unification and until 1995, the return to wage moderation did not help pull the German economy out of the crisis as in the 1980s, as the export demand gains from it were not sufficient. Similarly to the Netherlands, even though labour market reforms were undertaken in several policy areas, and in line with the OECD Jobs Strategy recommendations, to

provide incentives for active labour market participation, they failed to be effective. It will be argued here that the reason for this was the poor flexibility with which aggregate demand in Germany responded to these developments. To a large extent and given the German central bank's conservatism, this poor response was due to the openness and large size of the German in the run-up to EMU.

In the run-up to the unification, the Bundesbank had expressed its views on the conditions under which the German monetary union should take place so as to not jeopardise the internal and external stability of the German Mark. These included the extension of its sole responsibility for the conduct of monetary policy to the Eastern German area, the reform of the former east German banking system to match the western German financial institutions and an exchange rate for east German to west German Marks of 2:1. While the first of these conditions was granted, the last one was compromised as the government decided to convert the Marks at a rather generous rate of c.1.8 GDR Marks to the west German Mark (OECD 1991, 74), prompting the President of the Bundesbank to resign in protest (Manow and Seils 2001, 285-6). The exclusion of the German central bank from the decision-making process regarding the conditions of unification and the uncertainty about the new financial environment, whereby it could not accurately assess the liquidity requirements of the eastern Laender and set its monetary targets appropriately, generated some uncertainty about its capacity to stick to its traditional low inflation policy (OECD 1993, 62-3), thus undermining its credibility under the new circumstances.

Concurrently, higher budget spending in the eastern Laender, at a time when the economy in west Germany was already overheating, fuelled inflationary pressures in product and labour markets, to which the Bundesbank responded with tightening its monetary policy, by raising short-term interest rates to record postwar levels (Manow and Seils 2001). Real short-term interest rates peaked in 1991, while long-term interest rates, increased also due to the increasing public debt that the public financing of the unification generated and the general uncertainty of the final cost of unification (OECD 1993). Higher interest rates led to an appreciation of the German Mark. The unwillingness of other ERM members to consent to an

exchange-rate realignment pushed short-term interest rates upwards across the mechanism members, thus deteriorating the already weak macroeconomic conditions around the EU and slowing the German export market growth.

The tighter monetary policy and generally deteriorating macroeconomic conditions put once again pressure on fiscal policy. The non-accommodating stance of the central bank along with the shock that the conditions of and economic strategy for unification caused to the eastern Laender generated massive unemployment in the area and the need for proportionate public transfers. These expenses were further exacerbated as the social insurance institutions of the East were merged with those of the West (Mares 2006, 168), while in 1990 the third-phase of the tax reform introduced in the 1980s came to force, reducing tax rates, raising some tax allowances and thereby contributing to widening the budget deficit (OECD, 1993).

It should be noted that the tax reform that the Kohl government had introduced in steps in 1986, 1988 and 1990 was matched with a general increase in subsidies (Franz 1990, 27-8). Consequently, the federal government started rolling back its expenditures in mid-1991, with the cuts totalling 2p.p. between 1989 and 1992, while energy taxes and social security contributions were raised in mid-1991 and a one-off 7.5 percent 'solidarity tax was imposed n income and corporate tax liabilities. These measures amounted to a direct fiscal contraction of 3 percent of GDP in West Germany between 1989 and 1992. The contraction effects of this highly pro-cyclical fiscal policy also took their toll on consumer and investor confidence, given concerns about its future course (OECD, 1993, 19-22).

The consumption demand of German households slowed down after 1990, due to accelerating inflation, the increase in tax rates of 1991 and the declining employment that followed from recession. Wage moderation from 1995 onwards contributed to this subdued private consumption demand. Moreover, the savings rate remained high, above its average for the period 1983-9, in spite of the slowdown in real disposable income, most likely reflecting the uncertainty about future employment and taxation but also thanks to higher real interest rates (OECD

1992, 18), all outcomes of macroeconomic policies. Savings rates remained high throughout the 1990s in Germany and they have been linked to the supply-side reforms that were promoted in the country particularly in the areas of unemployment and other social benefits (e.g. replacement rates and eligibility criteria) and employment protection legislation (e.g. firing regulations) and which promoted precautionary savings (see Giavazzi and McMahon 2006 for a version of the argument and some evidence concerning pension reforms; Carlin and Soskice 2007).

High household saving rates are also likely to have contributed the relatively low 'marketisation' of services, which can be otherwise produced within the household (Freeman and Schettkat 2001). The marketisation hypothesis has sought to explain the relatively low employment in the low-end (low productivity-low wage) services sectors in Germany, apparently the main source of its relatively dismal performance in the 1990s. Thus, while Manow and Seils (2001) have been emphasizing supply-side reasons for employment creation in these sectors which were too inadequate to absorb the declining rates of employment in manufacturing, the fact that households appear to have been saving at a higher rate suggests an at least equally important reason for this performance.

Private investment, particularly in machinery and equipment, already high in 1990 following the late-1980s international boom, was boosted even more by the unification and the fiscal stimulus that financed it, making capacity utilisation reach record heights. However, after 1991, the fiscal contraction and the lower profits in addition to the increased international price competition, investment started decelerating fast. Moreover, the uncertainty about future taxation to pay for the growing unification costs and the increasingly depressed export sales expectations, mainly due to the sluggishness of economic activity in Europe<sup>30</sup>, generated a sharp turnaround in business confidence (OECD 1998).

\_

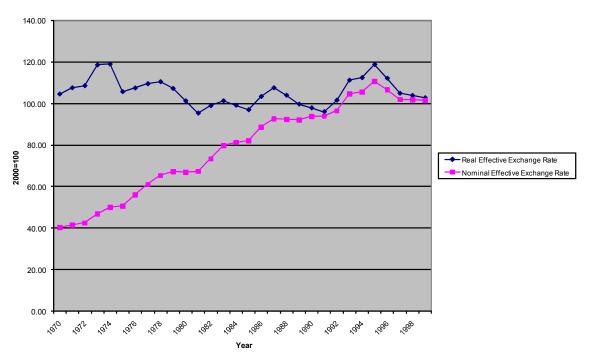
<sup>&</sup>lt;sup>30</sup> It should be noted here that the German exports have been found to be rather insensitive to relative unit labour costs and instead competing more on quality for the period 1976 to 1992 (Carlin and Soskice 1997; Carlin et al. 2001). Thus, it would be safe to assume that the stronger determinant of declining export demand was the weakness of demand in the importers of German commodities.

This account of the demand conditions in Germany in the 1990s is all but the opposite image of the conditions that prevailed in the Dutch economy during that time. Surely, the unification had a number of important consequences for the German economy, which can help explain the differentiation in unemployment performance between the Netherlands and Germany during the 1990s. First of all, the capacity of German exports to drive output growth in the economy was reduced, the supply-side shock in East Germany notwithstanding. The set up of the Maastricht criteria in 1992 put the German economy in an awkward position, as small but also larger open EU economies, and not just the Netherlands, started targeting the German wage developments as a means of reducing their inflation rates and maintaining the stability of their exchange rate in the ERM. This meant that even when moderate bargaining outcomes were restored in the German economy after 1995, a depreciation of the Mark's real effective exchange rate was more difficult to achieve than in the past.

Figure 6.1 shows the contrast in the evolution of the real and nominal effective exchange rate of the Mark vis-à-vis the currencies of EU-15. Up until 1991, relative unit labour cost developments used to mitigate any adverse nominal effective exchange rate movements to improve the competitiveness of German exports. However, from 1991 onwards, the evolution of the two exchange rates became far more similar.

In addition, the efforts for fiscal consolidation both in Germany and elsewhere in the EU suppressed demand in the area in an amplified manner. This meant that not only did German exporters find it more difficult to expand their turnover at the expense of their competitors by improving their competitiveness but also overall demand in their main trading partners was relatively subdued. The adverse demand conditions in Germany, the biggest trading partners within the EU, did not make things any easier (Soskice 2000).





Domestically, the massive increase in unemployment in Eastern Germany and the recession in which the whole country entered from 1993 increased the pressure on the unemployment insurance and pension systems and until 1996 the emphasis was on covering the deficits in their financing with increases in social security contributions. The government raised the contributions to the unemployment insurance system by 2.5 percent in 1991, whereas additional expenditures for the east amounting to 25 billion marks also had to be paid by western German contributions payers. At the same time, shortfalls in tax revenues, themselves the result of tax reforms that were designed before the unification in order to reduce the tax burden on firms and households and of the unfavourable macroeconomic conditions, generated further pressures on the government to shift its financial obligations to the insurance systems towards the contribution payers, thus, increasing non-wage labour costs (Manow and Seils 2001, 291).

Therefore, unlike what happened in the Netherlands, the German government did not have the option of cautiously stimulating demand by effectively administering tax cuts as the combination of the unification shock and the

ineffectiveness of German exports to drive output growth increased the pressure on public finances. This is also evident in the extent to which the German government failed to follow through the OECD Jobs Strategy recommendations on reducing the tax wedge, especially for low incomes, even though reducing the tax burden had been on the agenda since the early 1980s.

To sum up, demand conditions in Germany supported the effectiveness of moderate wage bargains in combating the increased unemployment rates in the 1980s but not in the 1990s following the large unification shock. The large size of the German economy in combination with the conservative policy of the Bundesbank contributed to this ineffectiveness. On the one hand, in the 1990s favourable real exchange rate adjustments became more difficult for the Mark as many aspiring EMU members started targeting the nominal exchange rate of their currency to their Mark and wage/price developments in Germany. On the other hand, any given real exchange rate adjustment was bound to be less effective in stimulating export demand in Germany because its unfavourable domestic demand conditions spilled over to its trading partners within the EU. The combination of the unification adverse shock, the ineffectiveness of export demand to play its traditional role of growth driver and the conservative policy of the Bundesbank also put pressure on fiscal policy in Germany, especially on the run-up to EMU, and did not allow much scope for any stimulus from that end. These conditions can explain why neither the restored wage moderation after 1995 nor the reforms in labour market protection policies were as effective in reducing unemployment as they had been in the Netherlands.

#### 6.5 Conclusions

This chapter has presented a case-study of Germany in the 1980s and the 1990s with two goals. First, to elaborate on the qualitative comparative analysis results of chapter 3, whereby the unemployment performance of Germany in the 1990s was more or less explained by the combination of generous labour market protection policies, coordinated collective wage bargaining, a conservative monetary policy, a hard currency and the openness of the economy to trade. Unlike other cases that the

results of QCA explained well and which in addition to these characteristics were also small in size, Germany is a large country. Therefore, its case-study also shed some light on the role of small size in addition to the other causal factors in combating unemployment. Secondly, to test the hypothesis that the effectiveness of labour market reforms that aim at increasing the flows of 'outsiders' from unemployment/inactivity to employment and reducing the non-wage costs of financing generous non-employment benefits, depends on the response of aggregate demand conditions, which in turn is more likely to be more flexible in small open economies than in large ones.

The main points that this case-study made are as follows. The German economy enjoyed moderate bargaining outcomes for most of the period in the 1980s and the 1990s and for as long as competitiveness-minded collective bargainers led wage determination with a view to internalise the credible threats of the conservative Bundesbank. Generous labour market protection policies did not 'cushion' wage-bargainers from the consequences of their bargaining outcomes to the point of inducing inflationary pressures as the competitiveness-minded bargainers that usually set the pace of wage developments for the German economy were more concerned with avoiding the adverse response of the central bank. Moderate bargains temporarily eluded the system in the immediate aftermath of the unification, as the federal government did not pursue its fiscal policy with the aim of supporting price stability.

Moreover, it was shown that the difficulty of the German economy to recover from the shock of the unification in the 1990s was compounded by the inadequate response of demand conditions. Neither moderate bargaining wage outcomes from 1995 onwards nor labour market reforms to increase the flows of 'outsiders' into employment were as effective as before (wage moderation) or as in countries such as the Netherlands in stimulating a favourable demand response. The position of Germany as a large open economy in the EU in the run up to EMU was an important factor for that. Wage moderation could no longer produce a real exchange rate depreciation as easily as it used to because other aspiring EMU members targeted the exchange rate of their currency with the Mark and the German

unit labour costs. On the other hand, the depressed demand conditions in Germany subdued demand conditions in the rest of the area, as Germany has been the main trading partner. Under these circumstances, the German government had to keep on increasing tax rates and rolling back benefits, thus squeezing further the disposable income of households and private consumption demand, while savings increased.

# CHAPTER 7. UNEMPLOYMENT, LABOUR MARKET INSTITUTIONS AND MACROECONOMIC POLICIES IN OPEN ECONOMIES: LESSONS FROM WESTERN EUROPE IN THE 1980S AND 1990S

#### 7.1 Overview

The aim of this chapter is to take stock of the empirical findings of the previous chapters and examine their implications for the hypotheses of this thesis. The qualitative comparative analysis of chapter 3 suggested that coordinated bargaining and generous labour market policies in open economies can lead to low unemployment in the medium-run if combined with either a conservative monetary policy and a stability-oriented fiscal policy or small size of the economy. In fact, both causal pathways can explain the good unemployment performance in most cases with 'regulated' labour markets. The exceptions to this were Germany and Sweden and Norway, with the former being a large open economy with a conservative monetary policy and a stability-oriented fiscal policy and the latter two being small economies with neither a conservative monetary policy nor a stabilityoriented fiscal policy for most of the 1990s. The comparative case-study of the Netherlands and Germany in chapters 5 and 6 lent further support to the QCA findings and suggested further that demand conditions in small open economies with regulated labour markets and stability-oriented macroeconomic policies can be more flexible in the face of shocks than in large open economies.

Moreover, the comparison of the Netherlands to Germany lends support to the hypothesis that moderate bargaining outcomes and labour market reforms that aim at increasing the flows of labour market 'outsiders' into employment are more likely to be effective in small and open economies than in large open ones because aggregate demand conditions are more likely to be responsive to these reforms in the former than in the latter. This is an important insight as far as such labour market reforms can enhance the moderating effect of a stability-oriented monetary policy and coordinated collective wage bargaining on wage-setting behaviour especially in cases with generous labour market protection policies (Mares 2004; 2006).

To see how the empirical evidence presented in the previous chapters informs the hypotheses of this thesis, the presentation of empirical findings will proceed backwards from the case-studies, to QCA to theory. Thus, this chapter is structured as follows. The next section will summarise the findings of the two case-studies for the two hypotheses. These insights will then be related to the results of QCA and their implications briefly examined for other cases in the population that was examined there. The last section will conclude.

# 7.2 Lessons from the Netherlands and Germany

The case-studies of the Netherlands and Germany were conducted with two aims. First, in order to illustrate how open economies with coordinated collective wage bargaining and stability-oriented macroeconomic policies can achieve low unemployment and to clarify the role of small economy size in that respect. Secondly, in order to test the hypothesis that in open economies with regulated labour markets and stability-oriented macroeconomic policies, the effectiveness of labour market reforms aiming at increasing the flows of labour market outsiders into employment is likely to be higher in cases that are small economies than in large ones, because aggregate demand is likely to respond more flexibly and favourably to reforms in the former cases than in the latter. To the extent that increasing the flows of outsiders into employment reduces the costs that generous labour market protection policies are likely to impose on the use of labour, it is also likely to enhance the effect that coordinated collective wage bargaining and stability oriented macroeconomic policies has on wage-setting behaviour and equilibrium unemployment.

The existing accounts of the success of the Netherlands in reducing its unemployment rate have been emphasising the role of wage moderation through coordinated collective wage bargaining since the early 1980s and the labour market reforms that promoted the activation of working-age population, through tighter eligibility conditions for non-employment benefits, the flexibilisation of atypical forms of employment contracts and other active labour market policies (Visser and Hemerijck 1997; Nickell and Van Ours 2000). These accounts had two

shortcomings. First, they did not explain how moderate wage outcomes were possible in the Netherlands even though labour market protection policies remained relatively generous, even after the reforms (Nickell and Van Ours 2000). Secondly, they did not adequately explain (Visser and Hemerijck 1997), if at all (Nickell and Van Ours 2000) why coordinated bargaining started delivering moderate wage/price outcomes from the early 1980s onwards, especially with reference to the macroeconomic policies context in which bargaining took place.

The failure of Germany to curb its own unemployment rate has been debited to a range of factors, from the rigidities that its labour market regulation has been generating (Siebert 1997) to the high non-wage labour costs that the combination of its labour market regime and macroeconomic policies have generated in the form of social security contributions and other labour taxes (Manow and Seils 2001; Mares 2006). Considering the case of Germany in comparison to that of the Netherlands suggests that these accounts have also had shortcomings. First, the German labour market policies and institutions have been very similar in their generosity/rigidities that are likely to induce to the Dutch ones (Schettkat 2003; Schettkat 2005). Moreover, up until 1990, the German unemployment performance was one of the best in Western Europe in the presence of these labour market policies and institutions. Secondly, labour market reforms actually took place in Germany in the 1990s with the aim of reducing the tax burden on labour and capital and increase the flows of labour market outsiders into employment. The comparison of the two cases seems to suggest that there has been a subtler story going on.

It was first of all shown that both the Netherlands and Germany have been benefiting from moderate wage bargaining outcomes and low inflation for most of the 1980s and 1990s. Low inflation pressures is a necessary condition for lowering the equilibrium rate of unemployment in open economies (Layard, Nickell and Jackman 1991). In both cases it was the combination of coordinated collective wage bargaining with stability-oriented monetary and fiscal policy and concerns about the competitiveness of the exposed sectors that induced these moderate outcomes even in the presence of generous labour market protection policies. In fact, in both Germany and the Netherlands the wage bargaining outcomes' shift

towards moderation preceded rather than followed labour market reforms that tightened the generosity of benefits and/or induced some flexibility in employment protection legislation.

In Germany, the interests of the exporting sectors were reflected in the bargaining process, thanks to the dominance of IG Metall and the Gesamtmetall in setting the pattern of wage growth for the rest of sectors. While the realignment of fiscal policy to match the stability orientation of monetary policy had already taken place in Germany in the 1970s (Scharpf 1991), it was shown how this process also took place in the Netherlands in the early 1980s. Moreover, it was shown that moderate bargaining outcome eluded the German economy in the early 1990s when, following the unification, the federal government deviated temporarily from its orientation towards maintaining price stability.

In the Netherlands, on the other hand, bargaining coordination from the early 1980s onwards was the outcome of intra-associational negotiations with the sponsoring of the State (Traxler, Blaschke and Kittel 2001). The government threatened to remove its legislative support that granted peak-level bargaining its governability and capacity to impose decisions from higher to lower levels of bargaining on two instances, in 1982 and the early 1990s when moderate wage/price bargaining outcomes were not forthcoming. In the late 1970s, the government's strategic view was that in an economy as small and open as the Netherlands, maintaining strong external competitiveness was crucial for achieving good macroeconomic performance in the medium-run (OECD 1979). In that sense, the government's goals coincided with those of the employers and unions in the exposed sectors.

Although the hard currency policy that the Dutch Central Bank pursued for most of the 1970s had stepped up the pressure on the exposed sector unions to change their strategy towards accepting moderate wage bargaining outcomes, it was only in the late 1982 that their views started dominating the peak-level bargaining in the Netherlands. At the time, the Lubbers government came to power and declared its intention to rein over its soaring deficit and debt. As the public sector employer,

it thus put pressure on the public sector unions to moderate their wage claims while a couple of years later it started taking measures to halt the growth of social benefits costs by freezing the level of benefits and eventually tightening some of their eligibility criteria. Equally importantly for signalling its intentions, the Lubbers administration also announced in early 1983 that thenceforth the Guilder would be pegged to the Mark, thus providing a nominal anchor for expectations.

In combating its high unemployment rates while trying to restore price stability in the early 1980s, the Netherlands benefited from its small size and openness. Pegging the nominal exchange rate of its currency to that of the Mark had two advantages. With Germany being the Netherlands' main trading partner, it provided wage and price setters in the Dutch exposed sectors strong incentives to target wage and price developments in Germany, as this would give them a significant competitiveness advantage. With the Netherlands being a small country, targeting German wage developments carried a low chance of retaliation from the German unions (Soskice 2000). Moreover, given the strong orientation of both wage/price-setters and macroeconomic policies in Germany towards price stability and the high competitiveness that they have been affording German exports, targeting these developments meant that the Dutch goods gained competitiveness not only vis-à-vis their German counterparts but also other trading partners. In an economy as small and open as the Dutch one, gains in competitiveness and export demand outweigh any depressing effects on private consumption demand that wage moderation may have (Soskice 2007). Thus, the small size and openness of the Dutch economy allowed it to make the most of gearing its monetary, fiscal and wage policy towards price stability.

Both Germany and the Netherlands having export competitiveness considerations and stability oriented macroeconomic policies driving their wage/price developments, benefited greatly from the strong international boom of the late 1980s. The small size and relatively higher openness of the Netherlands to trade gave it a stronger boost than Germany and allowed it to catch up in terms of unemployment. The strong stimuli that export growth afforded the Dutch economy helped its government meet its public finances consolidation targets, especially as

private consumption demand remained subdued until the late 1980s. Both countries reached 1990 riding at the back of the international boom with relatively healthy public finances (in the case of the Netherlands) and financial situation of insurance funds (in the case of Germany) and with Germany performing slightly better than the Netherlands in terms of employment and unemployment. Thus, its small size in addition to its openness helped the Dutch economy revert its soaring unemployment rates of the early 1980s while pursuing price stability. When the German economy had to recover from the aftermath of the unification in the 1990s, the same opportunity was not available.

The success of the Netherlands has also been credited to a number of labour market reforms that took place there particularly in the 1990s. From the 1980s already, the Dutch government started trying to limit the costs of non-employment benefits. These interventions sought more to rationalise the administration of the benefits than to fundamentally alter the generosity of the systems (Blanchard and Philippon 2004), as this would possibly generate social unrest and jeopardise the consensual wage-setting process that supported price stability at the minimum cost (Visser and Hemerijck 1997).

Similar attempts to reduce the costs of social benefits also took place in Germany (Manow and Seils 2001). However, the good exporting performance of both countries had relied to an extent on a strategy of encouraging exit from the labour market and into some form of subsidised early retirement for the elderly, least productive members of the manufacturing workforce so as to improve productivity and competitiveness in the face of rather strict firing regulations (Visser and Hemerijck 1997; Manow and Seils 2001). The non-accommodating monetary policy with its hard-currency component and high exposure to international trade for both countries put pressure on the competitiveness of exposed sector firms.

The Dutch governments of the early 1990s became alerted to this 'crisis of inactivity' and pushed hard to promote reforms that would address the high inactivity rates, if anything in order to rescue the generous character of benefits

systems. The aim was clearly stated, namely to increase employment and thus, broaden the tax base on which social security and other labour contributions could be drawn, while limiting the number of claimants (Visser and Hemerijck 1997). These reforms took place within benign macroeconomic conditions. The Dutch economy experienced a rather short-lived slowdown following the German slump after the unification. It was instead domestic demand that drove output growth and employment at this time.

The credibility of the peg of the Guilder to the Mark provided a firm nominal anchor for inflation expectations thanks to the close trade links between the two economies and the high openness of the Netherlands. The coordination of collective wage bargaining, where IB, the exporting/manufacturing sectors' union, dominated given its stakes to maintaining external competitiveness, contributed to maintaining unit labour cost developments which did not challenge the credibility of the peg, while keeping external competitiveness of Dutch exposed sectors strong. The relatively low real interest rates reflected to a large extent the credibility of the orientation of the Dutch monetary policy towards stability. The housing boom, which low interest rates fuelled in turn contributed to strong growth of private consumption demand.

Under these conditions, the labour market reforms, which aimed at increasing the labour force participation rates in the Dutch economy, fell onto fertile ground. The tax cuts that the governments delivered were to an important extent made possible by the fact that the taxpayers' pool thus grew, the savings in the costs of social benefits notwithstanding. These tax cuts did not only support moderate wage growth but also supported job creation in low productivity growth services sectors, i.e. sectors which are a great employment destination for women and young people, that is, the very groups which activation policies mostly targeted.

The German governments, on the other hand, saw the pressures on the country's insurance funds increase immensely given the conditions under which the eastern Laender were unified to West Germany. According to OECD data, the reform effort in Germany during the period 1994-1999 was no less intense than in

the Netherlands in the areas of non-employment benefits and employment protection legislation. Yet, the German government did not manage to administer reductions in payroll taxes that would support wage moderation and increase disposable income and demand for private consumption. This contradiction between the government's intention to reduce the level of taxation and the increases in insurance funds contributions added to the uncertainty about the costs of unification and the possibility of future benefits cuts and/or further tax increases, which in turn spurred precautionary saving (Giavazzi and McMahon 2006; Carlin and Soskice 2007).

At the same time, the return of wage moderation in Germany was no longer as effective in generating a sufficiently sizeable demand stimulus. For one, the country had increased in size after the unification with the new Laender not contributing much to its export base. For another, the central position of the Mark in the process of fulfilling the Maastricht criteria meant that cost developments in Germany were now closely followed by most EMU aspiring members, thus making a real exchange rate devaluation for the Mark harder to achieve.

Thus, the German experience in the 1990s stands in contrast to the Dutch one in the 1980s and the 1990s in two respects. First, Germany, unlike the Netherlands in the 1980s, could no longer turn moderate wage developments into a potent enough export demand stimulus due to both its size and its hegemonic position within the future EMU-area. Therefore, the net effect of wage moderation on aggregate demand was depressing, as private consumption remained subdued. Given the size of the unification shock and the tough policy of the Bundesbank (Schettkat and Sun 2008), adjustment became difficult. Secondly, under these conditions the labour market reforms that were undertaken in order to increase the flows of outsiders back into employment and reduce the costs of generous benefits on labour were not effective as employment creation suffered. In that sense, it was difficult to reduce the non-wage labour costs that generous benefits created. Consequently, active labour market programmes also suffered in Germany due to lack of public funds, further exacerbating the problem (Manow and Seils 2001). However, the underlying cause was not the generosity of these benefits but the

difficulty of pulling people out of the benefits system and into employment due to depressed demand.

To sum up, the comparative examination of Germany and the Netherlands has shown the following. First, that in open economies collective wage bargaining coordination can lead to moderate wage/price outcomes and thereby, create the conditions for lowering the equilibrium unemployment rate, when combined with stability-oriented macroeconomic policies, even in the presence of generous labour market protection policies. Under these conditions, small open economies are better equipped to deal with adverse shocks, as moderate wage outcomes can generate favourable aggregate demand movements through a real exchange rate depreciation and export demand expansion. Secondly, labour market reforms aiming at increasing the flows of labour market outsiders into employment, reducing the cost of financing them and enhancing the interactive effect of bargaining coordination and stability oriented macroeconomic policies in inducing wage moderation, are more likely to be effective in small open economies than in large open economies. Again the reason is that in the former, aggregate demand is likely to be more flexible in responding to reforms by an expansion.

## 7.3 The German and Dutch Experiences in Perspective

The aim of this section is to discuss the insights drawn from the comparison of the Netherlands and Germany with reference to other western European countries with regulated labour markets and good unemployment performance. The goal is to briefly examine to what extent they support the hypotheses of this thesis. The point is also to enrich the dialogue between the QCA method and the case-evidence (Ragin 2000; Schneider and Wagemann 2007). After all, the results of QCA provide a map for reading through the characteristics of a larger number of cases and their causal association to outcomes of interest. More detailed case-studies then help enrich the analysis further. While in this section there will not be any detailed case-studies, the brief overview of other cases for which the sufficient conditions

pointed out by the QCA results in chapter 3 seem to be relevant will help highlight aspects that should be taken into account.

The experience of Denmark in the 1980s was fairly similar to that of the Netherlands. The economy entered the 1980s in crisis with declining external competitiveness and soaring unemployment rates, inflation and public, domestic and external, debt. The Danish Krone had joined the Snake following the collapse of the Bretton Woods and subsequently the ERM. The relatively independent Danish central bank tried to defend the nominal exchange rate of the Krone vis-à-vis the basket of currencies. However, as Denmark is a small open economy, exchange rate stability came at a high cost, especially as in the 1970s wage/price developments did not support it.

Under these circumstances, the centre-right coalition government that took over in 1982 announced a new strategy that included, inter alia, the peg of the Krone to the German Mark, the elimination of all controls in capital movements, the elimination of the budget deficit and the suspension of all cost of living indexation (Iversen 1999, 140). In the context of consolidating its budget, the government also undertook some limited reforms in the generosity of non-employment benefits, which nevertheless led to public protests, especially from the public sector unions. However, the government stood firm and the Danish system of non-employment benefits is one of the most generous in western Europe with replacement ratios approaching 90% and duration that spans (even after reforms) to 5 years (Plougmann and Madsen 2005).

Meanwhile collective wage bargaining underwent a process of decentralisation in Denmark in order to ease the practice of solidaristic wage-setting. Nevertheless, care was taken to maintain collective bargaining effectively coordinated, while the exporting sector employers' associations and unions increased their power within the respective confederations. As in the Netherlands, the recovery from high unemployment rates was driven by competitiveness improvements and strong export demand in the 1980s. The strong external balance position that was built in the 1980s and maintained in the 1990s allowed the

government to undertake a cautiously expansionary fiscal policy in the 1990s after having issued a clear warning that the expansionary course would be subject to maintaining price stability (Iversen 1999). The reforms that were also undertaken in the 1990s especially in the area of tax wedges and non-employment benefits, thus, took place under relatively favourable demand conditions.

The qualitative comparative analysis results in chapter 3 suggested that the unemployment performance of Sweden is explained by the combination of generous labour market protection policies, coordinated collective bargaining, openness and small size alone and that stability-oriented macroeconomic policies did not matter in that respect. How does this square up with the insights of the case-study of the Netherlands in that respect? This seeming 'anomaly' in the case of Sweden has been due to the fact that unlike the Netherlands or Denmark for that matter, the shift of the Swedish macroeconomic policy orientation took place in the late 1980s-early 1990s.

The fact that the Swedish central bank had not built up its reputation as a policymaker that is willing to sacrifice output stabilisation for maintaining a fixed exchange rate meant resulted in a speculative attack in the early 1990s, in the wake of the ERM crisis. The Swedish Krone, hitherto pegged to the ECU, had to be floated, effectively devaluated and this incident appeared in the data that were used to calibrate the fuzzy-sets in chapter 3. Moreover, Sweden opted out of the EMU and this is why it did not change the constitution of its central bank by the late 1990s, something that also showed in the data that were used to calibrate the fuzzy-set for central bank independence in chapter 3. Therefore, the Swedish macroeconomic policies were far more stability oriented, if not conservative (in the case of monetary policy) than the data suggest.

Belgium has been classified as a case with good unemployment performance in the 1990s thanks to the rather high relative change in its unemployment rate between 1990 and 1999, for otherwise its average unemployment rate in the 1990s remained high at 8.5 percent. Like the Netherlands, Belgium is a small, very open economy that suffered high unemployment increases and deterioration of public

finances in the 1970s and early 1980s. Unlike the Netherlands, moderate bargaining outcomes have been more difficult to achieve in Belgium and have often required the intervention of the State to impose particular patterns of wage growth for the entire economy (see also Traxler, Blaschke and Kittel 2001). Thus, in spite of the high degree of harmonisation of wage bargains between higher and lower levels (i.e. Kenworthy's (2001) definition of wage coordination), this harmonisation was not 'voluntary' (cf. Traxler and Kittel 2000) and stripped the system from the possibility of more decentralised bargaining to meet sectoral or firm flexibility requirements.

The Belgian policymakers preoccupation with external competitiveness notwithstanding, there was no official peg of the Belgian Franc to the German Mark as a means of anchoring the expectations of wage bargainers and improve competitiveness. Moreover, the Belgian public finances were in a far worse state in the early 1980s than the Dutch ones and largely remained so throughout the 1990s. Thus, even though fiscal and monetary policy were both oriented towards stability, with the Belgian central bank having committed to shadow the exchange rate with the Mark in order to join the EMU, there was less scope for tax wedge reductions to stimulate domestic demand while fostering moderate wage/price developments (OECD 1995). It is an open question that a broad-brush account like this one cannot answer, however, in addition to any organisational issues that prevented collective wage bargaining from delivering moderate outcomes, one should not discount the effect of the lack of a firm external anchor to that effect, even though Belgium has had very strong trade links with both the Netherlands and Germany.

The case of Austria is interesting for the analysis offered here for a number of reasons. Austria is classified as a case with good unemployment performance in the 1990s owing more to its relatively low average unemployment rate than to the relative change in its unemployment rate. Even though its unemployment rate more than quadrupled between 1980 and 1996 from 1.4 to 5.7 percent, it remained well below the EU average. Austria managed to mute the shocks that other western European countries experienced in the 1970s and 1980s but at the same time, its adjustment was also more modest. Moderate bargaining outcomes have been a characteristic of the Austrian highly coordinated system of wage determination and

have formed part of a broader policy context, which used to be known as 'Austro-Keynesianism'.

Traditionally, this system ensured generous (passive) labour market policies, price stability and full employment, although the latter goal had to be gradually abandoned since the 1980s. Yet, public sector employment creation has continued to play an important role in the economy. In that sense, Austria has been a peculiar case in which a large part of the exposed manufacturing firms used to be nationalised and practiced labour hoarding (Hemerijck, Unger and Visser 2000).

This brief description suggests that while Austria has been complying to the picture suggested by the causal configuration that QCA pointed as sufficient conditions for good unemployment performance in the 1990s. However, as some of the elements of the traditional 'Austro-Keynesianism' have started receding since the 1980s, most notably the pursuit of full employment and the capacity of the government to use fiscal policy to manage demand, it will be interesting to see how the configuration of factors suggested here will continue supporting moderate bargaining outcomes in the future. Studying Austria further would be interesting as it tells a story that is different from that of Denmark and the Netherlands, i.e. other cases with similar characteristics, according to the analysis of chapter 3.

#### 7.4 Conclusions

The empirical accounts in chapters 3, 5, 6 and 7 have helped to sketch some picture of the conditions under which countries with regulated labour markets have been managing to reduce their unemployment rates in the 1980s and 1990s. The qualitative comparative analysis of chapter 3 suggested that good unemployment performance in the 1990s could have been the outcome of regulated labour markets in small open economies and/or regulated labour markets in open economies with conservative/stability oriented macroeconomic policies. This analysis concerned a large number of cases and for that, its insights could have only been rather generic.

The case-studies of Germany and the Netherlands in chapters 5 and 6 have further illustrated how appropriately oriented macroeconomic policies in open economies can generate moderation incentives for wage bargainers which can then be internalised through a system of coordinated collective wage bargaining to deliver moderate wage bargains even in the presence of generous labour market protection policies. These two more detailed case-studies also showed that small open economies are more likely to achieve unemployment adjustment under these conditions than large ones. Moderate wage/price outcomes, especially when achieved with the help of an external anchor located in the main trading partner of the small open economy, can lead to competitiveness gains and thus, facilitate aggregate demand stimulation. Under these conditions, reforms to reduce the burden of generous labour market protection policies on labour costs become more effective, as the goal of these reforms is typically to increase active labour force participation and employment and reduce the fiscal costs of benefits.

The brief overview of other cases whose unemployment performance in the 1990s could be explained by the qualitative comparative analysis results suggested that the broad insights afforded by the QCA and the case-studies of Germany and the Netherlands are potentially applicable to cases such as Denmark, Sweden and Belgium. Austria seems to have faced slightly different challenges or at least with a different timing. Still, its peculiarity serves to underline even more emphatically that even when configuration-oriented empirical methods are used, specifics matter for understanding the complex effects of institutions and structure on macroeconomic outcomes such as unemployment. This message also emerged forcefully from the comparison of the Netherlands and Germany.

## 8.1 Key Messages of this Thesis

This chapter briefly recapitulates the main messages of this thesis and considers their broader theoretical, policy and methodological implications. The analysis of the previous chapters has produced a number of key messages. The first message is that in open economies, the effect of labour market protection policies on wage-setting behaviour and thereby, on the equilibrium rate of unemployment, depends on the macro-institutional context within which they operate and that within a particular context, this effect is not adverse for unemployment. In open economies, generous labour market protection policies can be compatible with low unemployment in the medium-run if collective wage bargaining is coordinated, the monetary policy is conservative and fiscal policy is stability oriented. This combination of macroeconomic policies changes the trade-off between real wages and unemployment facing wage-setters. By threatening to respond with a sharp policy tightening, a conservative monetary policy makes any excessive increases in the bargained real wage more expensive.

Generous labour market protection policies need not provide sufficient insulation from this penalty. The more open an economy is, the more competition there will be in the product markets and thereby, the less cushioned firms and their employees will be from excessive cost increases. Under these conditions, strict employment protection legislation need not insulate employees from the effects of any excessive bargained wage increases and their consequences for the competitiveness of the firm. Moreover, the more credibly fiscal policy is oriented towards stability, the more likely it is that the government will put explicit or implicit pressure for moderate bargaining outcomes in order to keep its public finances on a sustainable path. This is because to the extent that excessive wage increases have fiscal externalities, especially in the presence of a conservative central bank, the government has incentives to discourage them, particularly in countries where non-employment benefit systems are generous.

Coordinated collective wage bargaining is crucial in this context. It is the channel through which the monetary policy threats and competitiveness considerations are internalised. In collective wage bargaining systems where the mode of macro-level coordination is 'state-sponsored', that is, in most western European countries with good unemployment performance (Traxler, Blaschke and Kittel 2001, 150), this is also the channel through which the government with a stability-oriented fiscal policy can exert its pressure for moderate bargaining outcomes. It can do so not only as a sponsor in the tripartite negotiation but also by threatening to remove crucial legislative support (e.g. peace clauses and the administrative extension of collective wage agreements) that provides 'governability' to bargaining. Bargaining governability is crucial for the effectiveness of 'voluntary' peak-level coordination (Traxler and Kittel 2000).

A conservative monetary policy implies that the central bank is likely to respond asymmetrically, that is, tighten its policy more when inflation accelerates than loosen it when it decelerates. Therefore, under these conditions, small open economies will find it easier to improve their labour market performance and respond to adverse shocks. In small open economies, the moderate wage/price bargaining outcomes that the system generates under the above conditions provide a positive net aggregate demand effect, as the real exchange rate depreciates and export demand increases. This outweighs the suppressed private consumption demand that wage moderation will, other things being equal, induce.

The second key message of this thesis is that, in countries with regulated labour markets, the extent to which reforms of labour market protection policies can be credited for supporting moderate wage bargaining outcomes and thereby, reducing unemployment, has depended on whether aggregate demand conditions have been favourable. Given the conservatism of the central bank and the stability orientation of fiscal policy that has been characterising countries with regulated labour markets and good unemployment performance, aggregate demand conditions that respond favourably to labour market reforms cannot be taken for granted but have rather been the prerogative of small open economies. Consequently, labour market reforms of the above type are likely to be more effective in supporting

moderate wage bargaining outcomes in their combat against unemployment, the smaller and more open an economy with the above institutional characteristics is.

Labour market reforms have been taking place in almost all western European countries, even in those with high 'labour market regulation' since the 1980s, typically to rationalise the administration and incentive structure of non-employment benefits and to render more flexible the use of atypical forms of employment, so as to increase the flows of outsiders back into employment. In countries where collective wage bargaining has been important for wage-setting, these reforms have stopped short from wholesale labour market deregulation, especially with regards to the protection and rights of the 'insiders' as generous labour market protection policies are desirable and a subject of exchange for wage moderation.

Such reforms, however, have been necessary in order to limit the financing cost of generous benefits policies. In some countries, such as the Netherlands and Germany, the combination of strict employment protection legislation for employees under 'regular' contracts and the generosity of non-employment benefits systems turned the latter into a relatively low-cost channel of disposing of the least productive employees to improve productivity and competitiveness (Hemerijck, Unger and Visser 2000; Manow and Seils 2001). The generosity of benefits, the rising number of beneficiaries and the shrinking pool of social security contributors resulted in high non-wage labour costs, which undermined both the achievement of moderate wage bargaining outcomes and their effectiveness in combating unemployment. Labour market reforms that increased the incentives of benefit recipients to take up employment would have not managed the objective of reducing the cost of benefits system and spreading it more widely over the working age population if the increased labour supply was not met with sufficient labour demand to absorb these outsiders, especially as 'outsiders' can often be less attractive to employers (Layard and Nickell 1987)

The third key message of this thesis is that the use of methods oriented to the analysis of causal configurations can usefully complement variable-oriented

analysis when it comes to studying complex phenomena such as the effect of institutions on macroeconomic performance. There are several reasons for this. First, as the analysis of this thesis has suggested there are alternative institutional/policy paths to low unemployment in advanced capitalist economies. Secondly, these pathways are complex in that they involve interactions among several causal factors. Thirdly, the applicability of these hypotheses to the group of advanced capitalist economies for a rather limited period of time restricts substantially the number of observations that can be used to account for both the complexity and equifinality of the causal pathways.

Having outlined the main messages of this thesis, the next section discusses how their implications for theory, policy and methodology.

## 8.2 Theoretical, Policy and Methodological Implications of this Thesis

#### **8.2.1** Theoretical implications

In developing the hypotheses that would answer the research questions of this thesis, I engaged with two broad strands of literature, namely the mainstream New Keynesian literature on the determinants of unemployment and the institutional political economy literature on the interactive effects of collective wage bargaining and monetary policy on the equilibrium rate of unemployment. My analysis married the insights of the latter to those of the former on the determinants of wage-setting behaviour and thereby, of the equilibrium unemployment rate, and expanded on both. This subsection discusses the implications of my findings for each of these literatures.

The first implication of my analysis for both literatures concerns the conditions under which the structure of collective wage bargaining can lead to moderate bargaining outcomes in the presence of generous labour market protection policies, such as non-employment benefits and strict employment protection legislation. My first hypothesis in chapter 2 and the empirical analysis in chapters 3, 5 and 6 have suggested that the context of macroeconomic policymaking matters for that purpose in open economies. Standard New Keynesian economics accounts investigate the effects of coordination in collective wage bargaining without

considering the context of macroeconomic policymaking that collective bargainers face. The institutional political economy literature has been arguing and showing empirically that this approach has been assuming more than it states and that instead coordinated collective wage bargainers can produce moderate wage/price outcomes when they have stakes at maintaining external competitiveness and when they are faced with a credibly conservative central bank.

My analysis has highlighted that the role of the government is also important in inducing moderate wage/price bargaining outcomes. This is an insight that both strands of literature have been overlooking (cf. Iversen 1999), even though the orientation of monetary policy towards price and output stability and the degrees of freedom that a central bank has in weighing each of these goals against the other in its monetary policymaking are determined by government choices (Iversen and Soskice 2006b).

As chapter 2 has argued and the qualitative comparative analysis and especially the case of the Netherlands has shown, in an open economy, a government whose fiscal policy is oriented towards stability has incentives to put pressure on collective wage bargainers to deliver moderate bargaining outcomes when the central bank is conservative and especially when labour market protection policies such as non-employment benefits are generous. This is because bargaining outcomes that fuel inflationary pressures involve fiscal externalities (Calmfors 1993) as they will prompt an adverse response by the conservative central bank and lead to higher unemployment in the exposed and private sectors in the economy. Standard New Keynesian accounts treat the generosity of non-employment benefits as exogenous when considering their effects on wage-setting behaviour. My analysis has suggested that this is not a sound assumption or at least that it has not been one for western European countries from the 1980s onwards.

Accounting for the role of government and its fiscal policy orientation is also an important insight for the institutional political economy literature that was used here. This is not only because the government is the public sector employer and can, therefore, exert some moderating pressure against the wage demands of public sector unions, in a similar way that private sector employers do in private sector bargains (cf. Garrett and Way 2000; Franzese Jr 2001). Unless the government supports with its fiscal policy the stability orientation of monetary policy, moderate bargaining wage outcomes are unlikely to effectively contribute to combating unemployment or at least averting employment losses (see also Schettkat 2003; 2005). If this is the case, it is then questionable whether coordinated collective wage bargainers would be sufficiently motivated to forego higher wage demands for employment gains.

My analysis has also cast doubt on the soundness of the assumption made in New Keynesian accounts that strict employment protection legislation invariably increases the bargaining power of employees vis-à-vis employers as it increases the costs of labour turnover and therefore, induces employees to bargain for higher wages, disregarding the consequences of their bids for demand and employment (Nickell, Nunziata, Ochel et al. 2002; Blanchard 2007). Taking into account the orientation of monetary policy and the exposure of an economy to international trade in a context of coordinated collective wage bargaining shows why this is not a very sound assumption. If the outcome of bargaining fuels inflation, a conservative central bank will tighten its policy, thus putting strong pressure on the profitability of private and especially exposed sector firms. Strict firing rules are unlikely to insulate bargaining employees from the consequences of any inflation-fuelling bids if the viability of the firm they are employed in is at stake. As my case-studies showed, in both the Netherlands and Germany, the legislation on regular contracts remained strict and yet, this did not seem to interfere with wage moderation.

The case-studies of this thesis have also challenged the assumption made in the New Keynesian literature that labour market reforms aiming at reducing the equilibrium rate of unemployment will be inevitably met with a flexible aggregate demand response in the medium- to long-run, because e.g. an inflation-targeting central bank will respond to the lower inflationary pressures following the reforms with a looser policy course. The underlying notion is that central banks credibly aiming at price-stability have similar preferences over output stability. The qualitative comparative analysis of chapter 3 suggested that the monetary policy

institutions in different countries with good unemployment performance varied (e.g. the UK vs. Germany), even though price-stability was an important goal for macroeconomic policy more or less everywhere. The comparison of the Netherlands to Germany suggested further that even when two countries practically share a common monetary policy, that could still have different effects on aggregate demand in each of them.

The issue of how flexibly aggregate demand responds to moderate bargaining outcomes also has implications for the institutional political economy literature that informed this thesis. To the extent that the vast majority of advanced capitalist democracies in western Europe are open economies, aggregate demand matters for determining the equilibrium rate of unemployment in the medium-run (Carlin and Soskice 1990; 2007). The contributions examining the interactive effects of monetary policy and collective wage bargaining on wage-setting behaviour and unemployment have been assuming away the issue of whether a monetary policy maker that aims at maintaining price stability gives this goal more or equal weight to output stability or not and if not, whether and to what extent countries with a conservative central bank can benefit of other channels of flexible aggregate demand response, such as export demand. As the comparative case-study of the Netherlands to Germany showed, this can be an important distinction.

My research has, therefore, suggested a more integrated way of considering the effect of labour market protection policies on wage-setting and unemployment in economies where coordinated collective wage bargaining is important (cf. Blanchard 2007). Coordinated collective wage bargaining has the potential of internalising externalities and delivering moderate wage outcomes. In the early postwar decades, moderate wage outcomes were exchanged for active demand management, full employment and the expansion of social and labour market protection policies (Cameron 1984). The fact that western European governments were no longer willing to guarantee these goals to bargaining workers and their unions does not mean that these goals stopped being important (Mares 2006). Moreover, the fact that unions have seen their power decrease in many cases does not mean that coordinating towards moderate collective bargaining does not require

any legitimation. This is why if collective wage bargaining has the institutional potential to deliver moderate wage/price outcomes, in order to understand the incentives of collective bargainers involved in it, we need to take into account the conditions that shape employment and the provision of labour market protection policies. This research has taken a first step in this direction.

# **8.2.2** Methodological implications

This thesis offers a fresh perspective on the empirical investigation of the relationship between labour market institutions and unemployment performance. The empirical literature in both economics and political economy has so far been relying on quantitative, variable-oriented analysis. Given the nature of these effects and the rather limited scope in terms of countries and time period of their applicability, variable-oriented analysis has proved to have weaknesses, most notably its incapacity to produce robust insights about the way in which institutions cause unemployment/labour market outcomes (Baker, Glyn, Howell et al. 2005). There are two main problems.

First, as this thesis has shown, the causal relation between institutions and unemployment is a complex one, i.e. the effect of each policy/institution depends on the effects of a host of others. To overcome this difficulty, one would have to use interactive terms in regression analysis. However, these interactive effects use up many degrees of freedom in a dataset with rather limited observations. This reduces the reliability of any inference (Bassanini and Duval 2006).

Secondly, as this thesis has suggested, there seem to be more than one institutional paths to low unemployment. To draw valid causal inferences from regression analysis with interactive terms, one would need to ensure that the appropriate counterfactuals are included in the sample and indeed in sufficient numbers to increase the reliability of the inference. However, when it comes to labour market policy and institutional characteristics, it seems that there is limited diversity. That is, not all logically possible configurations are actually observed

(see Iversen 2005; Iversen and Soskice 2006a for some potential explanations on why this is so when it comes to labour market policies and institutions).

Moreover, the qualitative comparative analysis approach that this thesis took to empirically investigate the conditions under which regulated labour markets can be associated with low unemployment allows for specific case knowledge to be brought into the analysis in a systematic way and thereby uncover the ways in which institutions are linked to unemployment. The results of this method, especially on sufficient conditions, provide a 'map' of navigating through the population of cases and draw systematic comparisons across a larger number of them.

The use of this method in this thesis has also made the point against 'symmetric' causality. That is, the fact that e.g. non-generous labour market protection policies seem to be associated with low unemployment does not mean that generous labour market protection policies would be associated with bad unemployment performance. This was shown in chapter 3 for the cases of Italy and France, whereby generous labour market protection policies led to bad unemployment performance because either bargaining coordination was not high enough or macroeconomic policies were not sufficiently oriented towards stability.

In short, the empirical approach used in this thesis has helped break through the complex character of association between institutions and unemployment. Taking into account institutional interactions has been a rather tricky business that runs the high risk of delivering results that either lack robustness (Baker, Glyn, Howell et al. 2005) or are biased because of omitted terms (Bassanini and Duval 2006). Yet, one of the main messages of this thesis is that the association between institutions and outcomes is far more complex than the mainstream economic primarily and the institutional political economy analyses have been admitting so far (Freeman 1998; 2005).

#### **8.2.3** Policy Implications

The policy implications of this thesis originate not only on the empirical analysis of how countries with regulated labour markets managed to achieve good unemployment performance in the 1990s but also on the findings of qualitative

comparative analysis in chapter 3 on the conditions under which some of them failed to achieve good unemployment performance. This is what is discussed in this sub-section.

The qualitative comparative analysis of chapter 3 and the case-studies of the Netherlands and Germany in chapters 5 and 6 suggested that generous labour market protection policies led to bad unemployment performance in the 1990s under three types of circumstances. In the case of a large open economy like Germany, in the aftermath of a shock as large as the unification and while other aspirant EMU members started targeting the German wage/price developments in order to meet the Maastricht inflation criteria, thereby reducing the German exporting sector's capacity to improve its competitiveness. In the case of France, when generous labour market protection policies, a conservative central bank and a stabilityoriented fiscal policy were not matched with sufficiently coordinated collective bargaining. In the case of Italy, when generous labour market policies and coordinated collective bargaining were not combined with sufficiently conservative macroeconomic policies. Three policy messages can be derived from these findings.

First, in the context of EMU, large economies with regulated labour markets, coordinated bargaining, a conservative monetary policy and a stability-oriented fiscal policy require extra provisions for aggregate demand stimuli to overcome large adverse shocks (see also Soskice 2007). The problem here is not only that the ECB's conservative and single monetary policy is unlikely to respond to any output adjustment requirements but also the fact that small EMU members are more likely to target wage and price developments in the large economies, especially if they are their main trading partners (see also Hancké and Soskice 2003). This means that any moderate wage/price developments in the large economies are unlikely to generate any boost in export demand, large enough to stimulate aggregate demand. Fiscal policy could be a source of aggregate demand stimulation. However, the restrictions of the Stability and Growth Pact and especially the asymmetry with which they treat surpluses compared to deficits may lead to a coordination failure in that respect (Allsop and Vines 1998).

Secondly, it is worth establishing clearly and credibly that macroeconomic policies are oriented towards stability in order to shape the incentives of coordinated collective wage bargainers appropriately. Thirdly, provided that there can be voluntary (as opposed to 'state-imposed') macro-level coordination of collective wage bargaining, it may be worth enhancing its capacity to effectively deliver moderate bargaining outcomes by strengthening the legislation that provides it with 'bargaining governability' (Traxler and Kittel 2000).

Moreover, the analysis of my thesis has suggested that unless aggregate demand can respond favourably, labour market reforms to increase the incentives of outsiders to take up employment opportunities are unlikely to be effective in countries with regulated labour markets, a conservative monetary policy and stability oriented fiscal policy. As mentioned above, in the context of EMU such favourable aggregate demand response will be more likely forthcoming in small open economies than in large ones. This suggests that the potential of success of the Lisbon strategy would be rather low given the current institutional set-up of fiscal and monetary policies in EMU, even if it was effectively implemented (see e.g. Mabbett and Schelkle 2007).

Last but not least, the empirical evidence of the qualitative comparative analysis in chapter 3 offered further support the already held view that a deregulated labour market is but one possible way to good unemployment performance. In fact, the findings of that chapter suggest a larger variety of causal configurations that led to good unemployment performance involving deregulated labour markets than not. This means that the relative importance of deregulated labour markets for achieving good unemployment performance may have been overestimated in the literature and that further case-specific research is required. One interesting point, however, is that of all the countries without generous labour market protection policies, Ireland was the only one that signed up for joining EMU, as it was also the only country whose institutional and structural set-up came closest to that of aspiring EMU members with regulated labour markets, namely a very small and open economy with high bargaining coordination, a conservative monetary policy and a credibly oriented towards stability fiscal policy.

#### 8.3 Limitations and avenues for further research

The aim of this section is to discuss the limitations of this thesis and suggest directions for future research thereof. Once more the discussion will be organised along theoretical and empirical issues.

In terms of theory, the arguments of this thesis have attempted to explain the experience of countries with regulated labour markets in improving their unemployment performance in the 1980s and 1990s. Although the motivation was to show that generalising over the effect of labour market policies and institutions on unemployment is not sound, this thesis has to an extent done just that for the group of countries with 'regulated' labour markets. While this bundling of cases served the purpose of pointing the alternative path to deregulated labour markets for good unemployment performance, it has been assuming away important variation. The brief review of cases to which the QCA results that supported my hypotheses seemed to be relevant illustrated this point.

For example, the empirical analysis assumed that the effects of generous employment protection legislation and unemployment benefits for wage-setting behaviour and medium-run unemployment are equivalent. Even though both policies provide labour market protection, employment protection legislation, unlike generous unemployment benefits can reduce the mobility of employees across jobs and sectors. Moreover, it seems that in countries with 'regulated' labour markets, the generosity of either of these two policies is inverse relation to the generosity of the other. My analysis has not addressed at all the issue of whether the organisation of interest representation renders collective wage bargainers able to effectively coordinate. Along the same lines, my arguments have not addressed other, subtler aspects of 'good unemployment' performance, such as what consequences it has for wage inequality and the quality of jobs.

The empirical analysis of this thesis only ran up to 1999 when the Euro was launched. This was a conscious choice. Given the central role that the central bank's signals play for shaping the incentives of coordinated collective bargainers,

keeping the analysis at the national level served to illustrate the argument. In that sense, the ways in which the arguments has to be adjusted in the EMU era is an obvious avenue for extending this research. There are two obvious questions that emerge.

First, how is the nexus of coordinated collective wage bargaining and stability oriented fiscal policy at the national level affect incentives for wage/price moderation by interacting with the ECB's conservative monetary policy? The extent to which the bargaining outcomes of a particular member-state will prompt a policy response from the ECB will vary according to, among other things, the size of its economy and thereby, the weight of its wage/price developments in the ECB's reaction function. Other things being equal, one might expect that the ECB's credible threat is more effective in moderating bargaining outcomes in large Euroarea members with coordinated bargaining than in small ones. However, if wage bargainers in large economies internalise this threat and moderate wages/prices, then it is also possible that competitiveness-minded wage/price bargainers in small Eurozone economies also moderate their behaviour. The second question then is what the implications for demand in the area would be.

The launch of the single currency and the deepening economic integration more generally, however, is not the only important change that has been affecting European economies in ways that warrant extension of the argument offered here. Most of the employment creation in western European economies has been taking place in the services sectors. This can have important implications for two reasons. On the one hand, significant and increasing parts of these industries are not covered by collective wage bargaining. On the other hand, in spite of the growing trade flows in services, the sector still remains relatively sheltered from international trade and thereby, external competitiveness considerations. Moreover, the shift of employment creation to services may mean that the definition of effective and desirable labour market protection policies may change for the labour force, as they may need to be able to be mobile across sectors over their career span. All these are issues that would alter the definition of objectives of collective wage bargainers and

thereby, the conditions under which they are willing and able to deliver moderate bargaining outcomes.

The analysis of this thesis has suggested that there are alternative institutional paths to low unemployment and as Table 1.2 in the Introduction of this thesis suggested, they seem to come with different implications for inequality and poverty, among other things. While some cases seem to fit fairly well into either path to low unemployment, others seem to be caught in-between configurations. Moreover, it appears as if labour market policies and institutions are not static. Given the diversity of institutional configurations that can be compatible with low unemployment that this thesis has suggested, an interesting question for further research would, therefore, be what determines the choice of path, especially for countries that do not seem to fit perfectly one institutional configuration or the other.

# 8.4 Some Final Thoughts

This thesis has sought to explain the experience of some western European countries in reducing their unemployment in the 1980s and the 1990s while maintaining their labour markets highly 'regulated'. It departed from the currently mainstream accounts of how labour market policies and institutions affect labour market performance by taking a more benevolent view of the role that these policies and institutions may play in shaping wage-setting behaviour, bargaining outcomes and through that affect demand and employment. In the past, the literature in political economy had claimed that the existence of generous labour market protection policies was a reason for wage-setters to moderate their wage claims (Cameron 1984). This was of course a politicised procedure.

New Keynesian macroeconomics as a response to the New Classical revolution of the 1970s has at best been ignoring the fact that politics still underlie collective wage bargaining and the conditions under which 'the battle of markups' takes place between wage- and price-setters. After all, the generosity of labour market protection policies and the priorities of macroeconomic policymaking are the outcomes of politics (Iversen and Soskice 2006b). The New Keynesian approach to

the effects of labour market policies and institutions on labour market performance has, therefore, been more appropriately characterising labour markets with thin institutional frameworks where decisions over higher wages vs. higher employment are taken in a decentralised uncoordinated manner. However, this situation characterises only a minority of cases, especially in Western Europe.

This thesis will hopefully draw attention back to the fact that, although the conditions under which full employment can be achieved and pursued and labour market protection provided have changed, fundamentally the motivations underlying the interactions between price- and wage-setters and the state and macroeconomic policymakers remain the same and should, therefore, be considered jointly.

#### REFERENCES

Allsop, C. and D. Vines (1998). "The Assessment: Macroeconomic Policy After EMU." Oxford Review of Economic Policy 14(3): 1-23.

Anxo, D. and H. Niklasson (2006). "The Swedish Model in Turbulent Times: Decline or Renaissance?" <u>International Labour Review</u> **145**(4): 339-71.

Baccaro, L. and D. Rei (2007). "Institutional Determinants of Unemployment in OECD Countries: Does the Deregulatory View Hold Water?" <u>International Organization</u> **61**(3): 527-69.

Baccaro, L. and D. Rei (forthcoming). "Institutional Determinants of Unemployment in OECD Countries: Does the Deregulatory View Hold Water?" <u>International Organization</u>.

Baccaro, L. and M. Simoni (2007). "Centralized Wage Bargaining and the Celtic Tiger Phenomenon." Industrial Relations **46**(3): 426-55.

Baker, D., A. Glyn, D. Howell and J. Schmitt (2005). Labor Market Institutions and Unemployment: A Critical Assessment of the Cross-Country Evidence. <u>Fighting Unemployment: The Limits of the Free Market Orthodoxy</u>. D. Howell, Oxford University Press.

Bassanini, A. and R. Duval (2006). Employment Patterns in OECD Countries. OECD Economics Department Working Paper No 486. Paris, OECD Publishing.

Bean, C., R., (1994). "European Unemployment: A Survey." <u>Journal of Economic Literature</u> **32**: 573-619.

Beck, N. (2001). "Time-Series Cross-Section Data: What Have We Learned in the Past Few Years?" <u>Annual Review of Political Science</u> **2001**(4): 271-93.

Belot, M. and J. Van Ours, C. (2000). Does the Recent Success of Some OECD Countries in Lowering their Unemployment Rates Lie in the Clever Design of their

Labour Market Reforms? <u>Discussion Paper No 2492</u>. London, Centre for Economic Policy Research.

Bentolila, S. and J. J. Dolado (1994). "Labour Flexibility and Wages: Lessons from Spain." <u>Economic Policy</u> **18**(1): 53-100.

Blanchard, O., J. (1999). European Unemployment: The Role of Shocks and Institutions. Cambridge MA. www.econ.mit.edu/~blanchard.

Blanchard, O., J. and L. Summers (1986). "Hysteresis and the European Unemployment Problem." NBER Macroeconomics Annual 1: 15-89.

Blanchard, O., J. and J. Wolfers (2000). "The Role of Shocks and Institutions in the Rise of European Unemployment: the Aggregate Evidence." <u>Economic Journal</u> **110**(462): C1-C33.

Blanchard, O. J. (2007). "European Unemployment: The Evolution of Facts and Ideas." <u>Economic Policy</u> **21**(45): 5-59.

Blanchard, O. J. and L. Katz (1997). "What We Know and What We Don't Know about the Natural Rate of Unemployment." <u>Journal of Economic Perspectives</u> **11**(1): 51-73.

Blanchard, O. J. and T. Philippon (2004). "The Quality of Labor Relations and Unemployment."

Blanchard, O. J. and P. Portugal (2001). "What hides behind an Unemployment Rate: Comparing Portuguese and US unemployment." <u>American Economic Review</u> **91**(1): 187-207.

Blanchflower, D. and A. Oswald (1990). "The Wage Curve." <u>Scandinavian Journal of Economics</u> **92**(215-35).

Blanchflower, D. and A. Oswald (1994). The Wage Curve, MIT Press.

Brandt, N., J.-M. Burniaux and R. Duval (2005). Assessing the OECD Jobs Strategy: Past Developments and Reforms. <u>OECD Economics Department Working Paper No. 429</u>. Paris, OECD Publishing.

Bruno, M. and J. D. Sachs (1985). <u>Economics of Worldwide Stagflation</u>. Cambridge MA, Harvard University Press.

Calmfors, L. (1982). "Employment Policies, Wage Formation and Trade Union Behavior in a Small Open Economy." <u>Scandinavian Journal of Economics</u> **8**(2): 345-73.

Calmfors, L. (1993). "Centralisation of Wage Bargaining and Macroeconomic Performance: A Survey." <u>OECD Economic Studies</u> **21**: 161-91.

Calmfors, L., A. Booth, M. Burda, M. Checchi, R. Naylor and J. Visser (2001). The Future of Collective Wage Bargaining in Europe. <u>The Role of Unions in the Twenty-First Century</u>. T. Boeri, A. Brugiavini and L. Calmfors. Oxford, Oxford University Press.

Calmfors, L. and J. Drifill (1988). "Bargaining Structure, Corporatism and Macroeconomic Performance." <u>Economic Policy</u>(April): 13-61.

Cameron, D. (1984). Social Democracy, Corporatism, Labour Quiescence, and the Representation of Economic Interest in Advanced Capitalist Society. <u>Order and Conflict in Contemporary Capitalism</u>. J. H. Goldthorpe. Oxford, Clarendon Press: 143-78.

Carlin, W., A. Glyn and J. Van Reenen (2001). "Export Performance of OECD Countries: An Empirical Examination of the Role of Cost Competitiveness." <u>Economic Journal</u> **111**(January): 128-162.

Carlin, W. and D. Soskice (1990). <u>Macroeconomics and the Wage Bargain: A Modern Approach to Employment, Inflation, and the Exchange Rate</u>. Oxford, Oxford University Press.

Carlin, W. and D. Soskice (1997). "Shocks to the System: The German Political Economy under Stress." <u>National Institute Economic Review</u> **January**.

Carlin, W. and D. Soskice (2006). <u>Macroeconomics: Imperfections, Institutions and Policies</u>. Oxford, Oxford University Press.

Carlin, W. and D. Soskice (2007). Reforms, Macroeconomic Policy and Economic Performance in Germany. mimeo. London.

CPB-Netherlands Bureau for Economic Policy Analysis (1997). <u>Challenging Neighbours: Rethinking German and Dutch Economic Institutions</u>, Springer-Verlag.

Cukierman, A. (1992). <u>Central Bank Strategy, Credibility, and Independence:</u> <u>Theory and Evidence</u>. Cambridge MA and London, England, MIT Press.

Danthine, J.-P. and J. Hunt (1994). "Wage Bargaining Structure, Employment and Economic Integration." <u>Economic Journal</u> **104**(424): 528-41.

Deelen, A., E. Jongen and S. Visser (2006). Employment Protection Legislation: Lessons from Theoretical and Empirical Studies for the Dutch Case. <u>CPB Document No 135</u>. The Hague, CPB Netherlands. <a href="http://www.cpb.nl/eng/pub/cpbreeksen/document/135/">http://www.cpb.nl/eng/pub/cpbreeksen/document/135/</a>.

Dingeldey, I. (forthcoming). "Between Workfare and Enablement-The Different Paths to Transformation in the Welfare State: A Comparative Analysis of Activating Labour Market Policies." <u>European Journal of Political Research</u>.

Dullien, S. (2003). "Is Small Really Beautiful? Explaining Different Unemployment Performances within the Euro-Zone." <u>European Political Economy Review</u> **1**(2): 126-151.

Ebbinghaus, B. and J. Visser (2000). <u>Trade Unions in Western Europe</u>. London, MacMillan.

Elmeskov, J., J. Martin, P., and S. Scarpetta (1998). "Key Lessons for Labour Market Reforms: Evidence from OECD Countries' Experiences." <u>Swedish</u> Economic Policy Review **5**: 205-252.

Epstein, J., D. Duerr, L. Kenworthy and C. Ragin (2008). Comparative Employment Performance: A Fuzzy-Set Analysis. <u>Method and Substance in Macrocomparative Analysis</u>. L. Kenworthy and A. Hicks, Palgrave MacMillan.

Esping-Andersen, G. (1990). The Three Worlds of Welfare Capitalism, Polity Press.

Esping-Andersen, G. (1999). <u>Social Foundations of Postindustrial Economies</u>, Oxford University Press.

Estevao, M. (2005). Product Market Regulation and the Effects of Wage Moderation. <u>IMF Working Paper WP/05/191</u>. Washington DC, International Monetary Fund.

Estevez-Abe, M., T. Iversen and D. Soskice (2001). Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State. <u>Varieties of Capitalism:The Institutional Foundations of Comparative Advantage</u>. P. Hall, A., and D. Soskice, Oxford University Press.

Fajertag, G. and P. Pochet, Eds. (1997). <u>Social Pacts in Europe</u>. Brussels, ETUI-OSE.

Flanagan, R. J. (1999). "Macroeconomic Performance and Collective Bargaining: An International Perspective." <u>Journal of Economic Literature</u> **37**(3): 1150-75.

Franz, W. (1990). "Fiscal Policy in the Federal Republic of Germany." <u>Empirical Economics</u> **15**: 17-54.

Franzese Jr, R. J. (1999). "Partially Independent Central Banks, Politically Responsive Governments and Inflation." <u>American Journal of Political Science</u> **43**(3): 681-706.

Franzese Jr, R. J. (2001). Institutional and Sectoral Interactions in Monetary Policy and Wage/Price Bargaining. <u>Varieties of Capitalism: The Institutional Foundations of Comparative Advantage</u>. P. Hall, A., and D. Soskice. Oxford, OUP: 104-44.

Franzese Jr, R. J. (2002). "Strategic Interactions of Monetary Policymakers and Wage/Price Bargainers: A Review with Implications for the European Common-Currency Area." <u>Empirica: Journal of Applied Economics and Economic Policy</u> **28**(4).

Franzese Jr, R. J. (2003). "Quantitative Empirical Methods and the Context-Conditionality of Classic and Modern Comparative Politics." <u>CP: Newsletter of the Comparative Politics Organized Section of the American Political Science Association</u> **14**(1): 20-24.

Franzese Jr, R. J. (2004). Strategic Interactions of the ECB, Wage Bargainers, and Governments: A Review of Theory, Evidence and Recent Experience. <u>Institutional Conflicts and Complementarities: Monetary Policy and Wage Bargaining Institutions in EMU</u>. P. Mooslechner, M. Schuerz and R. Franzese, Kluwer: 5-42.

Franzese Jr, R. J. and P. Hall, A., (2000). The Institutional Interaction of Wage-Bargaining and Monetary Policy. <u>Unions, Employers and Central Banks: Macroeconomic Coordination and Institutional Change in Social Market Economies</u>. T. Iversen, J. Pontusson and D. Soskice. Cambridge, Cambridge University Press. **173-204**.

Freeman, R. (2000). Single Peaked Vs. Diversified Capitalism: The Relation Between Economic Institutions and Outcomes. NBER Working Paper No.7556.

Freeman, R., B. (1998). "War of the Models: Which Labour Market Institutions for the 21st Century?" <u>Labour Economics</u> **5**: 1-24.

Freeman, R., B. (2005). Labour Market Institutions without Blinders: The Debate over Flexibility and Labour Market Performance. <u>NBER Working Paper No 11286</u>. Cambridge MA, National Bureau of Economic Research.

Freeman, R. B. and R. Schettkat (2001). "Marketization of Production and the US-Europe Employment Gap." Oxford Bulletin of Economics and Statistics **63**(s1): 647-70.

Garrett, G. and C. Way (2000). Public-Sector Unions, Corporatism, and Wage Determination. <u>Unions</u>, <u>Employers and Central Banks</u>: Macroeconomic

<u>Coordination and Institutional Change in Social Market Economies</u>. T. Iversen, J. Pontusson and D. Soskice, Cambridge University Press: 267-91.

Giavazzi, F. and M. McMahon (2006). Waiting for Reforms that Never Come: Saving and Work in Germany. <u>Mimeo</u>. LSE.

Greene, W. H. (1997). Econometric Analysis.

Hall, P., A., and R. Franzese, Jr (1998). "Mixed Signals: Central Bank Independence, Coordinated Wage Bargaining and European Monetary Union." <u>International Organization</u> **52**(3): 505-35.

Hall, P. A. (1994). "Central Bank Independence and Coordinated Wage Bargaining: Their Interaction in Germany and Europe." <u>German Politics and Society</u>: 1-23.

Hallerberg, M., R. Strauch and J. von Hagen (2001). The Use and Effectiveness of Budgetary Rules and Norms in EU Member States. <u>Report Prepared for the Dutch Ministry of Finance Bonn</u>, ZEI.

Hancké, B. and D. Soskice (2003). Wage-Setting, Fiscal Policy and Political Exchange in EMU. Report for Project 2000-203-1 'Institutionen, Wirtschaftswachstum und Beschaeftigung in der EWU', Hans-Boeckler-Stiftung.

Hancké, R. (1996). Labour Unions, Business Co-ordination and Economic Adjustment in Western Europe, 1980-90. <u>WZB Discussion Paper 96-309</u>. Berlin, Wisseschaftszentrum fuer Sozialforschung.

Hancké, R. and M. Rhodes (2005). "EMU and Labour Market Institutions in Europe: The Rise and Fall of Social Pacts." Work and Occupations **32**(2): 196-228.

Hartog, J. (1999). The Netherlands: So What's So Special about the Dutch Model? Employment and Training Papers No.54. Geneva, International Labour Organisation (ILO).

Hassel, A. (2003). "The Politics of Social Pacts." <u>British Journal of Industrial</u> Relations **41**(4): 707-26.

Hassel, A. and B. Ebbinghaus (2001). From Means to Ends: Linking Wage Moderation and Social Policy Reform. <u>Social Pacts in Europe-New Dynamics</u>. G. Fajertag and P. Pochet. Brussels, ETUI-OSE. **2:** 61-84.

Headey, B. W. (1970). "Trade Unions and National Wages Policies." <u>Journal of Politics</u> **32**: 407-39.

Hein, E. and A. Truger (2005). "What Ever Happened to Germany? Is the Decline of the Former European Key Currency Country Caused by Structural Sclerosis or Macroeconomic Mismanagement?" <u>International Review of Applied Economics</u> **19**(1): 3-28.

Hemerijck, A., B. Unger and J. Visser (2000). How Small Countries Negotiate Change: Twenty-Five Years of Policy Adjustment in Austria, the Netherlands and Belgium. Welfare and Work in the Open Economy. F. W. Scharpf and V. A. Schmid, Oxford University Press. II: 175-263.

Hunt, J. (1994). Firing Costs, Employment Fluctuations and Average Employment: An Examination of Germany. <u>NBER Working Paper No 4825</u>. Cambridge MA, National Bureau for Economic Research.

IMF (2003). Unemployment and Labor Market Institutions: Why Reforms Pay Off. World Economic Outlook. IMF. Washington DC, International Monetary Fund.

Iversen, T. (1999). <u>Contested Economic Institutions: The Politics of Macroeconomics and Wage Bargaining in Advanced Democracies</u>, Cambridge University Press.

Iversen, T. (2005). <u>Capitalism, Democracy and Welfare</u>, Cambridge University Press

Iversen, T. and D. Soskice (2006a). "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Distribute More than Others." <u>American</u> Political Science Reviw **100**(2).

Iversen, T. and D. Soskice (2006b). "New Macroeconomics and Political Science." <u>Annual Review of Political Science</u> **9**: 425-53.

Jacobi, O., B. Keller and W. Mueller-Jentsch (1998). Germany: Facing New Challenges. <u>Changing Industrial Relations in Europe</u>. A. Ferner and R. Hyman, Blackwell.

Kennedy, P. (2003). A Guide to Econometrics, Blackwell Publishing.

Kenworthy, L. (2001). "Wage-Setting Measures: A Survey and Assessment." World Politics **54**: 57-98.

Kenworthy, L. and A. Hicks (forthcoming). <u>Method and Substance in</u> Macrocomparative Analysis.

Lange, P. and G. Garrett (1985). "The Politics of Growth: Strategic Interaction and Economic Performance in the Advanced Industrial Democracies, 1974-1980." <u>Journal of Politics</u> **47**(3): 792-827.

Layard, R. and S. J. Nickell (1987). The Labour Market. <u>The Performance of the British Economy</u>. R. Dornbusch and R. Layard. Oxford, Clarendon Press.

Layard, R., S. J. Nickell and R. Jackman (1991). <u>Unemployment: Macroeconomic Performance and the Labour Market</u>, Oxford University Press.

Lehmbruch, G. and P. C. Schmitter, Eds. (1982). <u>Patterns of Corporatist Policy-Making</u>. SAGE Modern Politics Series Volume 7. London, SAGE.

Lieberson, S. (2004). "Comments on the Use and Utility of QCA." <u>Qualitative Methods</u>: <u>Newsletter of the American Political Science Association Organized Section on Qualitative Methods</u> **2**(2): 13-14.

Lindbeck, A. and D. Snower, J., (1988). <u>The Insiders-Outsiders Theory of Unemployment</u>. Cambridge MA, MIT Press.

Mabbett, D. and W. Schelkle (2007). "Bringing Macroeconomics Back Into the Political Economy of Reform: the Lisbon Agenda and the 'Fiscal Philosophy' of EMU." Journal of Common Market Studies **45**(1): 81-103.

Manow, P. and E. Seils (2001). Adjusting Badly: The German Welfare State, Structural Change and the Open Economy. <u>Welfare and Work in the Open Economy: Diverse Responses to Common Challenges</u>. F. W. Scharpf and V. A. Schmidt, Oxford University Press. **Vol.II**.

Mares, I. (2004). "Wage Bargaining in the Presence of Social Services and Transfers." World Politics **57**(October): 99-142.

Mares, I. (2006). <u>Taxation, Wage Bargaining and Unemployment</u>, Cambridge University Press.

Marx, A. (2005). Towards More Robust Model Specification in QCA: Results from a Methodological Experiment. <u>COMPASSS-Working Paper</u>. Antwerp, Belgium.

Morgan, S. L. and C. Winship (2007). <u>Counterfactuals and Causal Inference:</u> Methods and Principles for Social Research, Cambridge University Press.

Mortensen, D. and C. Pissarides (1999). New Developments in Models of Search in the Labor Market. <u>Handbook of Labor Economics</u>. O. Ashenfelter and D. Card. Amsterdam, North Holland.

Nickell, S., J.,, L. Nunziata, W. Ochel and G. Quintini (2002). The Beveridge Curve, Unemployment and Wages in the OECD from the 1960s to the 1990s. Centre for Economic Performance-Labour Markets Programme. London.

Nickell, S. J. and R. Layard (1999). Labour Market Institutions and Economic Performance. London, Centre for Economic Performance.

Nickell, S. J. and L. Nunziata (2002). Unemployment in the OECD since the 1960s. What do we know? <u>Unemployment Conference</u>. Paper presented at the Unemployment Conference on 27-28 May at the London School of Economics. London.

Nickell, S. J. and J. Van Ours (2000). "The Netherlands and the United Kingdom: a European unemployment miracle?" <u>Economic Policy</u>: 135-80.

OECD (1979). Economic Surveys: The Netherlands. Paris.

OECD (1986). Economic Surveys: the Netherlands. Paris.

OECD (1988). Economic Surveys: The Netherlands. Paris.

OECD (1994). The OECD Jobs Study. Paris, Organisation for Economic Cooperation and Development.

OECD (1995). <u>Economic Surveys: Belgium</u>. Paris, Organisation for Economic Cooperation and Development.

OECD (1997). Implementing the OECD Jobs Strategy: Member Countries' Experience. Paris, OECD.

OECD (1998). <u>Economic Surveys: Germany</u>. Paris, Organisation for Economic Cooperation and Development.

OECD (1999a). Employment Outlook. Paris.

OECD (1999b). Implementing the OECD Jobs Strategy: Assessing Performance and Policy. Paris.

OECD (2006). Employment Outlook. Paris, OECD Publishing.

OECD (various years-a). Economic Surveys: Germany. Paris.

OECD (various years-b). Economic Surveys: The Netherlands. Paris.

Olson, M. (1982). The Rise and Decline of Nations, Yale University Press.

Pissarides, C. (1990). Equilibrium Unemployment Theory. Oxford, Blackwell Basil.

Pissarides, C. (2000). <u>Equilibrium Unemployment Theory</u>. Cambridge MA, MIT Press.

Pissarides, C. (2001). "Employment Protection." <u>Labour Economics</u> 8: 131-159.

Pizzorno, A. (1978). Political Exchange and Collective Identity in Industrial Conflict. <u>The Resurgence of Class Conflict in Western Europe since 1968</u>. C. Crouch and A. Pizzorno. London, Macmillan.

Plougmann, P. and P. K. Madsen (2005). Labor Market Policy, Flexibility, and Employment Performance: Denmark and Sweden in the 1990s. <u>Fighting Unemployment: The Limits of Free Market Orthodoxy</u>. D. R. Howell, Oxford University Press.

Pluemper, T., V. E. Troeger and P. Manow (2005). "Panel Data Analysis in Comparative Politics: Linking Method to Theory." <u>European Journal of Political</u> Research **44**: 327-354.

Ragin, C. (1987). <u>The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies</u>. Berkeley CA, University of California Press.

Ragin, C. (2000). Fuzzy-Set Social Science, Chicago University Press.

Rihoux, B. (2006). "Qualitative Comparative Analysis (QCA) and Related Systematic Comparative Methods: Recent Advances and Remaining Challenges for Social Science Research." <u>International Sociology</u> **21**(5): 679-706.

Salverda, W. (1999). Is there more to the Dutch miracle than a lot of part-time jobs? University of Groningen, Research Institute SOM Research Report No 99C46. Groningen.

Scharpf, F. (1984). Economic and Institutional Constraints on Full-Employment Strategies: Sweden, Austria and West Germany (1973-82). <u>Order and Conflict in Contemporary Capitalism</u>. J. H. Goldthorpe. New York, Oxford University Press: 257-90.

Scharpf, F. W. (1991). <u>Crisis and Choice in European Social Democracy</u>. Ithaca and London, Cornell University Press.

Scharpf, F. W. and V. A. Schmidt, Eds. (2000). <u>Welfare and Work in the Open Economy</u>, Oxford University Press.

Schettkat, R. (1995). The Macroperformance of the German Labor Market: A Comparison with the U.S. Labor Market. <u>Institutional Frameworks and Labor Market Performance</u>. F. Buttler, W. Franz, R. Schettkat and D. Soskice, Routledge.

Schettkat, R. (2003). "Are Institutional Rigidities at the Root of European Unemployment?" <u>Cambridge Journal of Economics</u> **27**: 771-787.

Schettkat, R. (2005). Is Labor Market Regulation at the Root of European Unemployment? The Case of Germany and the Netherlands. <u>Fighting Unemployment: The Limits of Free Market Orthodoxy</u>. D. Howell, Oxford University Press.

Schettkat, R. and R. Sun (2008). Monetary Policy and European Unemployment. <u>Typescript</u>, Department of Economics, University of Wuppertal.

Schneider, C. and C. Wagemann (2003). Improving Inference with a 'Two-step' Approach: Theory and Limited Diversity in fs/QCA. <u>EUI Working Paper SPS No 2003/7</u>. Florence.

Schneider, C. Q. and C. Wagemann (2007). Standards of Good Practice in Qualitative Comparative Analysis (QCA) and Fuzzy-Sets. <u>COMPASSS WP2007-51</u>. <a href="http://www.compasss.org/WPShort.htm">http://www.compasss.org/WPShort.htm</a>.

Siebert, H. (1997). "Labor Market Rigidities at the Root of European Unemployment." <u>Journal of Economic Perspectives</u> **11**(3): 37-54.

Soskice, D. (1990a). Reinterpreting Corporatism and Explaining Unemployment: Co-ordinated and Non-co-ordinate Market Economies. <u>Labour Relations and Economic Performance</u>. C. Dell'Aringa and R. Brunetta, Macmillan. **95**.

Soskice, D. (1990b). "Wage Determination: The Changing Role of Institutions in Advanced Industrialised Countries." Oxford Review of Economic Policy 6(4): 36-61.

Soskice, D. (1999). Divergent Production Regimes: Coordinated and Uncoordinated Market Economies in the 1980s and 1990s. <u>Continuity and Change in Contemporary Capitalism</u>. H. Kitschelt, P. Lange, G. Marks and J. D. Stephens, Cambridge University Press.

Soskice, D. (2000). Macroeconomic Analysis and the Political Economy of Unemployment. <u>Unions, Employers and Central Banks</u>. T. Iversen, J. Pontusson and D. Soskice. Cambridge, Cambridge University Press: 38-74.

Soskice, D. (2007). Macroeconomics and Varieties of Capitalism. <u>Beyond Varieties</u> of Capitalism. R. Hancké, M. Rhodes and M. Thatcher, Oxford University Press.

Soskice, D. and T. Iversen (1998). "Multiple Wage-Bargaining Systems in the Single European Currency Area." Oxford Review of Economic Policy 14(3): 110-24.

Soskice, D. and T. Iversen (2000a). "The Non-neutrality of Monetary Policy with Large Price or Wage Setters." Quarterly Journal of Economics **115**(1): 265-84.

Soskice, D. and T. Iversen (2000b). "The Nonneutrality of Monetary Policy with Large Price or Wage Setters." Quarterly Journal of Economics: 265-284.

Stigter, A. I. (1997). Dutch Experiences in Reforming Social Insurance and Implementing Active Labour Market Policy in 1987-1995. <u>Applied Labour Economics Research Team Research Memorandum 1997-22</u>. Amsterdam, Vrije Universiteit.

Streeck, W. (1994). Pay Restraint without Incomes Policies: Institutionalised Monetarism and Industrial Unionism in Germany. <u>The Return of Incomes Policy</u>. R. Dore, R. Boyer and Z. Marn. London, Pinter: 118-40.

Traxler, F., S. Blaschke and B. Kittel (2001). <u>National Labour Relations in Internationalized Markets: A Comparative Study of Institutions, Change and Performance</u>. New York, Oxford University Press.

Traxler, F. and B. Kittel (2000). "The Bargaining System and Performance: A Comparison of 18 Countries." <u>Comparative Political Studies</u> **33**(9): 1154-90.

Velasco, A. and V. Guzzo (1999). " The case for a populist central banker." <u>European Economic Review</u> **43**(1317-44).

Visser, J. (1998). The Netherlands: The Return of Responsive Corporatism. <u>Changing Industrial Relations in Europe</u>. A. Ferner and R. Hyman, Blackwell Publishers Ltd.

Visser, J. (2000a). The First Part-Time Economy in the World: Does it Work? <u>Amsterdam Institute for Advanced Labour Studies WP 00-01</u>. Amsterdam, AIAS, University of Amsterdam.

Visser, J. (2000b). The First Part-time Economy in the World: Does it Work? Working Paper 00-01. Amsterdam, Amsterdam Institute for Advanced Labour Studies-University of Amsterdam.

Visser, J. and A. Hemerijck (1997). 'A Dutch Miracle': Job Growth, Welfare Reform and Corporatism in the Netherlands. Amsterdam, Amsterdam University Press.

Wagemann, C. and C. Q. Schneider (2007). Standards of Good Practice in Qualitative Comparative Analysis (QCA) and Fuzzy-Sets. mimeo <a href="http://www.compasss.org/WagemannSchneider2007.pdf">http://www.compasss.org/WagemannSchneider2007.pdf</a>.