

**Economic Stagnation and Labour Market
Segmentation in the North Atlantic Coast of
Colombia: 1900 - 1930**

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' No hay peor ciego que el que no quiere ver '

Anónimo

ABSTRACT

The purpose of this thesis is to gain insight into the problem of economic development in general and of Latin America in particular. Its main inquiry is to attempt an explanation of the process of regional economic development based on historical fact. That is, how does one reconcile economic stagnation with the presence of a high wage economy.

A chronological sequence of primary and secondary quotes tailors the theme, as major evidence for our argument. We do not wish to centre it on the wage variable. However, as the usual assumption exists about the lack of information on wages, economic evidence of wage differentiation is presented in an effort to disprove such an assumption. For this reason, a misunderstanding of the role of wages in economic decline over other alternative or complementary explanations, may emerge.

This thesis makes allowances for the exploration of several different ways in which imperfections in the labour market influenced wage levels in the NAC region. Nevertheless, it is not about alternate or complementary explanations. Neither is it about explaining why there was insufficient interregional migration within Colombia.

We mention these viewpoints, of course. Likewise, we understand that other aspects would enable the reader to better assess the role of wages. Aspects such as data on the progress of the particular sectors under consideration --particularly on demand, rates of growth, etc. But because they are such vast themes, they become more (and are) material for further research. Therefore, they are matters that lie well beyond the scope of this thesis.

In sum, this thesis suggests that labour market imperfection be at the centre of an economic explanation. Its argument is that imperfections in factor mobility --between the NAC region and other parts of the country, and internationally--

meant employers faced a labour shortage in the NAC region. The large-scale corporate unit of the banana sector was able to meet the resulting high wages. Since it was a large employer, it set wages for the rest of the region. Other employers were not, in the end, able to operate profitably at this wage level.

We wrote this thesis to counteract those who overindulged --and continue to do so-- in the explanation of national economic development in Colombia. It therefore seeks to counterbalance the excessive emphasis placed on coffee, in the literature on the economic development and economic history of the nation.

This had been studied upon the basis of a particular interior region's successful commodity --and sheer negligence-- of the particular element of regional diversity. The present research and analysis of economic facts show a completely different economic scenario.

The thesis attempts to deal with the former by theoretically suggesting an orthodox approach. But there is also an effort to assail the latter by showing the historical economic facts in straightforward manner, that highlight the existence of a high wage economy in the region under scrutiny. This represents an economic historical fact that was never mentioned in the discourse of analysis of economic development in Colombia.

The content of this work seeks to treat the general view of the process of economic development in the NAC region of Colombia, with as much contempt, as the failure to research it adequately, has produced in us.

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INTRODUCTION

This thesis is a study in economic development and history of a region in Latin America, namely the North Atlantic Coast¹ of Colombia. It is based on primary and secondary evidence, qualitative as well as quantitative.

Chapter I is designed to discuss a theoretical framework of imperfections. We suggest it may provide some reasonable basis to understand what actually happened during the economic development of the NAC region. But because of the relevance of regional diversity in Colombia, it is a framework that strongly features the regional.

The chapter discusses the influence a region's successful coffee economy had on contemporary literature on Colombian economic development and history. It represents an attempt to relate the lack of research in the economic history of the NAC region, with some significant frameworks that have emerged. We point out these benefitted from more abundant research in the economic history of the interior of Colombia and its coffee economy.

The chapter equally discusses ideas such as 'growth pole' and 'staple growth'. But the discussions also link with the notion of 'structural rigidity'. The use of the concept of segmentation --as a complementary or alternate theoretical tool-- reflects this.

It may in fact prove difficult to document it --whether in narrow or broad sense-- and its effects, in a way that is clearly convincing to everyone. But in line with true, unprejudiced, academic tradition --worldwide-- it should not prove a necessary and sufficient reason to feel threatened by it. In fact, we face it head on and benefit from it the best we can. Which is why we suggest it has practical usefulness in unravelling the complexity of the history of regional economic development.

In **Chapter II** attention is turned to several matters. It begins by briefly describing the economic historical setting for regional economic development in Colombia. The purpose here is to introduce the relevance of the selection of the period. We then provide some economic historical evidence, on the prevailing level of wages in pre turn of the century Colombia.

Chapter III provides information on the banana sector of the NAC region. It highlights the importance of understanding the role of the high wage level set by its large-scale corporate unit (UFC). This was as an significant element in labour market imperfections, because it affected costs of other industries, and contributed to stagnation in the region.

In it we introduce some information on (i) the intricacy of the international monopoly that was the UFC; (ii) the nature of the labour force in the region; (iii) its size; (iii) its organization and the relevance of the strike it generated. After that, we provide information on the cultivation of bananas in the region.

Because scholars have surprisingly neglected this, one of our efforts in this thesis is to underscore the NAC region's high-wage economy. Given that historical studies on the treatment of prices in the NAC region do not exist, in **Chapter IV** we deflate the empirical series on wages to analyse their significance in real terms. This is done by comparing and contrasting the evidence between both NAC and interior regions. Interior wage levels include non-monetary components.

The revelation that NAC region wage levels were higher in real terms than the interior of the nation, should corroborate the first aspect of the paradox encountered: the operation of a high-wage economy. The second aspect -that simultaneously there was stagnated growth- is complemented by other suggestions in **Chapters VIII & IX**.

Chapter V shows the evidence gathered in this thesis for the first time, on wage differentiation in the NAC region and in the interior (albeit in sparser detail). The

chapter draws the thesis together and focuses a main focal point: wages. It chronologically delineates the development of the prevailing level of the competitive wage in the NAC region, albeit in nominal terms. It does so particularly for the coffee and the cotton industries where a segmentation strategy was not introduced.

Chapter VI discusses the number of imperfections that, finally, influenced the cost of industries (other than banana) in the region. It begins by briefly underlining the possibility that some factors may have accounted for the insufficient flows of labour to the NAC region.

Such factors for example, are information imperfections, transportation costs, difference in costs of living between regions, non-monetary components of income, incomes over yearly cycles and attitudes to risk by peasants with access to land who may become landless proletarians. The chapter stresses that these factors are important and are valuable topics for further research. Little evidence was found to fully test these important factors and undoubtedly they would require many years of unearthing of additional material.

One factor that offered some degree of evidence was that referring to cultural attitudes towards waged labour. Within this scope, the chapter notes the character of the region's labour force. It suggests that cultural attitudes equally contributed to the emergence and persistence of high agricultural wages in the region. This is manifested by the degree of elasticity of demand for income and leisure showed by the labour force.

The chapter then examines that other factors --such as market imperfections, that resulted in such labour immobility, that it left employers in the NAC region facing labour shortage. Evidence of this is presented. Projects to import foreign labour failed.

The segmentation strategy introduced by the UFC itself is presented as another

imperfection. The company as a monopsonist, segmented its internal labour force, and paid the low wages it could optimally pay. Its monopoly position meant that this wage was higher than what a competitive wage in the region would have been. We focus dispersion not in the sense that in itself, it shows segmentation, rather than the operation of the market. We utilise it as reflecting the strategy of segmentation, not subject to supply and demand. This is why we show dispersion, heterogeneity and --above all-- asymmetry of both coffee and banana wages.

Chapter VII suggests at an early stage, the link between a prevailing high level of wages --as an end result of labour market imperfection-- and economic stagnation. There were many reasons for the decline of cotton exports. But we suggest it be plausible that excessive protection in the interior --as well as high wages in the NAC region-- were impediments. After all they are not mutually exclusive. And in the final analysis, we do not have to decide here whether the credit for economic stagnation goes to wage pressure or protection. What we are really studying here are the important effects, because, as far as we know, many other things may have been going on that we are still not aware of.

The evidence for the stagnation of cotton textiles is given by the collapse of the Obregón factory. The chapters act as the 'liaison' between the idea of 'linkage' in economic development and, its antithesis --that of the notion of 'leakage', the consequence of imperfections.

We suggest that --compared to the that of the interior-- the NAC region's economic growth and development process stagnated, because of the presence of a series of imperfections. We equally suggest the result was intra and interregional wage differentiation.

Particularly, within the confines of an intraregional differentiated labour market, the high wages the banana sector could afford to pay, contributed to the pricing out of other sectors in the region --cotton textile production, being the more indicative one.

Chapter VIII & IX cover the fortunes of the cotton textile industry. They contain no conclusive evidence that would prove that cotton cultivation and cotton textile production failed. They do attempt, however, to record the evidence already present that was weakening an industry with potentially high economic linkages. They suggest cotton cultivation for export --and textile production for domestic consumption-- had a relevant potential for the region's economic development.

It is within this context therefore, that both chapters deal with the argument put forward by this thesis. Additionally, the chapters underline the reasoning intended at the beginning of this thesis. That is --with sections on the staple itself, its production and linkage aspects-- this reasoning was induced, alongside guidelines implied by the notions of 'growth pole' and 'staple growth'. We have done the best we possibly could. And therefore hope that suggestions in these two chapters complement the second aspect of the paradox we encountered: that there was stagnated growth in the NAC region.

As a final note we would like to exhort the pertinence of the scarcity of data. The major shortcomings of this thesis are the unavailability of data that could help expound important factors in interregional labour mobility.

The British Vice-Consul Bowles accurately noted in 1915, that in Colombia " statistics dealing with subjects of importance in regard to trade continue to be largely unavailable. The collection of reliable information affecting trade and the general progress of the country is, therefore, attended with great difficulty, and statements regarding these subjects are little more than express figures."² The situation is not much better today.

The source material used here consists of British --mainly Foreign Office papers-- United States --mainly Commerce Department papers-- and Colombian --mainly Ministries' Papers-- origin³.

Although quotations are illustrations, not quintessential proof, the argument is a

structure around quotations. Therefore, conclusions can only be tentative. The proof such as there can be is within the body of evidence, ideas and notions to which we refer.

Despite their ultimate usefulness, the limited quantitative findings present drawbacks. A major one was the lack of access to large amounts of primary economic data. Such was the case for non-monetary elements of income and incomes over a yearly cycle. It was equally the case for costs of living in different regions for every year of the period under study, and for transportation costs.

Another is that insufficient economic data obstructs the presentation of detailed time series and creates uncomfortable discontinuities. Another is that wages only matter, relative to productivity; and we found no data on productivity.

Yet another is that most of the wage rates have to be quoted in rather wide ranges. If it were assumed that daily wages made rates reflect daily earnings, weekly or annual estimates could be constructed. This cannot be achieved given the lack of necessary, accurate and consistent data --on both wages and employment-- in different categories of work throughout the period.

1. NAC hereinafter.

2. Bowles, H., E., Vice-Consul at Bogota," Colombia. Report for the Years 1909-1913 on the Trade of the Consular District of Bogota ", *Diplomatic and Consular Reports*, Annual Series No. 5437, (London, 1915), p.6.

3. Britain

- (i) Public Records Office: *The Records of the Foreign Office*, General Correspondence, 1900-1930, Foreign Office 371; Board of Trade Files of Dissolved Companies, 1900-1930, Board Trade 31; Board of Trade Files of Dissolved Companies Liquidator's Accounts, 1900-1930, Board Trade 34;
- (ii) *Foreign Office Diplomatic and Consular Reports*, Annual and Miscellaneous Series, 1885-1930;
- (iii) *Parliamentary Papers* - Accounts and Papers, 1874-1930;
- (iv) *Board of Trade Journal*, 1900-1930;

United States

- (i) *Daily Consular and Trade Reports*, 1900-1930;
- (ii) *Monthly Consular and Trade Reports*, 1900-1930;
- (iii) *Commerce Reports*, 1900-1930;
- (iv) *Supplements to Commerce Reports*, 1900-1930;

Colombia

- (i) *Memorias del Ministro de Industrias*, 1900-1930;
- (ii) *Boletin de Industrias*, 1900-1930;
- (iii) *Memorias del Ministro de Relaciones Exteriores*, 1900-1930.

CHAPTER I

A THEORETICAL FRAMEWORK OF IMPERFECTION FOR REGIONAL ECONOMIC DEVELOPMENT AND HISTORY

Theoretical Framework

The NAC region grew for a while but then stagnated. Our hypothesis is that this was because imperfections in labour mobility between the region and other parts of the country (and internationally) meant employers faced labour shortage in the region. High wages were the result. But they were met by the large-scale corporate unit (the UFC, the international monopoly and local monopsony) of the banana sector and set a prevailing regional level of high wages (by Colombian standards) that other employers could not pay.

Imperfections involved national and international factors which lessened labour mobility to the NAC region. Imperfections also involved the character of the labour force which made it reluctant to become fully integrated in the wage economy. They also involved the presence of monopsonistic power of the UFC to set a regional price for wages which other employers had to accept. This forced other regional economic sectors, namely cotton cultivation and textile production to pay a higher wage than the competitive wage would have been, but they were internationally competitive so they could not operate profitably and survive.

A key point in this hypothesis of imperfections however, is that there was not a unified labour market all over Colombia. Within the UFC as well there was much wage differentiation. This was a result of the policy of the company to segment its labour force and therefore bring down its own wage costs.

So, in general, the hypothesis suggests that economic stagnation was a result of imperfections in the labour market. But to understand this historical fact it must be inevitably linked with theoretical concepts. In this way, historical evidence such as wages and wage differentiation itself may be properly interpreted.

This evidence explains not just the existence of, but the contrasts between, inter and intra-regional staple industries (NAC region banana and cotton; and NAC region and interior textile industry). The question of industries on the upsurge (NAC region banana and interior textile) at the expense of the decline of another (NAC region cotton cultivation for export and cotton textile industry respectively) are thus explained by a combination of economic theory and historical evidence.

This indeed attracts model-building. However, economic history need not be written (even today) simply to please those of esoteric persuasion. Although there is certainly a need for applying tools of economic theory and quantitative techniques to the study of economic history, sometimes, as Desai experienced, "these tools do not necessarily yield any strong conclusions. They point out the need for more historical data and cannot be a substitute for them"¹.

The economic historical evidence upholding the existence of wage differentiation offered here is so straightforward that missing data when found would only serve to strengthen the argument. Therefore, no more information is needed that would warrant straight-line interpolation, extrapolation of ratios or econometric curve-fitting as there is no need to estimate missing data to carry the argument through. There is really "no room for 'algebra over arithmetic'"².

The approach here is thus not to construct a formal model but for the adoption of a '*product-mix*' of theoretical concepts which interpret economic historical fact and help understand the NAC region's economic development. These intertwined elements of analysis thereby examine: a).- the predominant structural rigidity affecting the region: the nature of the labour market; and b).- aspects of the nature of the product of sectors in the NAC region, having in mind their potential for leakage as well as for linkage. The theoretical framework evolves as a function of a variable '*product-mix*' of a variety of imperfections in the labour market with the ideas of 'growth pole' and 'staple growth' and a digressional 'structuralist' tool of analysis.

Despite the fact that the 'staple growth' notion considers the labour factor as an input as well as the contributions it can make in the establishment of industry (linkage) through say, education (training), it does not deal with the more relevant structural aspect of this factor, namely the nature of the labour market.

The labour market segmentation concept provides one of the elements of analysis in understanding why stagnation took place.

The nature of the labour market plays a crucial role because it is where the major irregularities, imperfections or disequilibrium took place in the NAC region's process of development. It allows scrutiny of a major constraint in the labour factor and what emerged was shortage of labour supply. A significant societal response also emerges: the character of the labour force and the reluctance to blend into the wage economy.

Additionally, in order to understand the full role that the high level of wages played in the NAC region's economic development process the 'growth pole' and 'staple growth' ideas are useful tools of analysis. Theoretically, they provide a complementary explanation of stagnation of raw cotton exports and the decline of the cotton textile industry. The usefulness of these ideas is in the sense that the nature of the product reveals the specific characteristic of the (primarily outwardly oriented) banana staple.

Namely, it intertwines with a major imperfection in the labour market of the NAC region which was the presence of monopsony. The banana staple was centred upon an international monopoly such as the UFC with a considerable degree of monopsony power. The level of wages and more important, the degree of segmentation the UFC introduced could only be sustained by such a base.

Comprising one of the imperfections of the labour market the consequences of segmentation may have led to economic stagnation. While this sustained level of segmentation discouraged the sector which had most potential as a linkage

industry in the region (the primarily inwardly oriented cotton staple), it relatively strengthened the most formidable capitalist institution in the region (the primarily outwardly oriented banana staple's corporate unit, the UFC) as well as the interior coffee staple's economy.

The operation of both economic and institutional factors, play a crucial part in determining patterns of labour market. In relation to the former factor, character of the labour force and shortage of labour supply; regarding the latter, the banana sector corporate unit's introduction of segmentation as a new system of control in the regional labour process.

The evidence provided below, of the existence of different wages for labourers of equal efficiency, confirmed a significant imperfection such as the segmentation of the labour market of the NAC region. The key to understanding the incidence of the labour market, is not merely substitution of monopoly for perfect competition --in a neoclassical framework for determining the equilibrium price of labour. One has to look additionally, at segmentation.

A perfect labour market in the region there was not. The particularity of the situation in the NAC region was not so much the reality of the UFC's destructuring and restructuring of the labour force. It was that in restructuring the labour market, capitalist hegemony was maintained by setting a wage level that was not down to subsistence, but considerably above average.

The NAC region's growth and development process stagnated (compared to that of the interior) due to the presence of various imperfections of which one was the presence of intra-regional segmentation. Another question would be to ask that if there was intra-regional segmentation, why did the cotton textile industry not pay a different wage from the banana industry. That is, why did segmentation run its course within the UFC and not in every sector?

One answer would be linked to the role of monopoly and monopsony. Direct

foreign investment supplemented the region's labour factor by homogenising the regional economy's scarcely endowed labour resources. However, the instrument of homogenisation -setting a high level of wages- required a strong market imperfection. This was the presence of a monopoly which eventually also consolidated its role of monopsonist, contributing as one of several imperfections to the stagnation of the regional economy in the process. The cotton textile industry had no monopsony power in its producer market.

The market suitably fitted the nature of the production function of interior coffee and NAC region banana, but not NAC region cotton. Market forces eroded the NAC region's capacity for development because it was not endowed (as the interior was) with a suitable world market technological production function such as was showed by interior coffee. If indeed it did, say, as in the case of the banana sector, it was under foreign monopoly control which impeded development by the absence of creation of economic linkages. This in turn was due to the perpetuation of the UFC's strategy of segmentation.

NAC region enterprise such as the cotton textile industry declined and a regional factor such as scarce labour was destructured in the long run by the process of foreign direct investment. Direct foreign capital formation became an impediment for the regional economy's capacity to mobilize. This was so because the former could not afford to pay such high wages as the latter and was eventually outpriced. The benefits of direct foreign investment on the NAC region's income, employment and effective demand levels, proved fictitious. The reason for this was that although a high level of wages was set and some employment was created, effective demand so generated, could not be met by the NAC region's economy.

In the final analysis, the argument may be summarised as follows:

- (a) Inter-regional limitations on labour mobility as between the interior and the NAC region.
- (b) Reluctance of the labour force to integrate with the wage economy.

(c) i.- Within the NAC region, the UFC of course paid the low wages it could optimally pay but its monopoly position in the producer market meant that this wage was higher than what a competitive wage would have been;

ii.- Its monopsony position allowed the UFC to segment its internal labour force in outwork etc. and to compel the workers to spend their wages on the UFC stores thus restricting local multipliers;

(d) The cotton industry in the NAC region could not successfully segment its labour force from seeking high wages. As a competitive industry its power on the producer market was zero and hence, its power in the local factor market (labour) was limited. Thus, it became a price taker in the labour market, not a price setter.

A complementary explanation was that there was indeed increased competition from the interior as transport links improved as well as the relative dynamism of coffee and its better resistance to the Depression compared with bananas, for the reasons discussed earlier.

National and Regional Development in Colombia

Within the discourse of the economic historiography of Colombia, scholars have thus far neglected³ the essential characteristic of regional diversity in their explanation of 'national' economic development. Indeed Colombian and other economic historians have equated the national to the regional level in the study of the nation's economic development.

This has created in the interim the anomaly of a *uniregional* view of the economic development of all regions of Colombia based on an excessive stress on the relevance of the successful results of the interior's coffee economy. We see this as a flaw that needs to be redressed and strive to place emphasis on why other regions -the NAC region in this case- were not particularly (or less) successful.

A scholar such as Nieto-Arteta⁴, has used the staple thesis, incorporating some of its concepts as an approximation to the Innis interpretation of staple product

development. He has also used structural rigidities as theoretical concepts to explain economic development in Colombia.

Here, we seek to repair the aforementioned irregularity of existent overindulgence in the explanation of national economic development in Colombia . This is attempted by using an approach which combines the notion of 'growth pole' and the 'staple thesis' with labour market imperfections.

This theoretical framework is a response to other frameworks which emerged as the result of the study of the successful commodity (coffee) of the interior region. It aspires to counter-balance their excessive emphasis on the bean's economy. A short review of these other frameworks follows. However, it is labour market segmentation theory which provides a new element that explains regional economic development.

We emphasize the importance of regional diversity and suggest a theoretical framework based on that particular aspect. Although Hirschman's⁵ theoretical framework of inter-regional imbalances and unbalanced growth is based on Colombian regionalism, what is needed is a more elaborate attempt to draw up a framework concentrating on a particular region.

Export-led growth is necessarily unbalanced growth at least over a considerable number of years and the history of economic development has been overwhelmed by such examples. But historical research in Colombian regional economic development demands a different framework.

Both ideas can be fruitfully used in our analysis of the economic development of the NAC region. These can be applied to the strong emergent differences in the country's regional economic development. One reason for this is that regional economic development suggests that regions act as compartments which witness commodity but not factor flows between themselves, following the tradition of international trade theory⁶.

Growth Pole Theory

The '*growth pole*' idea is useful for two reasons. First, because by underlining the notion of '*linkage*' in economic development, it gives full weight to its antithesis: that of a parallel co-participant inverse such as the notion of '*leakage*' in economic development (a valuable theoretical '*alter-ego*'). Second, because the notion of '*linkage*' is a major implication of the idea of '*staple growth*'. This intertwining of both ideas of '*growth pole*' and '*staple growth*' allows the first element of this thesis' theoretical framework to flow in a more balanced way. The polarity of both notions of '*linkage*' and '*leakage*' is essential in this framework. We will stress further on in my short discussion on the '*staple thesis*', that whilst the notion of '*linkage*' is a strategical element in the framework, the notion of '*leakage*' is in fact, a tactical one.

Although the essentials of the argument first surfaced with Young⁷, the recognised originator of this theoretical system is Perroux⁸ with his pioneering '*pole de croissance*' concept for the explanation of economic development. In essence, when an industrial '*centre*' starts to grow, economies of scale and proximity appear, attracting increasing numbers of new factors. The implication that economic space is defined by economic relations as a '*field of forces*' and the idea of '*imbalance*' in development suggests that economic space consists of '*centres*' or '*poles*' or '*foci*'. These are followed by aggregations around nodes which, through innovation, spread '*development*'. As dominant nodes control objects limited to them, the former connect into '*growth poles*'.

Most of the case-studies of the '*growth pole*' theory view '*development*' (sustained or in fluctuant trends) in more aggregate terms. The treatment implies Smithian Classicism (that '*development*' presupposes capital accumulation) which ends showing characteristics such as the expansion of industries, use of technology, production of linkage effects and capacity of sustained '*growth*' over periods of time that must be linked to the general equilibrium theory requiring optimal efficiency. This is to say that -by and large- case studies have to do with

the degree of efficiency certain economies showed and not so much the historical process of structural transformation.

'Growth pole' theory has been widely criticised and under constant revision. Criticisms have been that 1) it is at a hypothesis, rather than a theory; 2) it is not thoroughly explained and that it shows limited support of empirical evidence.

As a policy, in terms of job creation it accomplishes little (especially in the long-run) in relation to the extremely high capital investment. And if associated with the recent upsurge of '*linkage-producing*' industrial complexes, 'growth' dynamics might not exist because '*growth poles*' depend on industrial complexes' capacities for generating and transmitting innovations, new interdependencies and new industries.

The notion of '*growth pole*' however, implies the existence of linkage or leakage capabilities which are (at worst) a reasonably realistic testimony to conduciveness or not to sustained growth and development over periods of time. Their significance will be further expanded in my comments on the '*staple thesis*'. It is the leakage capabilities in the NAC region which are stressed in this thesis. They command an ill-given attention that the historiography of regional development in Colombia has afforded.

Staple Thesis

A more detailed survey of the staple thesis is warranted because 'growth pole' theory does not really concern itself with say, institutional and technological change but only with rapid acceleration of income and industrialization. In terms of structural change it views 'growth' more in a complementary sense.

Indeed, it seeks to understand the growth process by inquiring whether or not regional exports led to growth in each region. That is, whether they constituted an 'engine of growth' ⁹ or not for their regions. The 'vent' for surplus¹⁰ element

in Smith¹¹ suggests that export expansion is accomplished not only by diversion of domestic output away from consumption (i.e., saving) but through involvement in the production of underutilized land and labour of subsistence sectors.

With the presence of raw materials or resource-intensive commodities facing large demand in world markets, not requiring elaborate processing and having a value to weight ratio high enough to sustain transportation costs (what the term 'staple' designates) a dominating economic linkage role was bound to be played.

This idea of the '*export base*' largely present in Innis¹², who set the ground for (amongst others, Kindleberger¹³) Watkins¹⁴ '*staple thesis*' paved the way for the notion of '*staple growth*'. The idea is a useful tool of analysis not just because it describes a growth path. It also emphasizes the production function of an export sector as the explanation for the growth path of an economy. Moreover, it essentially represents an inductive and descriptive (rather than a formal mathematical) model which attempts to arrive at comprehensive conclusions from economic historical data. Staple growth indeed implies that idle or undiscovered resources are brought into use, creating returns to those resources and relating consistently with venting a surplus for trade.

The staple thesis originated with Harold Innis' trilogy on export staples of Canadian economic history¹⁵. These works reflected a basic interest in searching for and revealing the effects of staple production on the socio-economic structure. Although he "went where the facts led him" their complexity did not allow him to encounter generalizations¹⁶. Its relevance as a theory has been widely debated by a considerable number of scholars and views have ranged from believing it is in decline to the stage of reconsideration and restatement¹⁷.

A starting point in the thesis is the idea that it is applicable to the phenomenon of the '*young region*'¹⁸, a '*newly settled region*'¹⁹, or a '*new country*'²⁰ where staple exports constitute what Rostow would refer to as a '*leading sector*'²¹, Perroux, a '*pole de croissance*'²² and Zarka, a '*force motrice*'²³ of the economy setting the pace

for economic growth and development. Non-existent or limited domestic markets together with favourable factor proportions such as land abundance relative to labour and capital are expected to provide the 'new region' phenomenon with a comparative advantage in resource extensive exports or staples. This comparative advantage of staple or 'exportable commodity'²⁴ development lies in relative costs of production including transfer costs²⁵.

One determinant of the staple thesis is the character or nature of the staple which implies an emphasis on the commodity. This implies namely : 1).- the tying in of one activity with another; and 2).- the way in which a commodity sets a general pace, creates new activities and is strengthened or weakened by itself²⁶. Another determinant is the technological nature of the production function of the export commodity ²⁷. It influences potentialities for further development in newly settled regions. These constraints affect the nature of factor migration and especially income distribution within a region²⁸.

In defining the degree of substitution of factors and the nature of returns to scale at plantation crop and family farm crop level, Baldwin's technological nature of the production function (along with his assumptions of demand for goods and supply of factors) enables the staple thesis to follow up on : a).- a demand for factors; b).- a demand for intermediate inputs; c).- the possibility for further processing; and d).- the distribution of income which further stimulates economic development.

This follow-up of (Myrdal's) '*spread effects*'²⁹ determines the range of investment opportunities in domestic markets depending on the degree of diversification around the export base. Income arising from the export sector is spent on other sectors. In short, the staple thesis " classifies income flows and adopts the form of a disaggregated multiplier-accelerator mechanism"³⁰.

For staple theory, growth is tied in to the export basis success. However, the export base not only implies growth. It also means decline and change. The

decline of one staple must be accompanied by the growth of others or a region will be 'stranded'³¹. The disappearance of a light, valuable commodity such as fur, for example, in the Canadian St. Lawrence basin, was accompanied by a rise in lumber as a staple export. The economy built up in relation to fur and water transport shifted to a second product available on a large scale³²: lumber.

The major reasons for the decline of a staple suggested by the '*staple thesis*' are : a).- changes in demand outside the region; b).- exhaustion of a natural resource; c).- increasing costs of land and particularly labour relative to those of a competing region; and d).- technological innovations that change the relative composition of inputs. However, a historical reason for the growth of new exports is a major development in transport, not in merely cost-reducing improvements in transport which may reenforce dependence on existing exports.

The export base notion of staple theory implies that a region may expand as a result of increased demand for its existing staples. This can be due either to an increase in income of the market or to a change in taste. Growth will also be promoted by improvements in processing or the transfer cost position of a region's staples in relation to competing regions. Historically, in a 'young region' the creation of a new export has resulted in an export industry and other economic activities³³. Increased capital investment in the export industry will go towards achieving optimum size of enterprise, increased mechanization of the processes and further development of specialized services to the export staple.

As a region's income grows, indigenous savings will tend to 'spill over' into new kinds of activities. This movement will be reinforced by the tendency of transfer costs to be less significant. The result will be that the export bases of the regions will tend to become more diversified, ultimately losing identity as regions. As North suggests, long-run factor mobilization will emerge, a wider dispersion of production will appear and finally a more equal per capita income will be acquired³⁴.

This last point draws some attention because, while conventional growth theory (namely the Harrod-Domar model) argues that growth depends on the injection of an adequate amount of capital and a catholic belief in the reality of the propensity to save and the capital-output ratio, an attempt to move away from this view is stressed precisely in that the amount of investment depends, not only on total income, but on the distribution of income. This follows Hirschman's argument in his account of the story of development economics³⁵. However, Baldwin had earlier mentioned that there was no reason to assume saving propensities would adjust automatically³⁶. And similarly, Watkins suggested that the amount of savings may not matter greatly³⁷.

An element of strategic importance for our theoretical framework is the staple thesis' implication of the *'linkage'* idea. Recent reconsideration of it suggests that if a staple (or staples) generate linkage effects which are adequately exploited, the economy eventually grows and diversifies³⁸. Population growth arising from natural increase rather than from immigration and per capita income rising beyond an 'underdevelopment level'³⁹ give way to diversification. This operates through the Hirschmanian analysis of entrepreneurial decision-making and expansion of opportunities of domestic markets in order to pave the way for domestic production as its threshold is being approached⁴⁰.

The inducement to domestic investment which results from increased activity of the export sector in staple theory follows the traditional two-way linkage effect familiar in Hirschman's initial analysis. That is, separation into a 'backward' and a 'forward' linkage. The *'staple thesis'* contributes another one already recognized by Hirschman : the final demand linkage or 'consumption linkage'⁴¹. Nevertheless, having described the phenomenon as a 'swallowing up' of imports during export-led growth⁴², he had not characterized it initially as a linkage.

Hirschman's linkage thesis initially assumed sufficiency of entrepreneurial motivation. Development was accelerated through investment in projects and industries with strong backward and forward effects. Entrepreneurial

decision-making was not uniquely determined by 'pull' of incomes and demand, but responsive to 'linkages' which were special 'push' factors from the product side. He also presented linkages closely tied to input-output analysis. These latter presented an important differentiation from linkage effects he himself admitted⁴³. This was namely, that the former was synchronic while the latter needed time to unfold.

If there is anything clarifying and stimulating about the debate on the testing of the linkage hypothesis, it is the recognition that the more instructive use of the '*linkage*' idea is found in historically and empirically verified case studies which, if anything, would be only to the benefit of the staple theory of growth⁴⁴.

The result of this debate on the testing of the linkage hypothesis has been that a more inclusive linkage approach is emphasized within the '*staple thesis*'⁴⁵. It has also further qualified the linkage nature of staple theory. A broader definition and generalization of the linkage notion appeared. It is one which incorporates new subdivisions. One of 'inside' linkages (which imply economic operators engaged in activities and pushed to undertake additional activities) and another of 'outside' linkages (which imply new activities taken up by foreigners or by the state)⁴⁶.

The result of the debate on the testing of linkages therefore laid a more comprehensive view on the relevance of the notion of '*linkage*'. This implied further varieties and interactions of linkage effects circumscribing three basic concepts: the original or production linkage, the consumption linkage and the fiscal linkage. These are the ways in which 'one thing may lead to another'.

The connection is initiated by the original or production linkage which captures one aspect: the procurement and elaboration of the staple itself. This is followed by the mechanism by which certain industries appear by staple production, e.g., the consumption linkage. It is equally followed by the mechanism of state levied tax on the staple income stream and its channelling of proceeds into productive investment, i.e., the fiscal linkage.

For the latter linkage to be effective, the ability to tax must be combined with the ability to invest productively. The most favourable connection or 'linkage constellation' is one in which the staple is simultaneously endowed with strong production, consumption and fiscal linkages.

But, this situation is unlikely to occur because 'one kind of linkage is often [emphasis added] to be had at the expense of another'⁴⁷. Which is why the tactical element in the theoretical framework has to be the antithesis to the notion of 'linkage'. Moreover, this is why the '*staple thesis*' is open to several criticisms.

Staple theorists recognize pitfalls in the theory. First, they acknowledge that conditions such as the incorporation of scarce factors and the ability to shift resources are not typical building blocks of a theory of economic growth. In this way the theory derived from them is limited. Therefore, the '*staple thesis*' is only a theory of a special type of economic growth⁴⁸. Second, the thesis implies that a staple economy, by thriving to achieve a high level of national income, masks deficiencies in the structural balance of the economy⁴⁹.

Third, they concede that there are the dangers of falling into the '*staple trap*', e.g., that if there is not a mixture of conditions such as a favourable combination of external demand, available resources, population base and a level of per capita income which allows taking advantages of economies of scale, institutions and values, as well as the good fortune of avoiding specialization in the wrong type of staple, the staple thesis will not operate⁵⁰.

Fourth, they grant that there is an exaggerated emphasis on the character of staples and the lack of consideration for an element as important as the absence of economic opportunity⁵¹. Fifth, they comply with the view that there is a lack of consideration of any particular economic section, once the staple which created or supported it, is no longer expanding⁵². Finally, there is their acceptance that, as staples become more capital-intensive⁵³, the idea that borrowed technology and staple exports will provide a sufficient impetus to the economy will lose

credibility. Last but not least, they comply with the view that the incidence of booms is a feature of growth in staple economies⁵⁴.

In this sense, the staple thesis cannot argue that it guarantees a consistency in the level of sustained growth. In the main however, the '*staple thesis*' attempts to show how the particular choice of production functions may affect all sources of growth. These include factor supplies. But they also include other residual or unexplained differences between contributions to national income growth from increased factor supplies (which may include technological progress, education, improved management, economies of scale or more efficient resource allocation) and income growth.

The criticisms and limitations of the staple thesis stresses the need of discussion of its fundamental aspect -the notion of '*linkage*'- especially because of its strategic role in the formulation of our framework. The notion has basically operational weaknesses. It focuses for example, only on the technically possible '*linkages*' between quantities of inputs and outputs without considering their economic realization, which depend on the costs and prices of both inputs and outputs⁵⁵. The staple thesis' generalization that expansion of agriculture within the rest of the economy will take place is therefore questionable⁵⁶. Moreover, the Hirschmanian purely 'demand' approach to economic development is made vulnerable and has been readily criticized.

The close relationship the '*linkage*' notion has with the staple thesis offers important grounds for critical discussion. Linkages can also act as handicaps and create their own operational leakages. The transition from lumber and wooden vessels to wheat and iron steamships and railroads (what Hirschman refers to as the '*convergence phenomenon*'⁵⁷) was the key to the troubled Canadian economic development in the 1850s⁵⁸.

Whereas lumber and wooden ships had admittedly provided direct contributions from the Canadian economic structure (i.e., direct linkage) wheat involved use of

steamships and importation of iron from Britain (direct leakage). Wooden ships and lumber capitalized the advantages of the St. Lawrence river and Canadian natural resources, while steam and iron involved imports of coal and capital equipment, the shipbuilding industry suffered devastating losses⁵⁹.

This of course is within the perspective of a 'new country' which sacrificed one economic activity in favour of another. It eventually led to economic development in the long run. But, even if these successful shifts of one primary export to another⁶⁰ exist, it is fully admitted that, for '*peripheral*' countries⁶¹, contact with capitalist '*centres*' through export of staples resulted in an impoverished populations with exhausted natural resources. It is acknowledged that the failure of a country to industrialize was attributable to its relations with another country or countries in the international economy⁶². It is equally granted that within a country, some regions developed at the cost of others⁶³.

It is also widely recognized that during the first phase of export expansion in '*peripheral*' countries the effect was not the creation of new industries to satisfy consumer demand but the destruction of established handicraft and artisan activities as labour was withdrawn from them for staple production and as new imports competed successfully against them⁶⁴.

At this point the '*linkage*' notion's antithesis (the notion of '*leakage*') within the '*staple thesis*', the '*development-of-underdevelopment thesis*'⁶⁵ and more recently, the ill-named (for lack of case-studies that would properly confirm its status as a theory) '*dependency theory*'⁶⁶ all converge. What is really being affirmed is that one thing did not lead to another⁶⁷. At the forefront of criticism of the '*linkage*' idea therefore, is the contention that its empirical and operational concepts are diametrically opposed to the notion of '*leakages*'.

The latter notion undermines the former. While the current thought was that linkages were 'achievable' on the basis of aforementioned historical and comparative studies, they could indeed be neutralized by the '*leakages*' of

imported inputs or by the immediate export of intermediate outputs⁶⁸. A series of disadvantages of the linkage approach followed. One was that once an intensively linked industry or sector in a country with a highly developed economy was moved to a country with a developing economy, linkages would not materialise.

Another was that rather than enlarging efforts to 'capture' linkages within a country with an 'underdeveloped' economy, the result was a mere diffusion of different branches of a multinational corporation. Defining enclaves only on the basis of material flows however, appeared equally disadvantageous because there was omission of dynamic linkages. Nevertheless, the process by which an enclave becomes embedded, accepted and adopted by an economy goes literally unrecorded in the annals of flow accounting⁶⁹.

This was bound to be a major linking point in any criticism in the 'capturability' of linkages. Which gave way to Hirschman's indictment: the "impact of capitalism and imperialism on the periphery has been to extract surplus, and, in the process impoverish people, destroy local industry, deplete soil and subsoil and emasculate and corrupt local elites"⁷⁰. This surely takes place when linkages transgress their definition only to transmogrify into leakages and act as handicaps.

This is so particularly when a staple is not activating 'forward linkages' due to technologically alien endowments which lead to competition of imported goods (driving out local industry and handicraft out of existence) rather than to 'consumption linkages'. In the case of sugar cane or rice, the grower or farmer who delivers his crop to the refinery or mill is cut off from further economic activities on behalf of his product because of technology which is alien to him. Paradoxically, in the case of staples, this suggests that the less these forward linkages exist, the better⁷¹.

The notion of 'linkage' within the 'staple thesis' directly implies that by the operation of the final demand or consumption linkage, the staple theory becomes

one of capital formation⁷². One salient aspect which the '*staple thesis*' fails to explain is in relation to the type of capital formation in countries with developing economies. Here, it can be argued that if the wrong type of capital goods is imported because of protection and if this importation is encouraged by the provision of cheap capital funds and foreign exchange by government policies, the potential gain may be reduced into an actual loss⁷³. The result is an annual flow of investible resources into capital formation of the wrong type. This may lead to continual wastage⁷⁴.

But wastage is a theoretically useful idea. It is so especially if associated with the notion of '*leakage*' as a co-participant result of and a digressive form emanating from within the '*linkage*' notion. The important characteristic is its capacity to relate to structural rigidity, which is another element in the theoretical scheme being put forward here.

That is, a framework that, whilst following a simple strategy of linkage, allows from within, the paradox of economic stagnation in the NAC region with the presence of high wages. But this paradox is only allowed by means of a number of labour market imperfections.

These were outlined earlier, but as imperfections significantly included the strategy of the UFC to internally segment its labour force, we therefore discuss the notion of labour market segmentation.

Labour Market Segmentation: a Digression

The labour market segmentation concept is a digression from neo-Classical theoretical framework. It is equally useful for an all round comprehension of imperfections in economic development, not just in developing but in developed economies as well.

The labour market segmentation concept goes to the core. Labour market

segmentation does not concern itself with 'optimal efficiency' of factors or their growth. It does not concern itself either with the surface fronts, but pierces into the depth of the structure of the factor. By doing so, it indirectly helps analyze why factors may be optimally efficient or inefficient.

These ideas unquestionably fit into the paradigm which incorporated structural rigidities, better known by the seminal label of structuralism. Indeed, Piore has confirmed that it was " the core of what might be termed 'structuralist' paradigm. This is the basic paradigm to which Kuhn's theory of scientific revolution belongs. And we believe it provides the most promising framework within which to build an understanding of labour market segmentation"⁷⁵.

If one thinks for example of the difficulties of contemporary orthodox economic theory, surely one of the more testing has been the successful handling of the problematic of employment. It is best expressed by Mrs. Robinson when she addressed the matter by stating that " the first crisis arose from the breakdown of a theory which could not account for the level of employment. The second crisis arose from a theory that cannot account for the content of employment"⁷⁶. Particularly, the content of employment (and underemployment) seems to appear impregnated with extraordinary fragmentation in a wide range of heterogenous labour activities which has been labelled '*segmentation*' of labour markets.

The concept of labour market segmentation is a general one. However, it is in the limelight principally because of the recent emergence of empirical evidence. Because of its empirical purposes *segmentation* has been distinguished from *stratification*. Indeed, Gordon has defined segmentation as a " separate division within a *stratum*. Within any stratum, several different labour market segments may coexist, resistant to the forces of conception, suggesting evidence of persistent wage differentials and little intersectoral mobility"⁷⁷.

Furthermore, segmentation, according to Edwards, Reich and Gordon, occurs when " the labor market or labor process is divided into separate submarkets or

subprocesses, or segments, distinguished by different characteristics, behavioral rules and working conditions"⁷⁸. Such, for example is some of the evidence we reveal for the NAC region's banana sector large-scale corporate, the UFC.

It is acknowledged today that labour market segmentation surfaced earlier in 19th century classical economics' concept of non-competing groups in the labour market. By stating that Adam Smith's treatment of wages⁷⁹ was not 'so complete and exhaustive'⁸⁰, Mill treated the theme in a remarkable way: he referred to wage differentials within different jobs. Referring to cases addressed by Smith such as goldsmiths and jewellers and their superior wages over others, for example, Mill said that the " superiority of reward is not here the consequence of competition, but its absence: not a compensation for disadvantages inherent in the employment, but an extra advantage"⁸¹.

Segmentation was therefore considered the cause of inequality which was maintained through inheritance. Mill put forward this notion when he stated that " so complete, indeed, has separation hitherto been, so strongly marked the line of demarcation, between different grades of labourers, as to be almost equivalent to an hereditary distinction of caste; each employment being chiefly recruited from the children of those already employed in it, or in employments of the same rank with it in social estimation, or from the children of persons who, if originally of a lower rank, have succeeded in raising themselves by their exertions"⁸².

Cairnes, after identifying sub-markets as " a series of industrial layers, superimposed on one another, within each of which the various candidates for employment possess a real and effective power of selection"⁸³, historically stated that " we are thus compelled to recognise the existence of non-competing industrial groups as a feature of our social economy; and this is the fact which we desire here to insist upon"⁸⁴. (Myint has equally emphasised the relevance of 'non-competing groups as an institutional pattern'⁸⁵). Marshall, despite dismissing Mill for not making " any great advance in the theory of wages beyond his predecessors, in spite of the care with which he set himself to emphasize the

distinctly human element in economics"⁸⁶, did not ignore segmentation⁸⁷.

In his chapter on industrial training, Marshall states " parents generally bring up their children to occupations in their own grade, and therefore the total supply of labour in any grade in one generation is in a great measure determined by that grade in the preceding generation, yet within the grade itself there is greater mobility"⁸⁸.

The whole idea of a *theory* of labour market segmentation arose recently in United States' economic literature as a major source of dissatisfaction with (not to say rebuttal of) neoclassical economic theory's failure to provide acceptable explanations for the persistent thorns in the United States economy, such as poverty, unemployment, race and sex discrimination.

Classical theory of wages was concerned with determining the aggregate level of wages. Neo-classical theory has, however, emphasised the personal distribution of income. In the latter, the intersection of the supply and demand curves determine wages as well as other commodities. Marginal productivity theory underlies the demand side while human capital theory underlies the supply side. Labour is demanded because labourers produce goods sold on the market, i.e., derived demand which represents the demand curve for labour. Labour is viewed in terms of marginal productivity and therefore wages are set in relation to productivity. In other words, the labourer is paid his or her worth. Wages paid must equal the marginal revenue product of labour, provided this situation takes place in a competitive market.

On the other hand, human capital theory states that wages are determined by individuals' investment in formal education or on-the-job training, such factors both lead to the acquisition of skills, which assign wages accordingly. Nevertheless, the notion of human capital does not necessarily challenge the concept that supply and demand determine wages. These may differ for labourers having the same human capital if the supply and demand forces for their jobs

differ.

The neoclassical analytic framework therefore suggests that poverty subsists because of lack of marketable skills or the failure of the poor to invest in themselves. This is to say, poverty is the end result of market forces and individual preferences. But a number of significant variables are beyond the control of individuals, such as race, social class, sex and age. The result is that different amounts of human capital are embodied within different groups of labourers. In order to explain wage differentials where jobs and required levels of human capital are the same, the structure of the industrial and labour markets have to be scrutinized.

In short, with the emergence of marginal productivity theory, concepts such as compensating differentials, non-competing groups and factor demand were intertwined into a theory of choice and determination of prices and quantities in the market.

The main criticism of neo-classical, orthodox or conventional economic theory is that because it abstracts economics from power it cannot say much about such fundamental problems as the distribution of income and wealth. The theory is specifically designed to isolate economics from all other social sciences. Such an approach is defended on the grounds that we live in a complex world and that only by separating out the different spheres can we achieve anything with our analysis. This serves to confuse a methodological requirement with the content of the subject. Though it is necessary to make abstractions from the real world, the particular abstractions of neo-classical economics mean that a number of problems cannot be analyzed by an economist working within such a framework. Neo-classical economists, for example, cannot explain how two groups with the same level of human capital have different wage levels.

Michael Piore has recently put forward some observations on this issue. He suggests that to explain marginality, " apparently one needs a social theory. And

most social theories do not combine easily with the conventional paradigm. Much the same can be said of institutional 'imperfections' as an explanation of labour market segmentation. The conventional paradigm has no theory of such imperfections. In their face it switches from a positive to a normative mode. It can explain behaviour in their absence. And in their presence it prescribes their elimination"⁸⁹.

The orthodox or conventional paradigm, according to Piore, has no " coherent theoretical story about where the imperfections came from and how (and indeed whether) they could in fact be eliminated. Nor does it have a good theory of how the economy behaves when imperfections are present. The lack of such a theory moreover, is fundamental. Such imperfections invariably involve cohesive institutions, and hence any argument about the imperfections that one wants to get rid of would imply something about other cohesive institutions like the family and the firm, which are taken as the building blocks of economics and which the theory does not - indeed could not - get rid of"⁹⁰.

Indeed, orthodox economists may argue that neo-classical economics is not a theory of economic behaviour but one of optimal resource allocation. This view was challenged by the point that optimality is subject to the behaviour of economic agents. In essence therefore, an alternative formulation of labour markets had to surface.

This led to the emergence of dual labour market theory, where for example, an issue such as poverty was analyzed as endogenous rather than exogenous to the labour market. As Gordon has explained, " economists began to argue that a dual market theory could best explain the phenomenon of urban poverty and underdevelopment ...; [the theory] arose gradually out of a series of relatively informal studies of local labor markets and individual establishments"⁹¹. A different view of course, would be Blaug's suggestion that, as it were, these " quasi-sociological theories of dual or segmented markets undoubtedly poach in the territory staked out by human-capital theorists"⁹².

Doeringer and Piore are widely recognized as having established a dual market theory. As they put it, the central concept of their work is the "*internal labor market*", an administrative unit, such as a manufacturing plant, within which the pricing and allocation of labour is governed by a set of administrative rules and procedures¹⁹³.

This concept challenged orthodox economic theory's concept of the external labour market, where pricing, allocation and training decisions were principally directed by economic variables. It is remarkable of Mill. Indeed, when he was discussing what was necessary (according to Adam Smith) to place skilled jobs on the same level of advantage as the unskilled, he stated that "when the disparity is greater, he [Smith] seems to think that it must be explained by apprentice laws, and the rules of corporations which restrict admission into many of the skilled employments"¹⁹⁴.

The interconnection between both internal and external markets (originally Clark Kerr's seminal concept of 'labour balkanization') is notably shown by the movement which takes place at job classification and which Kerr calls "ports of entry and exit"¹⁹⁵. The rest of the jobs available in the internal market are, as Doeringer and Piore point out, "filled by promotion or transfer of workers who have already gained entry. Consequently, these jobs are shielded from the *direct* influences of competitive forces in the external markets"¹⁹⁶. Other factors which caused internal markets were listed, such as task specificity, on-the-job training and 'custom'.

An important contribution of Doeringer and Piore's work was their identification and incorporation of variables "previously neglected or masked by orthodox economic theory ... into a more comprehensive approach to labor market analysis than that was provided by the competitive labor market model"¹⁹⁷. Orthodox economic theory approached problems such as structural unemployment, technological change, inflation and racial discrimination with its traditional tools. But, as Doeringer and Piore put it, "in one way or another each of the issues

strained the conventional framework and required the introduction of a number of institutional or other *ad hoc* explanations"⁹⁸.

Doeringer and Piore's concept of the internal market was of major significance. According to Loveridge and Mok, they "succeeded in eliminating, whilst not destroying the neo-classical theory of the firm"⁹⁹. Additionally, they are remembered for suggesting that the dual market theory approach to labour markets revolves around four inter-related hypothesis, namely that (i) it is useful to dichotomize the economy into a primary and secondary sector; (ii) that the wage and employment mechanisms in the secondary sector are distinct from the primary sector; (iii) that job mobility between these sectors is sharply limited; (iv) and that the secondary sector is marked by under-employment because workers who could be trained for skilled jobs are confined to unskilled jobs¹⁰⁰.

Despite the fact that what Doeringer and Piore began writing was unquestionably associated with "dualism" as a theoretical explanation of economic development and *non-development*, it served as a springboard for the full conceptualization of an attempt for a definitive *labour market segmentation theory*. Loveridge and Mok for example, have suggested that Doeringer and Piore's merit in "recognizing the horizontal dimension [local and industrial segmentation] in the labour market next to the vertical one [occupational stratification segmentation] was the first step towards a new body of theory which had come to be known as the theory of segmented labour market"¹⁰¹.

To be sure, just under a decade later Piore joined Berger and began calling social and economic segmentation *dualism*, but as they proceeded they found that "the significance of dualism is not that a society is divided into two autonomous and discontinuous segments, but that a society is divided segmentally and not continuously"¹⁰². As they pointed out, "the 'dualism' that was thought to characterize underdevelopment becomes a point of similarity rather than a distinguishing difference. We thus found ourselves analysing *developed and developing societies in the same frame of reference and were increasingly struck*

by the similarities between them[emphasis added]"¹⁰³.

Of course, much of this has been discussed in the vast literature on dualism, marginality and especially, the "informal sector" in "developing economies". Yet, as Berger and Piore recognized, the "*evidence from both developed and developing countries suggests the persistence, not the disappearance of the traditional or informal sector*[emphasis added]"¹⁰⁴. Indeed, as we shall see in a forthcoming chapter, the stagnation produced by the prevailing high level of wages set by the banana sector's UFC and the sector's abrupt decline, contributed to the initial formation of the informal sector in the NAC region.

Doeringer and Piore conceptualized the role of the firm in bringing together existing knowledge of different sources of segmentation in the market through the very act of creating each sub-market. But even more useful, was Berger and Piore's important concept of discontinuities: "they distinguish labour market segments which are qualitatively different"¹⁰⁵. These qualitative differences showed variances in the behavioural characteristics of labourers and managers from one segment to another. In this way, economic processes such as wage determination or education and training were quite different in different market segments could therefore not be encapsulated by a single model of human behaviour.

As the distribution of the labour force in the different submarkets arises in a non-competitive form through a process described by Thurow based on the '*labour queue*' (which in turn is determined by background characteristics)¹⁰⁶, it has been suggested that much the same may be said of labour market segmentation theory. It emerges as a "new '*queue*' theory: just like neo-classical economists perceived workers as standing in a queue according to their marginal productivity, so now workers are lined up according to their aptitude for certain market segments"¹⁰⁷.

In essence, one may say (as Loveridge and Mok do) that labour market segmentation theory puts forward the view that the "marginality of work arises,

not as the neo-classicist would have us believe, out of essential characteristics of either the job or its occupants as evaluated in a free and rational choice, but rather from the result of a constrained situation in which preferences are shaped by the very nature of the choice open to the worker within that situation ... it is being postulated that since the market is segmented by institutional rules, the rules themselves will maintain the situation in being until they are changed"¹⁰⁸.

Loveridge and Mok also sustain however, that although labour market segmentation theory was "by no means a unified body of theory, [but] rather a collection of approaches which still lack unity", it did carry some advantages. Segmentation theory, for example, had "undergone influences from many sides, although most of its origins can be traced to Marxist and institutional theories"¹⁰⁹.

Indeed, dual market theory initially posed a challenge which economists had not yet begun to meet. And as Gordon has clearly said, "its most important hypothesis are explicitly historical; they concern the dynamics and dialectics of changes in jobs, people and labour market operations over a period of fifty or more years"¹¹⁰. The result was that it became incorporated into a more general radical framework. This, as Gordon pointed out was due to the "conviction that [its] hypothesis can be generated by radical theory and that radical theory provides some important historical foundations for the specific conclusions of dual market analysis"¹¹¹.

The radical approach attempted to incorporate dual labour market theory within an historical and ideological framework. Labour market segmentation theory therefore became a radical statement of dual market theory. It was Reich, Gordon and Edwards who mainly summarized an emerging radical theory of labor market segmentation. They indicated that "the theory argues that political and economic forces within American capitalism have given rise to and perpetuated segmented labor markets, and that it is incorrect to view the sources of segmented markets as exogenous to the economic system"¹¹².

Equally important they launched a theoretical definition of labour market segmentation as the " historical process whereby political-economic forces encourage the division of the labor market into separate submarkets, distinguished by different labor market characteristics and behavioral rules"¹¹³.

There was now a theoretical base from which to sustain that there was such a thing as a segmentation process which produced segmented labour markets as a result. Segmented labour markets were perceived, according to Vietorisz and Harrison, " not as an aberration within an otherwise harmonious economic and social system, but as at least one of the normal modes of operation of a modern industrial market society"¹¹⁴. What was more, labour market segmentation was now argued to be " intimately related to the dynamics of monopoly capitalism " and arose as well as became " perpetuated because it is *functional* - that is, it facilitates the operation of capitalist institutions"¹¹⁵.

The radical interpretations of labour market segmentation focused on monopoly capital as a basic cause of attempted control by management of both factor and product markets through a policy of dividing and therefore, not only weakening, but ruling the labour force. It has been suggested that as capitalism developed and monopolies emerged, there was a restructuring of internal relationships of an 'internal' labour market and simultaneously, this weakened the bargaining power of workers by accentuating the differences between them in various segments of the labour force¹¹⁶.

This was fine as far as one envisaged a rationalisation of the structure of the United States labour market. However, the observation made by Rubery that the main reason for the lack of general applicability of labour market segmentation theory arose from the " almost exclusive attention paid to the actions and motivations of the capitalists in developing a structured labour market and the consequent neglect of the role of worker organisation in the process"¹¹⁷ helped to strengthen the theory itself. Labour market segmentation theory now recognized the active role of labour organisations in the development of the

labour market structure.

The consolidation, as it were, of labour market segmentation theory has of course attracted some criticism. In his survey, Cain argues that, whilst criticism of orthodox economics is healthy, labour market segmentation theory's "theoretical and methodological criticisms of the neo-classical theory are not substantial and are often misguided ... [and] ... do not begin to offer a theory of the labor market than can replace neoclassical theory, despite various degrees of dissatisfaction with the empirical corpus of the theory"¹¹⁸.

Indeed, because dual market theory was admittedly not without problems, it recently led one of its initiators, Michael Piore, to advance a further suggestion. Because (i) social groups and institutions are at the centre of labour market segmentation theory; and (ii) within the internal labour market, pricing and allocation are not merely market or competitive phenomenon but socially determined, "in order to grasp these social phenomenon ... one needs a paradigm which recognizes and incorporates 'social as opposed to individual phenomena'"¹¹⁹.

Piore therefore addressed the problem within the framework of a paradigm of social phenomena. He said that "to ask in this context about the paradigm to which notions of labor market segmentation belong is thus to ask a question about the relationship between the mode of research and the theory and practice of normal economics ... I never considered myself a revolutionary ... but as an exponent of labour market segmentation in the community of 'normal economics', I can assure you that labor market segmentation does not fit the paradigm"¹²⁰.

One of the central conclusions after Doeringer and Piore's work and especially of Gordon's work theories of poverty and underdevelopment was that up to that time economic research had not provided empirical evidence which could "ultimately arbitrate the competition among theories of poverty and underdevelopment ... In the face of these problems, we have little recourse but to

plunge back into empirical research"¹²¹. Most certainly, labour market segmentation theories proposed by Doeringer and Piore in 1971 and Reich, Gordon and Edwards in 1973 led to attempts by researchers to empirically test them.

But although these tests, according recently to Reich, " on the whole, supported the segmentation approach ", some¹²² of the studies were not " completely unambiguous as tests have been hampered by limitations in the available data and by theoretical controversies among segmentation writers"¹²³. The consequence has been that seemingly the validity of labour market segmentation theory still remained a matter of debate and that further empirical research appeared necessary.

A first generation of empirical studies tried to test the hypothesis of dual market theory, the existence of distinct labour segments and different behavioural patterns within these segments. Criticisms led to a refinement of labour market segmentation theory. But what was more significant, despite or because of criticisms of the first generation of labour market segmentation studies, a second generation of both theoretical and empirical efforts in labour market segmentation appeared.

The leading ones have been a few. Berger and Piore's work on dualism and discontinuities (which we have earlier made reference to), Frank Wilkinson's edition of contributions on the dynamics of labour market segmentation and more recently, Gordon, Edwards and Reich's epic on the position of labour in the United States economy on segmented work and divided workers¹²⁴ provide most of the theoretical weight.

Wilkinson's collection on labour market segmentation made three major generalisations. They were (i) that there surfaced a change in its discussion, from emphasis on the explanation of " a fairly stable structure of pay and job inequalities towards an analysis of dynamic changes in labour market

structure"¹²⁵; (ii) the importance of " specific historical experiences and the complex interplay of economic and institutional factors"¹²⁶ in determining its patterns; and (iii) that " general tendencies are clearly observable"¹²⁷ despite the variety of its study.

But most important of all, the contributions made to Wilkinson's work on labour market segmentation emphasise " the unsuitability of any notion of equilibrium"¹²⁸ for the general objective of arriving at the analytical framework which studies labour markets. Furthermore, they consolidate a more realistic contemporary academic view based on historical evidence that clearly envisages the emergence of a process which structures and destructures the labour market. The framework of analysis is not an equilibrium but a dynamic one. It is one which, as Wilkinson puts it, " provides a basis for theoretical and practical analysis of the structure and evolution of the labour market"¹²⁹.

Gordon, Edwards and Reich's work on the historical transformation of labour in the United States has been considered a most important event not only because it established them at the head of radical economics in that country but also because it was the culmination of their study of labour market segmentation.

Although considered a theoretical study, their analysis of uneven capitalist development (especially the heavy presence of monopoly capitalism) in the United States, of the initial proletarianization, of the homogenization, and the final segmentation of labour markets and of the recognition that trade unions contributed to the creation of divisions between primary and secondary labour markets has come to the forefront particularly because of its empirical content.

More important was that they presented an argument about the dynamics of labour market segmentation. They equally put forward an approach which made quantitative research on labour market segmentation viable. As Reich has recently said, this approach draws " from the recent historically-based dynamic theories a set of testable quantitative hypotheses and then test these against long-term time

series data"¹³⁰.

The most significant characteristic of the second generation theorists has been that they have drawn considerably from institutional and historical materials employing case studies of particular labour markets and applying theories of institutional forces in the capitalist economies. As Reich has put it " the case-study approach permits greater attention to dynamic processes and as a result the second generation labor market segmentation theories have become more complex"¹³¹.

Regarding the first generation of empirical studies it seems that differences among segmentation theorists have made the job of testing more difficult. According to Reich " it has been uncertain whether industrial structure characteristics of individual occupations or the presence of unions provide necessary or sufficient conditions for the existence of segmented labour markets and it has been unclear how to allocate individual workers or jobs to the hypothetical labour segments " ¹³². So it appears to be that much of the ambiguity in the empirical results of some researchers is linked to still unsettled theoretical issues.

The strongest opposition to dual market theory has usually been related to the use of participant observer techniques rather than econometric techniques which are commonplace in mainstream economics. Indeed, Piore subscribes to the opinion that " ... fury, disdain, resentment, sarcasm, and condescension have definitely greeted labour market segmentation"¹³³. However, more recently, Lawson has suggested that " historical research including case studies will usually be at least as important a part of any analysis as econometric evidence"¹³⁴.

On these matters one cannot help but be reminded of Phelps-Brown's observation that " ... we ought to value powers of observation more highly than powers of abstraction, and the insight of the historian more than the rigour of the mathematician. Our basic need for more observations of actual behaviour should make us prize the abilities of those who can gather them - ingenuity in devising

methods, patience in accumulating facts, curiosity about connections, a keen eye for the scientific detail. These abilities are not in fact commonplace; nor are they uncreative"¹³⁵. And Morishima has pointed out that " more important [than mathematics][sic] are such things as knowledge and observation of the economic system itself and in considerable interest in history and sociology"¹³⁶. Indeed, he further stated that " we have now reached a stage where the mathematization of economics is excessive"¹³⁷.

And sure enough, despite the scorn, sufficient merits have emerged in recent literature to contend that contributions in the realms of rigour have been made by dual market theory. Dickens and Lang have recently espoused the conviction that it " led to our test, and the results therefore tend to corroborate the theory ... we have shown that the dual market hypothesis can be derived and supported from standard data and statistical techniques. It is however, unlikely that standard approaches would have uncovered labour market duality, a fact that suggests that there is a role for other methods in mainstream economics"¹³⁸. Indeed, they go further to emphasize that " our results point out to the value of noneconomic techniques for uncovering and understanding labour market institutions"¹³⁹.

Some years earlier, Gordon pointed out that what seemed most important was to " develop a series of historical studies to trace the evolution of various (hypothesized) dimensions of stratification and segmentation in local labour markets"¹⁴⁰. Now, when this has been accomplished, Dickens and Lang argue that dual market theorists " have developed very elaborate theories of the origin and operation of the market institutions which are rich in historical detail. These descriptions are quite remote in many ways from the neo-classical description of the labor market"¹⁴¹.

What emerges therefore, is that historical research has provided and seems to provide the necessary evidence which yields real explanation on complex issues such as the dynamics of labour market segmentation. This, in turn has provided the main theoretical elements for us to understand the process of economic

development. Indeed, Gordon thought historical research would, for example, eventually provide the "most direct evidence on the validity of the stratification hypothesis"¹⁴².

The Influence of the Department of Antioquia's Successful Coffee Economy on the Testing of Ideas on Colombian Economic Development and History

The preceding survey makes the first three decades of the present century markedly stimulating for the analysis of Colombian regional economic development. This is not only because the conditions for growth were present more than ever at this time than any other. It also invites any attempt to reveal its process throughout the nation. That considerable and reasonable bases for regional development were already in operation in different parts of the nation, stresses the significance of the period (1900 - 1930).

The strength of regional economic development however, centred round one region of the interior of the country, the department of Antioquia. It has been the focus of many studies. Remarkably, its successful coffee economy was channelling two thirds of the nation's total earnings during the period this thesis concentrates upon. The coffee economy *per se* has been widely studied of course, particularly by Monsalve¹⁴³, Machado¹⁴⁴, Arango¹⁴⁵ and more recently Palacios¹⁴⁶. It becomes compulsory therefore, to mention the substantial links between Antioquia's successful coffee economy and the testing of economic and historical thought¹⁴⁷.

If one purpose here is to attempt to bridge the gap within regional economic history, then research should not only be about the process of economic growth and development but equally about economic stagnation in other regions such as the case of the NAC region in the 20th century, which (after the loss of Panama) included the departments of Atlantico, Bolivar and Magdalena. Our research unveils some evidence which contributes to an explanation on how economic

forces shaped economic stagnation upon the region, at a time when all regions in Colombia had a marked potential to keep pace with --at the least-- a gradual surge in economic development.

There is no single explanation for the process of economic development in the NAC region. The search for explanations is complicated by the lack of research on the region. We attempt to diminish that insufficiency here. But, the greater amount of literature about the interior's department of Antioquia, predominately its relationship with the coffee economy, borders on overindulgence. This may be so because such success as coffee had, provided the elements which attracted testing of ideas on economic development and history. But coffee's economic success overwhelmed scholars' customary reticence precisely because it generated considerable increase in academic research towards itself and its region of influence (the interior) away from other regions which were less successful.

This successful coffee economy most certainly generated Gonzalez-Casanova's patterns of "internal colonialism"¹⁴⁸ in Colombia. Havens and Flinn¹⁴⁹ have confirmed this. Interior region coffee elites controlled high government office and unquestionably influenced economic legislation.

According to Delpar, "Costeños [NAC region persons] seemed to be excluded from serious consideration for the presidency [of Colombia]"¹⁵⁰. Neglected and discriminated against by the federal government¹⁵¹, with the exception of Rafael Nunez, who began a new period of political and economic history in 1884 referred to as the '*Regeneration*', "no '*Costeño*' [NAC region person] has been elected for the Presidency [of Colombia] since Independence was accomplished ... systematically overlooked by the federal government"¹⁵².

Consciousness of federal government neglect towards many regions was bound to be evident. Research of other economic activities other than coffee, seems to have been equally neglected.

Despite the attraction the coffee economy of the interior has had towards research, it can neither be said that any particularly convincing theoretical framework for Colombian regional economic development emerged as a consequence of that research. This is illustrated only by briefly discussing four of the more famous authors on 'Colombian' economic development and history: Luis Ospina-Vasquez, Eduardo Nieto-Arteta and William P. McGreevy's noted views and Everett Hagen's discredited one.

First, consider Ospina-Vasquez's acclaimed framework. In his classic work¹⁵³, he put forward the idea of the '*way-of-being*' which characterised the people of the department of Antioquia. He suggested that cattle raising, mining and coffee cultivation were the activities which provided the basis of capital accumulation for further extension of agriculture and the eventual shift to industry in that department. Capital formation and 'entrepreneurship' lay at the heart of his theory of '*Antioqueño*' development.

The resolve to begin manufacturing as a function of purely economic reasons did not easily explain this. Thus, he fell back on the explanation of the department of Antioquia's entrepreneurs' 'way of being'. In essence, Ospina-Vasquez presents the first major effort in putting together highly concentrated researched information (particularly on industries and tariffs) since Nieto-Arteta's first important contribution¹⁵⁴ in 1942. Ospina-Vasquez's approach however, failed to emphasize that development was taking place in other regions as well.

His work suggests a model either of (i) regional development consistent with an aspect of Schumpeter's work (that economic development's basis is entrepreneurship¹⁵⁵) or of (ii) of the view that development is achieved when people want to do so. These factors, albeit not unimportant, are crude and marginal elements of analysis which would help explain economic development in general, its absence or its potential. It suggests more of an apology say, for a Schumpeterian theory of profitability as Furtado¹⁵⁶ has suggested or D.C. McClelland's (historical rather than genetic) '*n Achievement*' (need for achievement

-provided the opportunity-)¹⁵⁷ than an explanation of the national development process. Indeed, McClelland's answer to the question of how '*n Achievement*' results in more rapid economic development is essentially Schumpeterian: " the link is obviously the entrepreneur "¹⁵⁸.

Nevertheless, Ospina-Vasquez's work should be observed more from an angle of economic historical research as a solid base which has inspired a continuation of his thought in that direction. It inspired McGreevy to write his widely criticised economic history of the nation: " ... I carefully read don Luis Ospina- Vasquez's book ... and I went searching through those 400 pages, taking into account that I am a simple man, a peasant from Ohio, that does not know anything about formulating theories, and I thought that there in this book I could find a theory that I could use ... And this is found in only some five words in all of [his] book, what is really his theory of the development of Colombia, and that is, the way of being of the antioqueño ... "¹⁵⁹.

Bergquist¹⁶⁰ recently analyzed the political implications of the rise of the coffee sector in Colombia, placing emphasis on conflicts of elite economic interests. Furthermore, as a result of an '*anthropophagic*'¹⁶¹ assailment or the 'Inquisition tribunal'¹⁶² McGreevy's work was subject to, Ospina-Vasquez's '*way of being of the antioqueño*'[emphasis added] is to be interpreted as '*class consciousness*'¹⁶³ showed by the Colombian bourgeoisie.

Next, for a further step forward in the building of an theoretical framework for Colombian economic development, Nieto-Arteta's other major work¹⁶⁴ would necessarily have to be considered. In it he introduced discerning statements on the relationship between the geography of land (*tierras de vertiente*), land tenure and the possibility of regional development. More important however, although he argued that coffee provided political normality amongst social groups¹⁶⁵, he also -albeit lightly- touched upon the significance of the emergence of elite classes from the coffee sector in the interior of the country.

Nieto-Arteta pointed out the crucial political role of coffee in directing *minifundistas* (smallholders) towards conservative politics, creating a multifaceted class structure in the party. This led to the coffee industry's great influence over the appointment of governmental ministers (which were more important than presidents). As he put it, coffee produced " ... Ministers of Finance who cannot disavow the problems that coffee creates ... In several occasions a Coffee Growers Congress has had a more deep and lasting influence than even the National Congress "¹⁶⁶.

This in turn constituted the principal element both in the promotion and consolidation of the interior coffee region's economic growth and development. Nieto-Arteta noted that " coffee, director of Colombia, has given political primacy to those who produce it and have created the national economy with it " ¹⁶⁷.

Nieto-Arteta therefore introduced the relationship between a region's successful export commodity (coffee) and changes in the power structure. Additionally, in a surprising manner, he appeared to come close to Innis'¹⁶⁸ interpretation of economic development, with his concerns about the effects of particular types of export commodities on the developmental potentials of a region. (For example, Nieto-Arteta's interest in the role of gold, tobacco and coffee suggested the indictment of (i) the former for only leading to a concentration in the hands of a few with the accompanying failure to induce transportation or agriculture; and of (ii) the second, for similar concentration patterns in income distribution and lack of influence on education¹⁶⁹.)

But Nieto-Arteta also provided an apology for coffee by suggesting that it set the conditions for regional development which favoured considerable transportation input and improvement of the general economic attitude. Despite Nieto-Arteta's contributions to the understanding of economic historiography there seems to be a failure in them to address specific economic variables such as, for example, wage-rates (which were of particular importance to regional development) except for saying that they were unknown¹⁷⁰.

McGreevy was therefore bound to concern himself with certain conditions for regional development. He saw the need for more exhaustive research on wages but stopped pointblank. Initially, with his doctoral thesis, he set himself the task to "take many facts of Colombian economic history and several explanations of them to consider the formation of a more general theory of Colombian development"¹⁷¹. (He would describe this effort as 'presumptuous'¹⁷² some time later in his book). McGreevy's approach was to "conceptualise the process of economic growth in a gestalt form with a manageable phenomenon of rising per capita income, continuing technical progress and resource allocation "¹⁷³ considering "dynamic effects of regular population growth as they inhibit the maintenance of the level of per capita income until some political changes are made "¹⁷⁴.

Coming from such a person as McGreevy, "unaware of Colombia's existence before 1960 "¹⁷⁵, although his book "sought to correct the weaknesses"¹⁷⁶ of his doctoral thesis, it emerged as a bombshell that shook and took scholars on the subject by surprise. There is little doubt that it set a benchmark for debate on the economic development and history of Colombia¹⁷⁷. Both his works owed guidance to Everett Hagen, Charles Kindleberger and Simon Kuznets¹⁷⁸.

Much spadework was done by him and factual originality became a major quality sufficient enough to motivate academic follow up. He engaged in efficient collection of economic data and both his works contained several hypothesis. These provided good answers to some questions, such as models of agrarian structure and the role of transportation. Upon final analysis, he saw interior coffee cultivation operating as a catalyst which would stimulate development. As a crop coffee was suited to relatively small-scale farms and as an export crop, it indirectly stimulated related investments in private and then public transport, education and small-scale, import-substituting manufacture.

The coffee industry really only acquired major importance after the First World War. It was United States bankers that assumed leadership in its handling.

Specifically, during the 1920's, a small number of United States companies dominated the bean's export until 1928. It was then that interior coffee elite groups sought security against these companies by the creation of the National Federation of Coffee Growers which according to (a recent reassessment of his views) McGreevy, was the " mechanism ... which replaced ownership and control of land as the technique by which a few could realise substantial gains from the coffee industry as a whole [by restricting] access of [small estate] producers to the market by filtering their product and sales through a national organisation controlled by the nation's senior leadership "¹⁷⁹.

He enhanced the relationship between coffee and elite power structure arguing thus that " the Federacion Nacional de Cafeteros arose as an instrument of the coffee elite to organise the industry. It was the mechanism ... which replaced ownership and control of land as the technique by which a few could realise substantial gains from the coffee industry as a whole "¹⁸⁰. McGreevy concluded his views with a proposal of a population theory of the transition from economic decline to economic development, erecting a model of autonomous population growth. It suggested that at the beginning, autonomous population increase lead to a lower per-capita income (economic decline). Thereafter, with the technical and natural conditions of production of a specific crop (such as coffee) much influence was exerted on the ability of the nation to respond successfully to foreign demand patterns. Some of these views are reminiscent of the '*staple thesis*' as we will see later.

But although McGreevy admitted that the conditions of production were the product of conscious acts of specific groups to some extent, he did not give much attention to links between economics and politics. Especially, struggles among economic groups in conflict, which determine the nature and rate of economic development. Indeed, after formulating his model, McGreevy alarmingly concluded that " an explanation must finally be pushed back to human motivation: some region developed because the people there wanted to "¹⁸¹.

This invited Safford's well-known criticism. He pointed out the " absurdity of the conclusion ... that the transition towards development finally arrived in Colombia because Colombians [some part of them - the Antioqueños] (after 1880) wanted it that way. This means that they did not want it before, a claim without a basis. This conclusion completely leaves out consideration of the many obstacles to development that Colombians confronted during the XIX Century. Therefore, this result is more than a tactlessness ¹⁸².

Regions other than the interior (Antioquia) wanted to advance. Mendez pointed out the " example of Barranquilla [NAC region], whose growth I think has not been studied in a systematic form. The growth of Barranquilla was spectacular. From a sandy city, where one sunk ... Barranquilla became in the third and fourth decades of this century a city that threatened the predominance of other Colombian cities ... there was no way of doing things, however they accomplished them ¹⁸³.

Although McGreevy strived to emphasize social and political changes wrought by coffee and tried to encompass more than just economic results and causes, he fell back on what seems to be an established coffee interpretation of overall national development of Colombia. Although he suggested that regional development was taking place in regions other than coffee areas, there was no particular interest -let alone consistent attempt to analyze them individually. He accomplished the enormous task of collecting many facts of the nation's economic history and several explanations of them. He failed however, to provide a comprehensive explanation of the regional developmental processes. In particular, there is no emphasis on the process in the NAC region.

McGreevy aimed to establish a general theory of Colombian development. But this is not a sensible way to approach such a complex task. The complexity of the economic history of Colombia is precisely its regional diversity. As Dix pointed out, " Colombia's unusual multifaceted regionalism ... persists and continues to have important implications for the country's development¹⁸⁴.

It is certain that the only scholar in the historiography of regional development of Colombia who makes any claim of being the harbinger of a theory on the whole nation's development is Hagen¹⁸⁵. By arguing that derogation in society is a source of talent which leads to innovation, reference to McClelland's '*n Achievement*' is vital for Hagen's model. He studied the formation of entrepreneurs and, in Schumpeterian fashion, their role in innovation and economic development. He examined the native of the (Antioquia) interior as a case of innovators formed by their special relationship with other regional groups in the country.

But the basis of his analysis is the discredited theory that the movement into industrial activities in Colombia was a result of the enterprise of the people of the department of Antioquia. These, in turn, were motivated by 'status deprivation' to obtain recognition by achievement. That is, the withdrawal of respect for their status in society resulted in regional economic development.

Within the Colombian context of his theory, Hagen has already been criticised (particularly relating to the Antioqueño case). First, by Lopez Toro¹⁸⁶, who stressed the advantages the Antioqueño area had over others. Second, by Safford¹⁸⁷, who argued that economic superiority in the region was prior to the times when '*Bogotanos*' looked down upon the Antioqueño. Nevertheless, it is clear from collected evidence, that other regions were fertile with entrepreneurs as well¹⁸⁸. Few academics fail to realise that even Hagen himself stated that "capable and effective entrepreneurs have arisen in every region of the country"¹⁸⁹.

While the urban centre of Hagen's particular region of interest - Medellin - led in the cotton textile industry, beverages and food processing industries started in large scale enterprises in other regions. Although the department of Antioquia's cotton textile industry was the first, other regions were ahead in the industry with regard to output, employment and relatively advanced technology. Furthermore, if 'status deprivation' is of any significance, it was probably experienced by other

peoples of other regions. Industrial leadership was in their hands all over the country. In 1915, for example, aggregate information¹⁹⁰ on modern industry showed that the urban centres of Bogota and Barranquilla were not far behind Medellin.

Relative population size, quality of communications and other differences considered, the nature of the production function of the leading export commodity for the interior of Colombia provided a '*lead*' for the department of Antioquia. Research usually tends to reveal explanations in terms of markets, prices and the nature and costs of inputs. In so doing, suggestions of cultural explanations and degrees of initiatives virtually diminish in academic stature when used to analyze why a particular region advances faster than others.

But this '*lead*' does not warrant Ospina-Vasquez and Hagen's implications about economic development in all regions. McGreevy, for example, suggested that by measures of total employment or perhaps capital investment, differences were not that significant. Consequently, it seems unsatisfactory to lay the burden of '*explaining*' a nation's economic development by constructing only a framework that enhances development of a particular region's successful commodity.

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CHAPTER II

THE HISTORICAL SETTING FOR REGIONAL ECONOMIC DEVELOPMENT IN COLOMBIA

National Scene Setting

(i)

To begin with, in order to place this thesis' framework into proper bearing, it requires a brief survey of the economic historical setting of Colombian regional economic development. This is so because it sketches the general economic environment which embraced regions in Colombia during the period of our research (1900 to 1930). It also reveals that to acquire a fuller view of 'national' economic development, more than one region has to be closely studied.

The nation, at its NAC region was first visited by European ships at the region's most northern tip -the *Guajira* peninsula- in 1499. Although certainly important Indigenous urban settlements¹ existed in the region many years before the Spaniards' arrival such as *Teyuna*², the 'lost city' in the Sierra Nevada de Santa Marta, which " is now judged to be 1,500 years old and superior in ecological planning to anything built by the Incas, Aztecs or Mayas "³, the region as a whole claimed some of the first hispanic urban developments in Colombia. This was so with the founding of Santa Maria la Antigua del Darien in 1510, Santa Marta in 1526 and Cartagena de Indias in 1513. These, located within sight of the coast or at short distance from the sea (not withstanding the deficient factor that low tropical soil represents) supplied at least one of the less mobile factors of production (accessibility to the market). They offered some early potential as an almost adequate basis for export crop industries and subsequent export-led growth and development.

However, this was not to be as we shall see further on. Although the earliest pre-hispanic or pre-Colombian metal trade and industrial mining centre known to hispanics in Colombia was Buritaca (in the mountains of the northern part of

the department of Antioquia, in the interior of the nation) which 'exported' both finished items and raw metal, most of the gold and jewellery was traded northwards in Dabeida (at the most south-westerly part of the Sinu area in the NAC region). It was here that a community of technologically skilled goldsmiths⁴ expanded, on the basis of transforming 'imported' raw material, and opened the trade route through the Sinu river, supplying the entire NAC region.

There, barter market centres were established and merchants exchanged coastal products for Sinu jewellery and ingots of raw metal from (what today) is the department of Antioquia in the interior of the country. The following three centuries of Spanish conquest and colonial rule further enhanced urban economic developments; the classical example being the seaport of Cartagena.

Not until the 19th century was its predominance challenged (and for some time surpassed) with the rise of another port, Barranquilla⁵. Both cities were in the NAC region. Indeed, import-substitution industrialisation can be said to have begun in the NAC region in the late 19th century as then, already ten shoe manufacturers in Barranquilla were implementing it⁶. By the end of the first decade of the present century, the NAC region offered as much possibility for regional economic development as other areas in Colombia.

The Republic of Colombia was formed on the 17th December, 1819 through the influence of the *Libertador* Simon Bolivar. Thereafter, as Deas has claimed, the "number of constitutional experiments has been great, and this republic has been the scenario for more elections, under more systems, central and federal, direct or indirect, hegemonic and proportional, and with major consequences than any of the american or european countries that seeked to dispute the title "⁷.

However, Colombia's independence was marked by a series of violent socio-civil conflicts. Consequently, economic development suffered serious setbacks and a succinct pattern of comparative regional unevenness emerged. Civil wars took place " at a higher level than local in 1839-1841, 1851, 1854 and 1859-1863,

disallowing more minor scuffles. Blood penetrated the system, intensifying antagonisms and local as well as party loyalties "⁸. During years 1863 - 1885, the " free trade of arms was a matter decreed by the Constitution ... the state forces were very scarce ... [therefore] it is not strange that there were more than fifty rebellions in these twenty and so years "⁹.

What today are the nations of Colombia, Venezuela, Ecuador and Panama constituted the Republic of Great Colombia between 1819 and 1822. It is unsettling that after eight years, the Republic dismembered into only Colombia and Panama. Far more disturbing is the fact that, instrumental to the completion of the process of dismemberment, was the rising strategic and economic power of the United States and its crucial role in the secession and loss of Panama in 1902. Between 1830 and 1847 there was little if any economic change for the Republic. After 1847 and up to 1880, government free-trade policies had negative effects, such as decreasing working class incomes¹⁰.

Agricultural products such as tobacco, cotton, indigo, quinine and cacao were cultivated from earlier years and which required the use of capital, land and labour on a reasonably considerable amount. After 1848 there was an expansion especially of tobacco exports, a spread of large cattle '*haciendas*' and socio-civil conflict intensified. External forces such as expanding industrial output in the developed economies of North Atlantic nations meant Colombia was among the markets this output was seeking an outlet to. With tobacco¹¹ exports the openness of the economy increased. The result was an increase in imports and a decrease in local artisan industries.

It was not until the early 1850's that a major technological change in transportation took place, although it initiated in the early 1820's . Steam navigation¹² was introduced to the main commercial artery of the nation, the Magdalena river. Railways followed suit¹³. Both methods of transportation first emerged in the NAC region. This opened up links with the developed economies of the world where important technological change was taking place.

The 1850's brought bourgeois reforms mainly favouring landed elites and urban middle classes. The tobacco monopoly was shifted to private enterprise. The Ambalema (interior) tobacco export industry ended but a high level of productivity was maintained. The balance of trade was not unfavourable and it seems that economic conditions were reasonably good. Tobacco production in Carmen de Bolivar (NAC region) took over from the decline of Ambalema for local consumption.

Some snags were present. One was the emergence of persistent deficits in the balance of trade. Another, the failure, due to geographical dispersion, of the artisans to organise in a way which would guarantee them more effective protective legislation from the domination of governments by merchants. The latter, tended to foster imports in excess of export capacity which was generated by tobacco and especially, gold.

Export expansion abruptly ended in the mid 1860's. The nation's economy became increasingly dependent on trade and unable to transform itself in face of adverse markets. Nevertheless, although agricultural products of higher value (such as coffee and indigo) became relatively more important in international trade and the extraction of chinchona (quinine bark) was also growing, falling prices in foreign markets brought economic depression in 1857. This resulted in suppressed economic conditions and downward pressure on prices.

Only in the 1870's did the nation's trade see a substantial revival with increased exports of coffee, hides and tagua (vegetable ivory)¹⁴. However discouraging, tobacco and cotton did not however participate in the export revival. It is true of course, that the lack of a specialised natural product compounded the country's early economic problems. After 1880 however, 'mild' coffee developed in the interior as the nation's leading commodity and characteristic industry of potential value.

Coffee was a commodity which was showing considerably more dynamism than

the remaining staple products. Tobacco in the Ambalema area operated in large units. Therefore, the stimulus for complementary development was limited and few economic linkages emerged (as surface transportation) that were found later in coffee. Tobacco had a high value in relation to its weight. Its largest production area was located near the Magdalena river. Coffee on the contrary, had higher transportation costs in relation to its value and was located in the mountains rather than next to the river.

It is clear that in the 1880's the more farsighted landowners from the department of Antioquia identified topography and ample and cheap labour supplies as being essential elements in the production of coffee. It is probable that gold however, despite its enormous abuse dating from the '*conquista*' and the '*colonia*' periods, remained the nation's most valuable single commodity. In 1885, gold exports represented approximately five ninths of the value of estimated exports¹⁵. Chinchona bark, tobacco, coffee and tropical woods made up the rest.

The first major period of sustained regional development took place in the last two decades of the 19th century. For example, there is evidence that in 1891 while exports of gold and coffee were considerable, tobacco was being sent to Germany, cotton fibre and seed were sent to Europe at relatively good prices and the cultivation of bananas was acquiring significance¹⁶. Between 1880 and 1899 the cultivation of coffee spread to the mid-west of the Magdalena river in the nation's interior and to a lesser degree, in the Sierra Nevada de Santa Marta areas in the NAC region.

Between 1886 and 1897 the gradual depreciation of Colombian currency in terms of gold, stimulated the production of commodities¹⁷. Coffee for example, met unusually high prices¹⁸. In the 1890's in general however, although money wages seem to have increased with inflation, real wages and labourers' purchasing power decreased. The favourable economic conditions enjoyed by Colombia in this period were short lived due to the '*War of a Thousand Days*' between 1899 and 1903. Although it was "officially the last civil war suffered by the Republic ... the

country was subsequently at the borderline of war in many occasions "¹⁹.

This particular war considerably crippled the country. British Acting Vice-Consul McDougall noted that " merchants here have withheld importing to a great degree, as the premium on gold went up by leaps and bounds from 200 to 1,800 per cent, and naturally the owners did not know at what price to sell their goods so as to secure enough money to enable them to purchase fresh stocks "²⁰.

The rate of exchange on British Gold indeed rose from 240 % in january to 550 % in december, 1899 and from the latter, leaped to 1,950 % in december 1900 in volatile manner²¹. In 1899 the " average rate of exchange in first half-year [was] 252 per cent [sic] [and] in second half-year, 483 per cent "²². In 1900 it was " ... 1,045 per cent in the first half-year [sic] [and] 1,648 per cent in the second half-year"²³. Therefore, according to McDougall, " in 1899 a [American] dollar was worth 5 dol. 50 c. paper and £1 sterling, 27 dol. 50 c. paper, whilst in 1900 American dollars were worth 20 dol. paper and £1 sterling, 97 dol. 50c. paper"²⁴.

In addition to this, United States 'gunboat' diplomacy contributed immensely to the accomplishment of the 'secession' of Panama in 1902, the underlying reason being acquiring the strategic canal zone. Since the digging began in 1885 by a French company, " the canal, from which hope of economic redemption for the nation emerged, stood more like Damocles' spear, for it was already manifest that the United States highly desired the Isthmus territory "²⁵.

In general, between 1848 and 1902, the nation as a whole witnessed a period of economic decline (extensive empirical quantitative data is limited). After 1902, a transition towards economic growth took place until 1930. Compared with earlier periods, the years between late 19th century and the beginning of World War I was a 'spectacular' one for economic growth.

The long economic decline was reversed and the two events mentioned earlier (the turn of the century war and the loss of Panama) were followed by others of

major significance. These were for example, a 7 % average export quantum growth rate as the expansion of coffee exports grew at rates never experienced before; the creation of the first textile mill in Medellin, department of Antioquia (interior); the successful currency conversion completed by 1910 which resulted in clearing up inflated paper currency and re-established the Colombian Peso²⁶ on par with the US dollar; the passage of tariffs favouring growth in the Medellin (Antioquia) textile industry; and of course, the payment by the United States to the Colombian government of the US \$ 25 million as " indemnity " for the loss of Panama.

This indemnity payment and the other monies that came along with it as is mentioned further on, led to the renowned " dance of the millions " ²⁷ in the 1920's, during which time loans and bonds were floated in the New York market by the Colombian government. Rippey claims that United States capital investments in Colombia " in 1913 ... amounted to somewhere between \$2,000,000 and \$4,000,000. In 1920 they amounted to \$30,000,000; at the beginning of 1926 they were estimated to be \$80,000,000; and by the end of 1929 they had reached \$ 280,000,000 ! " ²⁸. The monies promoted some prosperity, but the short-sighted spending spree they were subject to was accompanied by inflation and corruption. To be sure, opportunities were lost for integral regional economic growth and development.

These monies were really destined to assist the government in building up transportation infrastructure (the whole of it to be supplied by the United States). As Stallings pointed out, "as New York became the world's principal financial center ... by the mid-1920s ... U.S. banks were out scouring the world for prospective customers, often convincing foreign governments to take loans in excess of their needs ... At one point ... there were twenty representatives of U.S. banks in Colombia alone trying to negotiate loans with public and private entities [which] ... led the Commercial attache in Bogota to write to the Department of Commerce: 'I think Colombia is going wild on borrowing. She has started too many railroads and too many highways, and she has not any idea where she is

going to get all the money, except that the money is coming in so readily now, that she thinks she can borrow *ad infinitum*'²⁹.

They were also linked to considerable United States interests in acquiring oil concessions, which they did. As Taylor-Parks indicated, the " smell of oil ... [made] a settlement [on the loss of Panama] desirable and Colombian friendship essential '³⁰.

He added that the " ... desire for a share in the development of Colombian natural resources and the need on the part of Colombia for American capital and skill in the fulfilment of an acknowledged national destiny seem to have been determining factors in the payment of the 25,000,000 '³¹. Posada later suggested that " the money was not given to Colombia until the government was ready, by means of secret documents, to deliver petroleum and other resources to northamerican corporations '³². Senator Watson saw the indemnity payment as " an indirect subsidy to the oil interests '³³.

During this phase -between 1904 and 1914- contemporary regional development took place. Both exports and imports more than doubled. Shipments of hides, tobacco, gold, platinum and bananas also performed strongly. Although coffee constituted from 40 to 50 per cent of the total value of exports, there was not, as yet any intense specialisation in the production of this commodity³⁴. Railway transportation networks on the principal routes of trade were constructed. Loans were contracted in London - an indication of the nation's improving credit and financial capacity. The internal debt, however, seemed to be composed primarily of documents issued in recognition of claims, which originated in political disturbances, and of bonds representing railroad subventions or construction payments.

By 1907 the gold peso (equivalent to one-fifth of a pound Sterling) was adopted as a monetary unit. The outstanding paper was given official equivalence at a rate of 10,000 to the gold peso³⁵. By 1914 the nation was understood to have been

monetarily on a relatively sound basis and gold was in circulation for the first time since 1870. McQueen claimed that " the condition of Colombia in 1914 was, on the whole, better than at almost any other time"³⁶. And indeed, estimates of the national growth rate of per capita income were placed at 0.5 % per year after 1895³⁷, although the strength of this regional development was located in the coffee economy of the interior department of Antioquia.

Between years 1906 and 1913, foreign trade (as the total of exports and imports) grew from about 25 to 63 million pesos³⁸. Colombian exports rose from 14.4 million to 78.1 million between 1910 and 1919, underlining a dominant role of the export sector. External debt was less than four million pesos (mainly obligations of war) during the period³⁹. Despite credit restrictions, decreases in imports and diminishing demand price ranges for export commodities, the early effects of the European war were not as severe to the nation as they were to other Latin American countries with closer and more dependent European financial and trade connections. As customs collections furnished 75 per cent of ordinary revenue, treasury revenue was reduced⁴⁰.

After 1915 the export trade felt the impact of higher prices for commodities and increased demand in the United States revived coffee shipments⁴¹. This more formidable economic climate continued until the United States entered the war in 1917. By this time Colombia was in the final step of placing itself within reach of consistent economic growth. Estimates suggest that the economy was growing rather slowly, " perhaps at an average rate of 0.5 % per year "⁴² after 1895.

The results of this initial phase were the income generating effects of the export expansion, the stimulus to various sectors of the economy, the rapid growth of manufacturing output, the drawing of subsistence farmers into active participation through the production of coffee, investments into social overhead capital and the expansion of the railroad system from 100 kms. in 1909 to 1,500 kms. in 1922.

The next phase and undoubtedly the most crucial for regional development, was

the period between 1919 and 1929. External as well as internal forces were operating in such a way as to create an auspicious economic environment. There was a gradual rise in the price of coffee primarily due to Brazilian valorisation schemes. Major changes were introduced through institutional reforms, particularly in the fiscal and financial system based on proposals by the United States Financial Mission to Colombia led by Professor E., W., Kemmerer. The creation of a national central bank in charge of all monetary guidelines, and the consolidation of national budgeting are evidence of the implementation of such proposals. Indeed, for Kemmerer, banks were central, not regional, and in general he supported the trend towards strong governments and the economic political primacy of capital cities⁴³.

A formidable input of foreign capital in the form of working or investment capital, public sector capital loans and private investment followed the nation's established financial bill of health guaranteed by the Kemmerer mission . As mentioned earlier, the bulk of the public sector capital loans were designed to finance the railway transportation system.

This brought with it severe constraints, such as growth of external borrowing and debt servicing. These conditions, along with the enormous amount of direct foreign investment, increased the dependence of the external sector. Access to foreign funds was conditioned by fiscal responsibility. Policies such as the 1927 reduction of levy were therefore implemented. This led to the allocation of foreign exchange earnings to the importation of foodstuffs which could have been produced domestically.

But (despite heavy centralisation of economic policy) the most salient characteristic of this last economic phase was the unequivocal translucency of the weight of the notion of the 'regional' (in contrast to the notion of the 'national') in the process of economic development.

It is, after all, during this period that the 'nation' thrived with rapid economic

growth, exceeding that of years 1910 -1919. But, it was not a 'nation' that thrived. It was one particular region (the coffee producing interior) that did so. Nevertheless, the consolidation of several of the most economically important urban areas (and their regions of economic influence) took place. After all, the cities of Bogota, Barranquilla and Medellin were undoubtedly implementing the transition from agriculture to industry in economic-linkage creating undertakings.

(ii)

Although most data assembled refers to the mid-1920s and should of course be looked at with scepticism and caution, some national trends as well as a wider view of the Colombian context is perhaps best recently portrayed by Bejarano⁴⁴.

He has noted for instance that the most notable aspect of the Colombian economy around 1920 was the weight of its agricultural structure. It was characterized by the diversity of forms of utilization of the soil and the exploitation of the labour force⁴⁵. It was also hampered by low levels of productivity and by nearly nil levels of incorporation of technology⁴⁶.

The agricultural structure was heterogenous with small stretches of cultivated territory and only one fourth of the land was under any sort of economic utilization. The small portion of economically exploited land was divided in four agriculture and living stock activities: (i) the great cattle raising *haciendas* ; (ii) the great coffee *haciendas* ; (iii) modern enterprises in sugar and cattle; and (iv) the small coffee and non-coffee plots of the interior⁴⁷.

There was in addition an embryonic industry centered largely on the textile sector of the department of Antioquia and some consumer durables. An equally nascent railway development appeared that was useful only for the transport of exported coffee. However, it only linked non-coffee production to the market in a tangential way⁴⁸.

This was undoubtedly a discouraging economic picture in which, save the drive deriving from coffee exports, no other factor was perceived that stimulated economic transformation⁴⁹.

There were two complementary processes in the expansion of the interior's small plot economy that would make coffee the privileged product of the region: one was that coffee adopted itself particularly well to the types of settlements that surfaced during Antioqueño colonization.

The other was the expansion of the agricultural frontier carried out by colonization. It was part of a more profuse process of expansion supported by the occupation of public lands during the second half of the 19th century and beginning of the current one. Half of incorporated lands and 65 per cent of the coffee areas were handed over before the take-off of the bean's culture⁵⁰.

Although this fortified the [interior] *latifundio* (very large land properties), within a small but disperse stretch of land, the small plot economy began to prosper. Between 1906 and 1932, 216,817 hectares were allotted to the [interior coffee provinces] of Antioquia and Caldas, of which 12 % went to colonizers, 47 % to individuals with less than a 1,000 hectares and 41 % to large properties. Although slight, after 1910 the portions occupied by small producers propped up coffee production in the colonized zones⁵¹.

Regional economies such as those of 19th Colombia were characterized by low levels of income per capita and capital accumulation, scarce linkage with world markets, meagre technological incorporation of technology to agricultural activity and scarce labour force when compared to the availability of land⁵².

By the 20th century, coffee constituted the nucleus of the expansion of the internal market, not because of what the small plot economy represented, but because through the processing, commercialization and transportation of coffee it created a network of urban consumers and transport (namely railways) which expanded

and diversified the market. The railway network for example, expanded from 593 kilometres in 1898 to 1,571 kilometres in 1922. Of these railways lines, 71.4 % in the former and 89 % in the latter year were used for the transport of coffee⁵³.

Between 1910 and 1925 the total cultivated area of the nation increased a significant 59 % from 920,000 to 1,471,000 hectares. During the same period, areas dedicated to export cultures increased from 139,000 to 395,000 hectares. The cultivation of products for urban consumption augmented from 92,000 to 152,000 hectares while those for rural consumption rose from 680,000 to 925,000 hectares⁵⁴.

Urbanization between 1912 and 1925 was not unimportant. Urban population in 1925 was at 1,560,000 (23.2 % of the total) and already 25.7 % of it was populating Medellin, Bogota, Barranquilla and Cali, cities in which -between 1918 and 1925- population had grown annually at a rate of 4.4 %. This is in contrast with national rates of 2 % for total population, 3.4 % for urban and 1.6 % for rural population⁵⁵.

Between 1925 and 1930 the urban population grew by 24 %, e.g., increasing by 400,000 people in only 5 years. During this period the population of the country's four main urban areas grew by 31 %, that is, 127,000 people, a figure not to be disregarded for an essentially rural country⁵⁶.

Public work schemes concentrated mainly in the interior's oriental region generated 30,000 jobs and differentiating wages along the way between itself and agriculture. Between 1925 and 1928, the country's labour force increased by 140,000 people of which 42.4 % was absorbed by agriculture (especially coffee cultivation), 10.8 % by manufacture, 12.2 % by construction, 7.8 % by mining and 26.4 % by other sectors including government, transport, communications and energy ⁵⁷.

Cattle raising development was also a result of land concessions in considerable

extension especially in the interior department of Antioquia and in the NAC region departments of Bolivar and Magdalena.

Of the concession of 923,743 hectares handed over between 1910 and 1937, 273,531 (29.6 %) went to Bolivar, which showed an average of 1,688 hectares per property⁵⁸. Antioquia received 191,677 (20.75 %) showing an average of 1,453 hectares per property, while 102,013 hectares (11.1 %) were handed over to Magdalena, representing an average of 1,030 hectares per property⁵⁹.

The assorted conformation of the country's agricultural structure and the scarce industrial development caused extremely different forms of utilization of the labour.

During the 1920s the labour market's dynamism was much more emphasised in the interior's western (coffee) zone rather than in its eastern one. In the latter zone the only option for many labourers was to become either *arrendatarios* (labourers receiving small plots of land in exchange for obligatory work) or share-croppers on *haciendas*⁶⁰.

Additionally, working relationships had the common characteristic of isolating labourers from an already thin labour market because *agregados* (labourers allowed to work a patch of land as part of their wages) were forbidden by police law regulations to engage in working activities other than those assigned by the *hacienda*⁶¹.

The dependence entirely on *arrendatario* labour force made it unacceptable for the interior *haciendas* to reduce its labour force. This was especially so when demands were placed to allow *arrendatarios* to cultivate coffee for their own benefit. The loss of control of interior *haciendas* over their labour force was therefore a main bone of contention⁶².

This incidentally raises the question on whether interior *arrendatarios* were at all

able to afford to migrate to the NAC region when there was either a legal impediment for them to do so or, being deprived of the opportunity to make gains on his plot's products, decide to remain as such -at least until 1936, when a new law gave them rights of property over their plots⁶³.

The development of Colombian exports was late in arriving. Between 1905 and 1910 real exports per capita were just those of the colonial period (17th century) by 30 % and in comparison with the period 1835-1839 only doubled when the first efforts were carried out to export tobacco⁶⁴. Outwardly oriented development only began after 1910-1912, when the rise of coffee exports helped consolidate exports that had been systematically increasing⁶⁵.

The country's total growth was propelled by exports -particularly coffee- and by foreign debt. This allowed it to surmount the structural limitations that characterized its economy during the period under study here. This was the result of expansion of public spending, the greater capacity to import and the increase of internal demand from the greater revenues generated by coffee. These were reflected in the industrial, agricultural and transport activities.

Between 1925 and 1929, the per capita annual growth rate of GNP reached a 5.2 % level, the highest in the history of the country while total GNP grew at 7.7 % annually, equally one of the fastest throughout this century⁶⁶.

For an economy which by 1925 was reaching average income per capita levels of US\$115 (one of the lowest in Latin America) and for a country where, by the same year, 75 % of its 6.7 million people were employed in agricultural activities, these figures were not to be spurned⁶⁷.

National, departmental and municipal finances enjoyed an ample margin to begin or continue the public investments that the economy was demanding. Public spending tripled between 1926 and 1929, per capita public spending increasing from US\$5.5 to 13.7 during the period. Between 1925 and 1929, public investment

reached 29.4 % of total national investment, particularly in transport, where it rose 74.9 % during the same period⁶⁸.

The possibility of surmounting obstacles in the way of imports absorbed a great portion of the country's debt. The import quantum between 1923 and 1929 grew 134 % although 49 % of imports were of consumer goods⁶⁹.

As a closing remark, coffee suited the small plot economy well once it was stabilized because it did not require great investments of capital. Additionally, it was a durable product and easy to process, so there was no need to invest in heavy machinery. Neither was coffee subject to significant economies of scale. Although colonization of these lands was not done with the strict purpose of founding coffee cultivation areas, it is easily understood why they prospered after stable settlement of its first settlers⁷⁰.

Prevailing Level of Wages in Pre-Turn of the Century Colombia

(ii)

Several studies on 19th century interior region wage levels in Colombia have been done. Cotes⁷¹ estimated wages for labourers in Samper⁷² showed some real wages between 1848 and 1892. Bustamante-Roldan⁷³ presented data on interior coffee plantation wages. Deas⁷⁴ also presented data on interior coffee plantation wages. Hemberg⁷⁵ indicated the standard of living of Bogota's working class before the second world war. And Rivas⁷⁶ gave some indication on mid 19th century interior tobacco industry wage levels.

Although Urrutia-Montoya showed that for urban (Bogota) government labour " [the period] 1863-1884 ... produced a slow increase in nominal wages ... [and] ... [the period] 1880-1895 revealed stability for labourers"⁷⁷ wages as a whole, and agricultural wages in particular, had been traditionally low in Colombia.

In a late 19th century report, Bunch stated that " the rate of wages is very low and should not be raised"⁷⁸. Particularly for the 1870's, although not specifying

whether it was a daily or weekly rate, he equally noted that purchasing power amounted to 0s 10d (20 cents) for agricultural labour and 3s (80 cents) for skilled labour⁷⁹.

British Acting Consul Diez also noted in 1871 that in Panama (then part of the NAC region), " ... those employed by the Railway Company struck for higher wages, requiring 4s per diem instead of 3s 2d. , their daily pay"⁸⁰. British sources also indicated that in Cartagena in 1874 " ... wages given to labourers in the town are 3s 2d. per day and in the country 1s and food, consisting of rice, plantains, maize and occasionally, dried beef"⁸¹.

Nevertheless, in the 1880's, St. John noted that " the rate of wages, both for skilled and unskilled labour, regard being had to the quantity and quality of the work produced, is above the average of the last twenty years"⁸².

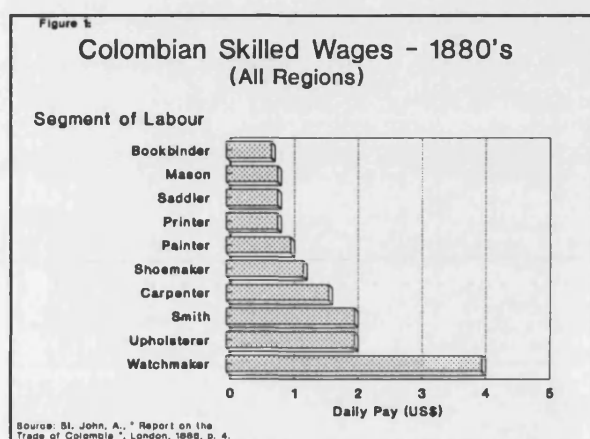
Table 1 below shows the different wage rates in the 1880's for different classes of skilled labour. According to the data, the simple unweighted average wage rate for skilled labour in Colombia in the 1880's was US\$ 1.49. **Figure 1** shows the barchart which illustrates the differences. **Table 2** shows wage rates for unskilled classes of labour for the same years was distinctly lower. The simple unweighted average wage rate for unskilled labour was therefore US\$ 0.33 . **Figure 2** shows the barchart graph which illustrates the data.

Despite St. John's generalisation of above average rates of wages for the twenty years preceding the 1880's, ordinary agricultural labour wages dropped considerably from the early 1870's to the late 1880's from 20 cents (0s 10d) to 15 cents - an 25% decrease in United States currency; an equally significant 26.7% in pounds Sterling (that is, from £0.04 down to £0.03).

TABLE 1. COLOMBIAN SKILLED LABOUR WAGES: 1880's

<i>Class of Labour</i>	<i>Price/Day (US\$)</i>
Bookbinder	0.70
Mason	0.80
Saddler	0.80
Printer	0.80
Painter	1.00
Shoemaker	1.20
Carpenter	1.60
Smith	2.00
Upholsterer	2.00
Watchmaker	4.00

Source: St. John, A., *Report on the Trade of Colombia*, (London, 1886), p.4.



British Vice-Consul Carr noted that in Santa Marta in 1887, "labour at present is sufficiently abundant and cheap, the wages given to an ordinary day labourer being from 60 c. to 70 c., which represents, at the present rate of exchange, about 1s 6d. only"⁸³.

The following year in 1888, Wheeler pointed out that "wages, salaries and, as a rule, rents remain more or less the same as they were ten years ago"⁸⁴. If Urrutia-Montoya's Bogota government wages are viewed as 'national' wages, this would mean therefore, that in 1888 they were slowly on the increase.

TABLE 2. COLOMBIAN UNSKILLED LABOUR WAGES: 1880's

<i>Class of Labourer</i>	<i>Price/Day (US\$)</i>
Town	0.50
Country (includes food)	0.15

Source: St. John, A., *Report on the Trade of Colombia*, (London, 1886), p.4.

Wheeler's views on wages however, provided some basis for speculative interpretation. Few for example, were as explicit as he was when he indicated that "the wages of farm labourers on the savanna of Bogota are from 30c. to 40c.

a day, equivalent now in English money to from 7 1/2d to 10d., or taking the average, 5s. a week ... in the hot country the wages are lower, but the requirements are smaller as regards clothing, lodging and food, is cheaper"⁸⁵.

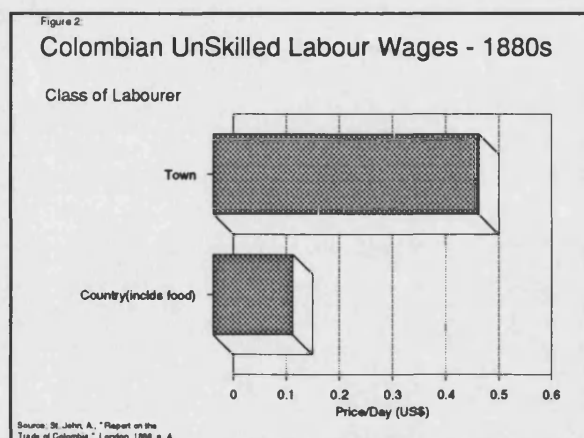
As the term '*tierra caliente*' is

arguably used in Colombia by interior people to denote the hot country within the interior, if this is what Wheeler referred to, then two interpretations may be suggested. First, that Wheeler would be confirming that not all interior wages were slowly rising as for example, Urrutia-Montoya's Bogota government wages. Second, that he --perhaps inadvertently-- revealed early signs of segmentation within the interior. Segmentation in this case would be commonplace there, at least from the perspective of an upper limit, represented by a simple unweighted average of 8.75 d (£0.04).

Assuming (all other things remaining constant) that St. John's '*labourer in town*' spent the nominal wage differential (relative to the country labourer's wage, which was in addition to food) of US\$ 0.35 on food, the lower limit would be represented by 2.63 d (£0.01).

If Wheeler was making reference to the NAC region (which is definitely 'hot' country), it suggests that this would be the preview to the contention that a major and significant destructive upsurge from low to high wages took place in the region (at least from the turn of the century until the end of the thirty's as we shall see further on).

This is in fact what contributed to the region's economic demise. Fals-Borda clarified this when he stated that wages " could go from five centavos daily in the interior to four pesos monthly on the [NA] coast [and that] (in general, wages



were much higher in the hot country rather than in the cold)"⁸⁶. So, Wheeler probably referred to interior sections of 'hot country' where wages were indeed low, because, only assuming the NAC region labourer worked thirty days per month, Fals-Borda's data would suggest the labourer would thus be paid CP\$ 0.13 per day, or just under three times as much as his counterpart in the generally 'cold' interior country.

Wheeler provided further insight in another of his reports (equally produced in 1888). He indicated the occurrence of a definite national decline in wages in a very short period of time. He noted: " the rates of wages for the different classes of workmen and labourers have not materially changed in the last few years"⁸⁷.

This, by the end of the century was of course worsened by the 'War of a Thousand Days'. It left deep rooted indications of its terrible effects on the level of wages. For example, United States Consul-General Beaupre stated in 1900: " not withstanding the great depreciation of the purchasing power of Colombian currency, salaries and wages have advanced little, if at all"⁸⁸.

Thus the general rule seems to be that the initiation of the century was very much a low-wage one for the nation. Consul-General Beaupre further noted that, in 1900, " house servants earned [CP]\$ 5 to [CP]\$ 10 (50 US cents to [US]\$ 1) per month; labourers from [CP]\$ 1 to [CP]\$ 1.50 (10 to 15 US cents) per day, and clerks in stores in commercial houses from [CP]\$ 60 to [CP]\$ 100 (\$ 6 to \$ 10 US currency) per month"⁸⁹. What is more significant however, is that these wage rates suggest that wage differentiation in an already low-wage interior was equally existent at the turn of the century.

The question on how wages in the nation as a whole grew between 1900 and 1930 is difficult to address. This chapter is a contribution towards an answer. As noted earlier on, an economic history of national wages in Colombia is yet to be researched and written. Nevertheless, Urrutia-Montoya and Pardo-Parra's contributions to the economic history of regional (namely interior urban private

and public sector data for Bogota and Medellin) wages do provide an indication of the growth of some wages in the interior⁹⁰ as will be seen further on.

Indeed, Berry and Urrutia-Montoya admit that " it is unfortunately impossible to elaborate nominal or real wage series for transformation industry labour which would apply to the whole nation and for relatively long periods of time"⁹¹. Data collected before 1955, they add, " which were frequently of dubious quality, were published only for certain regions"⁹².

As mentioned earlier, despite a general low-wage interior, St. John succinctly pointed out that within that region, rural agricultural labour - discounting food allowance - could easily double their wages in the 1880's by moving to urban areas. According to Urrutia-Montoya, " nominal wages increased at an unprecedented rhythm - [Bogota] Manor House labourers' wages moved from [CP]\$ 1.04 to [CP]\$ 2.75 between 1895 and 1901 - undoubtedly due to the fundamental reason of inflation provoked by growing National Bank emissions [emphasis added]"⁹³.

The exception to the general rule of low wages (particularly the agricultural level) ruling at the turn of the century Colombia however, was certainly the coffee sector in the interior. It precipitated a momentary sharp upward jump in wages, which the layman - yet even the expert economist - would deem absurd.

This 'absurdity' can only be attributed to the effects of war. Urrutia-Montoya suggested that increases in Bogota government labour wages for the period 1872-1880 and for the year 1895 were probably due to the 1876 and 1895 civil wars⁹⁴. In similar fashion, the " Thousand Days' " civil war probably generated the same effect for 1903.

This war witnessed the exchange rate surpass the limit of Colombian Paper⁹⁵ \$ 10,000 per Colombian Gold Peso⁹⁶ \$ 100 and was responsible for " the abolition of the forced acceptance of paper money and the fixing of the official exchange rate of 10,000 % for the withdrawal of paper money in circulation"⁹⁷.

British Vice-Consul Dickson reported this 'absurd' wage in 1903: "wages on coffee plantation have risen considerably. The picking is done by women and children and is paid by weight. The rate of wages before the war was from [CPP] 20 c. to [CPP] 50 c. [1 1/2 d. to 4 d.] per arroba (25 lbs.) but this has now risen to 1 dollar 60 c. at which rate the pickers generally gain about 6 dollars a day, in addition to their food. Five to 6 lbs. of coffee, weighed and received from the pickers in the cherry only gives 1 lb. after being prepared and dried"⁹⁸.

According to Urrutia-Montoya, at the least, Bogota government labour wages "which started in 1905 at a lower level than that of 1863-1872, showed a slight tendency to increase between that date and 1915 ... [experienced an] abrupt increase in 1915-1916 ... [and thus] ... the period 1917-1930, is as a whole a period of increase of wages. [Although there was] a momentary interruption in the upward trend in 1922 ... from 1923 wages went up without interruption until the world crisis with its repercussions being manifested in an abrupt fall in wages between 1930 and 1932 to the levels of 1920. A slow recovery as of 1932 allows that wages in 1939 reach levels of the period before the crisis"⁹⁹.

Urrutia-Montoya's analysis is confirmed -at least for years 1923 to 1929- by several additional views. British Vice-Consul Garnett-Lomax in 1929 ascertained that "according to one authority, agricultural wages have risen from 30 centavos per day in 1923 to a present level of 1 peso 50 centavos. The level of wages paid to labour in the national Government public works was increased from an average of about 3s. 9d. per day in 1926 to 4s. 9d. per day in 1927"¹⁰⁰.

Machado argued that the large capital input unleashed by the United States' indemnity payment for Colombia's loss of Panama "produced an increase in agricultural wages which at the beginning of this vertigo of millions did not surpass an average wage of from 30 to 35 centavos, to situate itself towards 1928 at \$ 1, up to \$ 1.50"¹⁰¹.

And although Kepner does not mention levels of wages as high as Garnett-Lomax

and Machado, he does provide confirmation of an abrupt fall in wages - not between 1930 and 1932 - but in 1929 when he noted that interior coffee sector wage levels actually declined: " in Colombia at the end of 1929, in spite of the fact that 50,000 workers were unemployed, coffee laborers could command 70 and 80 and more cents a day"¹⁰².

Despite Garnett-Lomax, Machado and Kepner's views (as well as Urrutia-Montoya's analysis) there is the powerful dissenting view of someone who, as the Colombian Federation of Coffee Growers' director (Alejandro Lopez) knew what the reality of wages was. Lopez, (presumably addressing the matter of interior coffee sector wages) noted in 1926-27 that " in Colombia, there has been something like a million agricultural labourers of the lower class, commonly addressed as peons, who are paid a fixed wage according to the level ruling in each place, for ten hours of work. Before this period of official activity, they used to be paid those ten hours from 20 centavos in some places up to 50 in others"¹⁰³.

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CHAPTER III

THE UNITED FRUIT COMPANY AND THE CULTIVATION OF BANANA IN THE NAC REGION

Operational Intricacy of the Monopoly

The most crucial effects labour shortage had were those upon the banana sector. This proved to be highly significant because, above all, labour shortage unleashed perhaps the single most detrimental economic phenomenon in the region: the introduction of the highest regional agricultural wages in the nation.

With the arrival of the banana sector's large-scale corporate production unit, the UFC, wages were to be pushed above average levels by banana monopoly production, at the end of the first and, especially, by the beginning of the second decade of the present century.

Within the context of a labour-shortage economy, the UFC's role as prime deviser of economic transformation (through the payment of high wages and introduction of segmentation) at the base of the NAC region's economic structure, warrants some elaboration especially about the operational intricacy of the international banana monopoly.

With the merger in 1899 between fruit merchant Andrew W. Preston's Boston Fruit Company (created in 1885) plus its seven subsidiaries of which three steamship companies (America Fruit Company, Buckman Fruit Company and Quaker Fruit Company), three fruit growing companies in the Caribbean and the selling agent in the United States (the Fruit Dispatch Company) and railroad builder and international financier Minor C. Keith's interests (Costa Rican Tropical Trading and Transport Company, American Snyder Banana Company and British Colombia Land Company), the creation of the powerful United Fruit Company took place¹.

Indeed, the UFC's influence extended much more so when, as Wheeler, Curtis &

Haight report, it secured a " controlling interest in the stock of the principal importers who had not already become associated with the United Fruit Company. Thus it purchased a controlling interest in the Bluefields Steamship Company, ... the Orr - Laubenheimer Company, ... the Camors - McConnell Company, ... the Thacker Brothers Steamship Company and the Belize Royal Mail and Central American Company. In each case the stock held by the United Fruit Company was either one-half or one share more than one-half , with the exception of certain instances in which the whole, or a great majority, of the stock was purchased"²

Additionally, Wheeler et.al. report that " the Camors-Weinburger Banana Company became a part of the combination about the year 1899 by a purchase of the majority of the stock by the United Fruit Company"³. In short, the UFC, according to Kepner and Soothill, through its " monopolistic concessions, the domination of transportation facilities, the chartering on ships of lines other than its own of space that competitors might use for banana cargo, the control of the supply of fruit through banana purchase contracts so arranged that they expire at different times, and in other ways, the United Fruit Company drives actual or potential competitors to the wall"⁴.

One major dramatic factor in the UFC's ruthless and avid hunger for the control of the market was straightforward manipulation of prices. A way in which independent operators were disposed of is described by Wheeler et.al., in this way: " Jobbers in the vicinity [of Henry Bayer & Co.] were warned that the Fruit Dispatch Company, would not tolerate purchases from Bayer. Each time one of Bayer's ships arrived, the Fruit Dispatch Company would drop its prices far below the margin of profit, and thus compel the sale of the independent fruit at a loss, since owing to its perishable character, it was necessary to dispose of it without delay. When Bayer and Co. had disposed of its cargo, the Fruit Dispatch Company's prices would at once go up to a very high figure, to be held there until the next independent cargo arrived"⁵.

The result of this according to Wheeler, et.al., was " doing business at a loss for the combination as well as for the independent, the large resources of the United Fruit Company, and the large profits which it was able to make at places where there was no competition, enabled it to push competition with independents to an extreme, and to bring about a condition where it was merely a question of which side could stand the loss of money longest"⁶.

The UFC regulated supplies and prices by a technique which since its creation in 1899 enabled it to have, as Wheeler, et.al., put it, " ... full control of the sales and prices of the fruit imported by all corporations named, which comprised altogether some 80% to 90% of the importations into the entire country"⁷.

The technique was to fix prices on its eastern as well as southern divisions which would govern sales in the United States market through reports which showed " the number of cars sold in the particular district from which the report comes by the Fruit Dispatch Company during the week, and a similar report as to the fruit sold by each independent operator. The reports state what jobbers buy of the independents , what measures of competition are being adopted to stop independent sales, and in general the advice of the various branch managers is asked with reference to that end"⁸.

But the technique was more draconian than it would seem to appear. Wheeler, et.al., explain that " ... since the existence of the UFC, the Fruit Dispatch Company has deliberately destroyed fruit for the avowed purpose of maintaining the market price which it desired to establish. This has been done even when the fruit destroyed has been in good condition and saleable at a profit, although at a price less than that fixed by the Fruit Dispatch Company's pricing committee ... [and] ... the amount of fruit to be imported by subsidiary companies has been restricted ... in order to avoid overstocking the market and preventing the competition which ensues from such a condition"⁹.

As Wheeler, et.al. point out, these UFC pricing committees were able to " tell at

a glance every car of bananas sold by any independent operator throughout the entire country and are given elaborate data on which prices for the ensuing week are fixed"¹⁰.

As a result of this, there were " many instances where jobbers were threatened with loss of their business if they continued to deal with independent importers, and accordingly ... [they] ... have been forced to lose their fruit for lack of a purchaser. There have been instances where fruit has been given away by the Fruit Dispatch Company , in order to prevent the independents from selling what they had imported"¹¹.

Indeed Wyle has equally pointed out that " in 1931, during the depression, for instance, it made no shipments of fruit from July to September, and the bananas were allowed to spoil in the fields. The quantity of fruit rejected for shipment because it does not meet specifications also varies from time to time"¹².

Illegal (perhaps even criminal) practices such as price-fixing were followed by the UFC. Conklin argued that UFC price-fixing was a crime as " an exercise of joint economic power through agreement or collusion to raise prices, exclude competitors and restrict price competition"¹³.

Indeed, the UFC was the sole 'economic power' as a monopoly with no real need to collude: it quite simply raised prices, excluded competitors and very definitely restricted competition. Furthermore, Conklin argued this was an offence which is " particularly common in industries in which the bulk of output is in the hands of a few producers who can easily convene to fix prices, where the demand for the product is price-inelastic, [and] where prices are unstable ..."¹⁴. The bulk of output was certainly in the UFC's hands and it certainly fixed prices.

However, it is difficult to conclusively prove the net existence of a demand of bananas in the United States and the United Kingdom market as being price-inelastic. The UFC certainly knew how far to push up prices for their

consumers. Considerable increases in prices would have inevitably resulted in reduction in demand.

The case for instability of prices is another situation and it certainly existed for the UFC's fruit. To say the least, grounds for investigating a case in criminality on the UFC's price-fixing techniques, existed. Indeed, as Conklin points out, " when greater profit can be made through the fixing of prices than through legitimate competition and when the risk of legal action is low, favourable conditions for this crime exist"¹⁵.

All the ingredients (great profits, price-fixing and low legal risks) were there for the UFC to qualify for criminality within its own country but it was never knowingly tested. It is difficult to imagine the UFC having any obstacles for such qualification in a country such as Colombia during the first three decades of this century. Recently bruised by the loss of Panama and a disastrous civil war (1899-1903), Colombia could only welcome the kind of capital investment the UFC could bring regardless (or unaware) of the fact that the net return to its own regional economies would be low.

A consequence of the emergence of the UFC was the elimination of competition that existed earlier between importers to the largest market for banana producers and the definite manipulation of prices. Wheeler et. al. reported how the price of bananas went up " considerably since the formation of the United Fruit Company, and even in the cases where it sells fruit to jobbers direct, without the intervention of the Fruit Dispatch Company, these sales are so safeguarded as to ensure the absence of competition with [it] ... In Baltimore, for example, each jobber who buys from the United Fruit Company is required to state to what point he expects to send his fruit and where it is to be sold, and sales which conflict with those of the Fruit Dispatch Company are not permitted"¹⁶.

Finally, more than regulating, the UFC -as a monopoly- showed a tendency to restrict supply. This is clearly pointed out by Kepner and Soothill when they state

that " the fruit monopoly, after having driven off other potential purchasers, does not want the fruit. Sometimes the hold of a particular ship cannot accommodate all the bananas available. Moreover, it is impossible to regulate the supply of bananas so that it will accord with the demand of the market at each season of the year"¹⁷.

The way the UFC actually restricted supply came about in a number of ways, such as Kepner and Soothill describe : " when the UFC desires to limit the supply of fruit it discards bananas which it has raised or purchased. Occasionally it cuts mature bananas on its own plantations and leaves them to rot in their native habitat; again, after purchasing bananas from private planters it abandons them at trackside ; more frequently it rejects considerable quantities of fruit on arrival at the wharf; and at other times it heaves fruit overboard outside of northern ports, even though at the time the unemployed may be suffering for lack of nourishing food. While sometimes bananas which the company does not desire are thus purchased and later junked, more frequently the loss is sustained by the banana growers"¹⁸.

Therefore, the controlling factors within its consumer market and production centre provided the UFC with the necessary financial backbone it needed to afford the payment of high wages in the NAC region. As regards the important controlling factor of restricted supply mentioned above, a concluding remark may be added. This factor influenced the size of the range of the UFC's returned value during seasonal market slumps as well as hard times.

As the fruit supply was of such large numbers to be sold at existing prices the UFC could, as Kepner and Soothill have put it, " allow the prices of bananas to fall to the advantage of the mass of consumers, or it could keep them up in true capitalistic fashion to the advantage of its stockholders by the restriction of the supply and the monopolistic dictation of prices"¹⁹. The fact that the UFC chose the latter option had significant impact in the shaping of its ability to pay high wages and overcome the labour shortage constraint.

Cultivation of Banana in the Region

Banana cultivation was in operation in the Santa Marta district of the NAC region of Colombia quite some time before the UFC was able to impose its monopoly there. Adams mentioned that "bananas were cultivated in this section long before Mr. Keith entered the field"²⁰. This seems to be the case. British Vice-Consul Dickson in 1903 indicated that "banana cultivation in the district of Santa Marta was begun in the year 1890, but it was not until the year 1892 that exportation commenced from this district"²¹. And Patiño recently indicated that the beginnings of the banana industry were at the end of the 19th century"²².

British Minister Stronge confirmed this when some years later he informed that "the export trade from Santa Marta is of recent origin and may be said to date from 1892. Since then the methods of cultivation have been greatly improved"²³. However, in 1910, British Consul-General Huckin clearly stated that "banana exportation began in 1891"²⁴. Indeed, Wyle indicates that "the first shipment of bananas from Santa Marta was made on March 21, 1891. In these early years of the industry the crop went largely to New Orleans"²⁵.

In similar fashion, when in Colombia, Professor Kemmerer (head of the financial mission to Colombia bearing his name) was informed that "between 1890 and 1892 the Santa Marta Railway reached the town of Rio Frio"²⁶. It was "here [that] the banana industry began with small shipments to New Orleans by Sanders, Phillips, Hoadley & Company; the Tropical Trading Company; etc."²⁷.

Several years earlier however, in 1887, British Vice-Consul Carr reported that "with the prospect of the railway shortly connecting this locality with the port of Santa Martha, considerable interest is being shown in the cultivation of bananas for exportation to the United States of America, where there is an ever-increasing demand for the fruit"²⁸. Carr also pointed out the important logistic advantage of Santa Marta as "the steamers employed in carrying the bananas will of course make this their last port of call"²⁹.

By 1895, banana exports proper took off. As British Vice-Consul Macgregor has reported, Santa Marta's " exports consist almost entirely of bananas to ports in the United States "³⁰. By 1897, British Vice-Consul Carr reported that in the Santa Marta area of the NAC region, " the cultivation of bananas for the United States markets, after eight years of varying success, is now in what may be called a prosperous condition, some 17,000 having been paid last year to the planters for their fruit"³¹.

A year later in 1898 British Vice-Consul Carr indicated that " the amount of bananas exported during 1898 was somewhat less than in 1897, but this was owing to the decrease in the tonnage owing to the Spanish-American War and not to diminution in production. The production is continually on the increase and the methods of cultivation are being improved, as the business is a remunerative one when properly managed"³². And by 1899, the Monthly Bulletin asserted that bananas were being " conveyed from Barranquilla in small US steamers to the markets of Mobile and New Orleans ... Fifteen firms in Barranquilla ... deal in bananas"³³. So, at the turn of the century, small to medium scale banana production was probably the base of the sector.

As Wyle pointed out, " since 1900 the Magdalena Fruit Company [subsidiary of the UFC] has owned and cultivated most of the banana lands in Santa Marta. In the early days, the company owned all the banana lands, but gradually private owners have developed plantations in the Santa Marta district"³⁴. But the upsurge of the banana sector in the NAC region came with the presence of powerful investment by the UFC. According to information supplied to Professor Kemmerer, " in 1901-02 the United Fruit Company succeeded the Tropical Trading and Transport Company which was engaged in the purchasing, and transporting of fruit to the New Orleans market. It also acquired the interests of the Colombian Land Company, consisting of 9811 acres of land ... and of which 1299 acres and 112 shares were in bananas and pastures respectively"³⁵. It was " here [that] the development of the banana industry commenced on a commercial scale"³⁶.

It was at this point that " the Company commenced to develop by planting in a small way on its own behalf, and to encourage private owners to plant"³⁷. Of course, as we shall see later, the UFC's encouragement to individual growers to plant on their already used lands, while it grew on new lands had crucial profit-making objectives. By 1903 banana cultivation in the Santa Marta district of the NAC region was well instituted. British Vice-Consul Dickson indicated that by that year, there were " about 4,000 acres irrigated and under banana cultivation, and the produce requires for its transport to the United States a steamer every week"³⁸. The transport of the fruit was, according to Dickson " carried on by the Santa Marta Railway Company, a British concern"³⁹. However, Dickson also pointed out difficulties in the cultivation of the banana because " irrigation costs are costly and generally outside the possibilities of the small planters"⁴⁰.

Already in 1903 the cocoa sector of the region was being pushed aside by the banana sector. As British Vice-Consul Dickson pointed out, it " had little attention owing to the higher and quicker profits to be made by the banana cultivation"⁴¹.

For the following year of 1904, British Vice-Consul Carr reported that due to the " long dry season, cultivation of bananas made irrigation absolutely necessary ... six rivers are utilised in this way, and by deep canals their waters are constructed to the surface of the land and then, by means of shallow distributing ditches, the lands are flooded as often as necessary. Some 10,000 acres of land are under irrigation in this way and the acreage is gradually being extended ... the cultivation of bananas is increasing steadily and once a week a steamer of the Hamburg-American Line is loaded with this product"⁴².

For the year 1905, British Vice-Consul Carr pointed out that " the cultivation of bananas is increasing steadily in the district of Riofrio, distant 30 miles from the port, and the output of 1906 promises to be considerably in excess of that of 1905"⁴³. For the same year US Consular Agent Granger reported that " banana planting is being extended ... near Santa Martha. The fruit is excellent, and it is

expected that this will become one of the important industries of the country".⁴⁴.

By 1906 British Consul Gillies informed that due to " an increased demand there has been an enormous development during the last few years in banana cultivation ... [and] ... the banana enjoys great advantages over other products of the country, especially over those of the interior, in that it is more easily cultivated and is not burdened with the large freight expenses which makes the export of coffee and other export articles produced in the interior so expensive ..."⁴⁵.

Gillies noted that "a good deal of land has recently being bought in the neighbourhood of Santa Marta for the cultivation of banana, and both native and foreign capital is being largely invested in the business ... The United States is still the largest consumer, but there is now a good market in Europe, and it is increasing year by year. The bananas produced in the district are contracted for by the United Fruit Company of New York, and are shipped to the port weekly ... From all accounts the cultivation of the banana is a most lucrative investment and the prospects for the future, in view of an ever increasing demand, are certainly bright"⁴⁶.

Indeed, United States Consul Demers asserted in 1906 as well that in the Santa Marta district " all the fruit is purchased and exported by the American company"⁴⁷. By 1907 British Minister Stronge reported that the banana export trade from Santa Marta " has greatly increased and the fruit commands as high price as any in the New York market ... [and] ... shows the rapid growth of the trade. It is expected that the export will reach 2,500,000 bunches at least in 1908, and as a large area suitable for cultivation has now been opened up, a further increase is expected"⁴⁸.

In 1908 the cultivation of bananas increased consistently and as British Vice-Consul Carr pointed out " extensive plantations have been commenced ... [as well as] ... new irrigation canals ... constructed"⁴⁹. Carr also estimated production of bananas in 1909 would be " at least 50 per cent in excess of the output of

1908"⁵⁰. Carr equally stated that " the cultivation of bananas is by far the most important and remunerative industry and the prosperity of this region is entirely dependent upon it"⁵¹. Indeed, Carr reported an increase in banana production of 67,499 for 1909 ⁵². He added that this represented " an increase of 40 per cent, and it is estimated that the output in 1910 will be 50 per cent in excess of that of last year"⁵³.

However, in the same year of 1909 British Pro-Consul Stevenson reported competition had arisen for the Santa Marta area banana production. He indicated that the national government " in December 1909, granted a 50-year concession to the Consorcio Albingia of Hamburg, with the authority to transfer the same to the Hamburg Colombien Bananen Actien-Gesellschaft, for the establishment of plantations for the growth of bananas for export on an area of about 12,300 acres (5,000 hectares) of land on the eastern coast of the Gulf of Uraba"⁵⁴. But, by 1912, United States Consul Manning was confident enough to inform that " it said that the United Fruit Company and other interests may yet increase the output from the Santa Marta plantations by 50 per cent ... "⁵⁵.

It was in the 20's that the UFC seems to have consolidated its position. Twelve years after Manning's confident report, in 1924, the United States Department of Commerce was confirming that the banana industry was indeed " practically controlled by an American company with headquarters in Santa Marta ... [and] ... the banana industry being very dependent upon rapid and suitable shipping facilities, must necessarily be developed by companies with a large amount of capital at their disposal"⁵⁶.

By the year 1926 British cotton expert Pearse was in a position to indicate what has to be a major and crucial argument here. That the UFC " has virtually the world's banana monopoly. They are most anxiously concerned with the speedy handling from plantation to steamer, and under those conditions they can afford very high wages for this work"⁵⁷.

When in 1928 the Colombian Ministry for Industry suggested that " the United Fruit Company has the de facto monopoly in the banana market, monopoly established throughout many years for different factors"⁵⁸, it was far too late to consider the need to curb such leakage creative characteristics of a far too efficient, influential and ruthless profit-maker. Previously, the aforementioned Ministry had already pointed out one important factor: " the power necessary to obligate planters -without telling them- to sign sale contracts of the fruit for long periods, generally 5 years"⁵⁹.

But the real cause of the UFC's monopoly as explained by the said Ministry was " the solvency of the industry achieved by the UFC, a company which extended its economic net with the approval of those who benefited from it and that, having channelled its activities in this way, moved from the straightforward industrial precise banana investment loan to procure the general insolvency of many non-industrial citizens; and from the well calculated loan for industrial and effective needs to the knowingly uncontrollable loan"⁶⁰.

In his analysis of the banana industry, Kepner poignantly stated that " entrenched behind monopolistic concessions, holding in the same hand control of transportation facilities and banana production, being able to a large extent to dictate terms to planters and laborers, having greater income, influence and power than many governments, the United Fruit Company is able to amass larger profits than it could were it operating under either genuine competition or governmental regulation"⁶¹.

Rippy also suggested that the UFC " because of its shipping facilities ... has made possible a large native banana industry which probably would not otherwise have developed, although it is able to purchase the bananas of the native producers at virtually its own monopoly price"⁶². And Kepner & Soothill argue that " at the time of its organisation, however, it dictated prices and controlled about 80 per cent of the banana imports"⁶³.

But, before the consolidation of the UFC, Kepner indicated that " no limitation was put upon the quantity of fruit which each importer could handle, and the quantity of fruit thus placed upon the market and natural competition determined prices in the United States "⁶⁴. Therefore, according to Randall, in the NAC region, quite plainly the UFC " enjoyed a marketing monopoly ... on bananas"⁶⁵. As Wyle equally pointed out, " since the entire marketing mechanism is controlled by a single organisation, the supply to consuming markets could be limited readily, and the course of banana exports, therefore, did not follow that of other agricultural and raw-material products"⁶⁶.

The real nature of the UFC was its establishment as an agricultural trust in the most important market, that of the United States. As the German Imperial Consulate indicated, the UFC " occupies in more than one way a peculiar position among American trusts. While almost all others are active in one field of industry and seek to monopolise the manufacture of article, the United Fruit Company is an agricultural trust. It is engaged mainly in the production and marketing of a natural product , and one too, that belongs to the Tropics -the banana"⁶⁷.

Randall has also stated that the UFC first entered Colombia by " the acquisition of the British - owned Colombia Land Company by Minor C. Keith ... [who] ... gained control of the Santa Marta Railway, another British enterprise, which had been used for sugar transit in the Santa Marta area since the 1880s ... [and] ... acquired a monopoly on railroad transportation in the Department of Magdalena. The Santa Marta Railroad ... [was] ... almost exclusively for shipping bananas to Santa Marta for export"⁶⁸. The special incentive for the banana industry as Kepner points out, was indeed the " desire to monopolise the production, transportation and selling of bananas"⁶⁹.

The Nature of the Region's Labour Force

Part of the NAC region labour force which included subsistence farmers and *peones* was already part of the monetary economy. This was so because they had

historically evolved within the *hacienda* system which at least had 'semi-proletarized' its labour⁷⁰. Additionally, " at least eleven enclaves from 1850 to 1929 (without including petroleum)⁷¹ in the region did so as well during the mid 19th century ⁷².

The *hacienda* (which means a "very large land estate") ⁷³ system was at the crux of whatever cultivation could be accomplished. In the NAC region it was the economic mechanism which allowed landlords the appropriation of agrarian surplus produced by indigenous communities.

It operated as a 'production unit and effective dominion over the new society'⁷⁴. The basic structure of the *hacienda* as of the 17th century consisted usually of an absentee landlord, a *mayordomo* (administrator) and his subordinates⁷⁵.

These consisted of (i) *terrajeros*, who were given a plot of land to clear and plant maize and other staples; and (ii) *jornaleros* (wage-labourers) who were 'free vagabonds' that frequently employed themselves in the cattle business⁷⁶ who were 'positively discriminated' if they were Spanish-stock whites. Indigenous ones, who were *concertados*, received eight-hour day wages plus 'perks' such as food, clothing, shoes and housing but within their own *reducciones* (limited spaces not within the hacienda premises)⁷⁷.

Alongside the hacienda there did exist groups of poor Spanish-stock *pobladores*. Their economic contribution and social function as founders of villages, as *colonos* and as direct creators of wealth, led them to organise *minifundio* (small shared tracts of land) societies (as opposed to *latifundios*, the private monopoly of land) which no doubt offered solidarity, respected collective rights, and motivated self-help as well as support amongst families⁷⁸.

The system generated a cotton cultivation process left first to *peones* (rural labourers) and later to *minifundistas* (small landowners). Fals-Borda recorded that in the 18th century, " cotton was being tried out since the colonial period (there

were experimental cultivations at the hacienda de Portaca, in front of Mompo, in 1784). Its packaging and commercialisation had been sources of enrichment for don Pedro Martinez de Pinillos, the main merchant in the region. It was exported by foreigners from Barranquilla to New Orleans for some years as well as from Cartagena to the same port by Juan Trucco Lanfranco, which was harvested in his farm in Ballestas. Cotton, therefore maintained itself on a small scale during the 19th century more as a product from the hacienda"⁷⁹.

The negative consequences included the necessary control of vast areas of land. This deprived labourers of economic alternatives, except subsistence plots within the hacienda. The result was to bind labour by means other than money wages and to restrict labour's consumption of profits arising from the sale of the product.

These *peones* were part of the consequence of the *hacienda* system's effect of breaking up of the NAC region's social formation. Some were '*colonos independientes*' (independent colonists) forming groups of '*colonos marginales*' (marginal colonists) characterised by self-sufficiency, produce barter and local distribution of surplus creation.

Size of the Region's Banana Labour Force

Numbers for the size of the NAC region labour force -in general terms- were not conspicuously available in the primary or secondary evidence researched, but some figures did emerge. There was however a particular facet of urban and rural supply of labour.

Although historically the larger percentage of all regions' labour force was engaged in primary sector economic activities (57.2 % in 1870, 70.1 % in 1925 and 62 % in 1945) ⁸⁰, the average annual growth rate of twelve major cities were significant: 3.8 % for the intercensal period 1905 - 1918 and 3.7 % for 1918 - 1938

Regional capitals (such as Barranquilla, Cartagena and Santa Marta in the NAC region) therefore drew considerable rural-urban migrants from their region's departments. The problem of scarcity of labour was essentially a rural one and also a seasonal factor. It is apparent that labour in urban areas such as Barranquilla and Santa Marta was reasonably well supplied. United States Consul Demers confirmed this in 1906 : " plentiful and efficient labour [in the Barranquilla industry] seemingly superior to the Jamaican labour is to be obtained"⁸².

But it was in the beginning of the 20's that the NAC regions' urban industrial areas seem to have begun to strip the rural areas of labour. As United States Trade Commissioner Bell suggested, " labor is plentiful in Barranquilla, but not in the cotton district in the interior of [Department of] Atlantico"⁸³.

Bell understood this crucial phenomenon and perhaps was one of the first to envisage the nature of rural-urban migration as the crucial factor for some very important potential linkage-endowed agricultural sectors.

Therefore, by this time, within a labour shortage economy, urbanisation (not rural export sectors) absorbed some important fractions of the region's tight labour supply in straightforward competition with the high wage banana sector. As Bell put it, this was " coming from the outlying districts to the Coast cities being attracted by the factory employment , the better conditions and the better wages procured in dock and freight work"⁸⁴.

There is some evidence of the size of the labour force throughout the first three decades of this century. Within the cotton textile industry for example, the Aycardi and Company cotton mill in Barranquilla employed " forty girls are employed"⁸⁵.

Although unable to name which one it was, a textile factory in Barranquilla " employed 427 people"⁸⁶, whilst another one " permanently employed 60 women and 8 men"⁸⁷ . The former was undoubtedly the Fabrica de Tejidos Obregon in

Barranquilla with a total number of 450 labourers working ten hours daily⁸⁸. Still another textile factory in Cartagena " employed 200 persons"⁸⁹. There were also 74 workers at the de la Espriella factory working eight hours per day⁹⁰. This was the same " J.M. de la Espriella cotton and woolen undershirt factory with 100 employees"⁹¹.

Other industries also provided an insight to the general size of the NAC labour force. At Cartagena," there were 48 industrial establishments ... a tannic extract plant, under the same ownership with 200 employees ... [the] M. Emiliani cigarette factory with 24 employees ... [the] Colombian Match factory with 60 employees ... [and] ... [the] Benedetti Hmnos. Bakery with 15 employees⁹².

De la Espriella Hnos., a shoe factory in Barranquilla, engaged " thirty-five employees"⁹³ , while the Colombia Match factory " had sixty employees"⁹⁴ . Harinera Rueta, a flour factory, also engaged " from thirty to thirty-five labourers"⁹⁵ , while Fabrica Jabon Pino , a soap factory, " permanently held ten labourers for the product processing"⁹⁶.

But it was within the agricultural sector that figures on the size of the NAC labour force was most considerable. Such was its impact that it apparently all but stamped out unemployment at the time. Indeed, according to British Vice-Consul Maidment, in 1923, " the industrial conditions in the northern part of the department [of Magdalena, in the NAC region] are good. There is practically no unemployment"⁹⁷. Whatever employment was created in the countryside emerged from capital-intensive ventures with more advanced technology and management methods such as the sugar and especially the banana industries.

The sugar industry had a short life but employed a considerable size of NAC labour force. At the Sincerin sugar factory " there (were) 1,300 men engaged in the work of installation of the sugar plant and extending the cane plantation "⁹⁸ and eventually the Colombian Sugar Corporation engaged " 5,000 employees"⁹⁹.

It is slightly more difficult to establish the exact size of the NAC region labour force in the banana sector. Nevertheless, an idea about the labour force figure engaged by the UFC can be had if we observe the following secondary source data.

Uribe-Uribe, for example, had the opinion that " approximately some fifteen thousand labourers worked at the end of 1906 "¹⁰⁰. And in 1912, the Colombian Ministry of Foreign Relations informed that the " number of labourers in the banana region can be calculated at 5,000 "¹⁰¹. Adams indicated as well in 1914 that in the UFC " most of the 2,500 workers in the banana fields and along the irrigation ditches are native Colombians "¹⁰². Finally, British cotton expert Pearse for example, spoke of " 8,000 labourers employed on the plantation "¹⁰³.

In 1926 the size of the banana labour force was at least 10,036 rural agricultural labourers (excluding the aforementioned '*ganaderia*' labourers) in 51 units of the four banana sector 'districts' of *RioFrio*, *Sevilla*, *Tucurrica* and *Aracataca*.

He further indicated that the UFC had altogether " 70,000 workpeople on their payroll "¹⁰⁴. Monsalve, in 1927, also commented that the UFC gave work to " six thousand labourers, of which 98.55 per 100 are Colombians "¹⁰⁵. For the same year however, Rippy indicated that the UFC's " banana plantation in the Santa Marta district provide labor for about 18,000 men, of whom the majority are Colombians"¹⁰⁶. By 1930 Jones noted that the UFC's " holdings, divided into forty farms in several districts, require some 10,000 laborers ... 160 foreigners and 5,000 head of cattle for draft, beef and milk "¹⁰⁷.

With these figures in mind, one can assume therefore that, for the period, a considerable amount of the total size of NAC region labour force was drawn by the banana sector's UFC. Randall even emphasized that the UFC was " Colombia's largest single agricultural employer in 1928 "¹⁰⁸.

Actual Organization of the Banana Labour Force

Although there is not much research as yet which would provide the evidence for monopoly capital's ability to divide the NAC region's labour force, there are sufficient grounds for arguing that it did weaken and rule the labour force through the UFC's practice of outwork, for example, within its segmentation process.

Outwork in fact, stands in a similar relationship to direct employment as the secondary sector to the primary industrial sector. It provides, as Rubery and Wilkinson say, " the capitalist system with a means of increasing flexibility, shifting risk and minimising costs"¹⁰⁹. Furthermore, outwork suits the perspective that " segmentation is both the medium for and the result of the struggle for control over the labour process between capital and labour"¹¹⁰.

That the UFC engaged in labour subcontracting in the NAC region is not in question. But, there is some qualitative evidence to that effect in one of the following chapters. And quantitative evidence is certainly lying about in the NAC region waiting to be unearthed. But, labour subcontracting in the region was generally associated with the idea of evading official legislation which granted labourers a number of fringe benefits. It was therefore more convenient for the UFC to declare that officially it had no employees.

Outwork enhances the understanding of segmentation further, that is, with regard to the supply of labour. The case of the NAC region is particular. Whereas Rubery and Wilkinson argue that outwork provides a " means of mobilising a latent reserve supply of labour and utilising a supply of labour at low-wage cost"¹¹¹, the UFC utilized a scarce supply of labour at a high-wage cost because it was in a position to afford these high costs.

The increase of wages was not just what the NAC banana labour force organized for. It also organized to combat contractual conditions. As Kepner pointed out,

when the UFC required particular sorts of labour, it gave " contracts not to individual workers but to foremen who make their own terms with their men. The bulk of farm maintenance and harvesting is performed by workers holding individual contracts to do certain specified tasks"¹¹².

So, to the organized labour force, in addition to an increase in wages, appropriate handling and application of the legal mechanisms of fringe benefits and hiring methods were also important. As the " workers' situation was ambiguous because the United [UFC], in order to fraudulently bypass labour laws, would not hire personnel directly, but use contractors. In this way, when wage and fringe benefit claims arose, the company would declare itself to be detached from the problem and the middlemen would not pay either for lack of capital "¹¹³.

Randall's indication that the UFC , " because of its contract labor system... refused to comply with social insurance legislation "¹¹⁴ further expands the argument. The system of labour indeed played a significant role in assigning wages in the region. Indeed, the UFC as (i) a monopoly more than able to afford the payment of high wages and (ii) a monopsony creating important employment in the region, was not thoroughly completing the economic linkage cycle -by means of its wage bill- precisely because of its reluctance to comply with the full responsibility of making its wage-labour full company employees.

For example, United States Trade Commissioner Bell indicated in 1919 that " nearly all labor is performed by a system of piecework; as, for example, so many bunches of bananas handled or a certain area of land cleared constitutes a day's work"¹¹⁵. Pearse as well, in 1926, noted that " all wages are regulated on the piecework rate"¹¹⁶. And Wyle also confirmed that by end of the decade, " the cutting and loading forces usually work on a piece basis"¹¹⁷. This system eventually produced dire consequences which certainly became problematic for sections of the labour force in the longrun.

As Rippey explained, " the laborer is paid for each bunch of bananas or according

to the amount of land cleared. This means that workers migrate from one banana plantation to another and are under the control of foremen-contractors. It also means that native planters and the United Fruit Company escape direct responsibility for the provisions of the Colombian law regarding medical attention, sanitary dwellings for labor, and collective and accident insurance "¹¹⁸.

Herrera-Soto and Romero-Castaneda indicate similar views, suggesting the system implied the contracting of " personnel based on the custom of arrangement with each gang leader. There was no permanent work for the same grower ... the verbal agreement to work undergone with a sub-contractor would subject collective personality to the will of the mentioned middleman. Eventually, labourers joined work through verbal contracts with which there was no proof of their right to protection by ruling social laws ... [middlemen] anonymously joined producers and the [United Fruit] company and through the system of weekly rotation from cultivation to cultivation in order that ruling social legislation [such as] Law 57 of 1915 which dealt with work accidents, Laws 37 of 1921 and 32 of 1922 which dealt with obligatory collective insurance and Laws 78 of 1919 and 21 of 1920 which dealt with strikes, would not cover them "¹¹⁹.

This system of contracting invited Lopez's criticism that " what is important to signal out is that process of involuntary and unconscious degradation by which ... labourers through their fixed wage, independent of any result, gang wage and gang management ... "¹²⁰.

Indeed, Fonnegra draws attention to what labourer Federico LLanos (who worked in the banana industry at the time) stated: " none of the workers appeared on the payroll, only a hundred or two hundred contractors. This the reason why the company appeared to be with such few personnel"¹²¹. This view is confirmed by Herrera-Soto and Romero-Castaneda who indicate that the UFC " always raised the argument of lacking payroll workers"¹²².

Montana-Cuellar has gone further noting that " in 1928, the United Fruit Co.

obligated workers to sign contracts in which they declared they were not company employees in order to evade payment of on-the-job accidents, Sunday holiday and collective insurance that was then beginning to rule"¹²³. Furthermore, presenting the 1928 labour leader Alberto Castrillon's accounts of labour conditions under the UFC, Rippey has written that the UFC required "piece-work laborers to sign a statement which declares that they are not the employees of the company, thus escaping responsibility for accidents and collective insurance ... the company reduces wages in order to compensate itself for hospital service"¹²⁴.

An illustration of this is Fonnegra's quote of UFC worker and political militant Guillermo Hernandez : " ... of this wage the company discounted a high percentage for the sustainment of hospitals, which provided no service ... "¹²⁵.

All these views help consolidate the claim therefore, that the banana sector's system of labour and particularly, the control middlemen contractors had over it, explain why " ... the first point of the statement of petitions in 1928 was that the company admitted that it had [emphasis added] labourers. The other two important petitions were increase of wages and formalization, not of individual contracts, but of an industry labour contractual agreement, which implied recognition of the trade union "¹²⁶.

The UFC's system of contracting was a reason why there is difficulty and complexity in the allocation of a figure for its wage bill. Even if the UFC was prepared to disclose its ledger book accounts, there would probably not be complete certainty of the exact volume of the labour force employed. While the UFC could in fact present a reasonably high wage bill by Colombian wage standards. This had no particular structural impact in the NAC region's economic development either.

One reason for this was that labour contractual conditions were meaningless. Labourers organized and were contracted through individual intermediary labour

contractors and therefore were not official employees of the company. In this way, they drew no benefits which Colombian Law specified, such as fringe and medical benefits . In addition to this, an important percentage of these 'high wages' (as was suggested earlier in this chapter) kept wage labourers at a degree of the company's mercy because of the reabsorption of some of the wages as debt to the company's own merchandise stores.

Indeed, the UFC as (i) a monopoly more than able to afford the payment of high wages and (ii) a monopsonist creating important employment in the region, was not thoroughly completing the linkage cycle through its wage bill precisely because of its reluctance to comply with full responsibility of making its wage-labour full company employees.

The establishment of a reasonable figure for the UFC's wage bill is difficult to assess. This is so because of the imprecise number of employees and their accompanying wages throughout the period under study. Additionally, wages were so segmented that it would prove yet more difficult to be precise. But, most important of all, despite the high level of wages to be paid to the labour force it did not particularly all accrue to it in the end. Relatively significant portions of these high wages undoubtedly most have gone to the labour contractors.

Banana Labour Force's Strike Action for Higher Wages and Better Contractual Conditions

In the view of some members of the labour force, despite the precedent of banana sector high wages, there were instances when these did not seem to be so. This resulted in a series of strikes, the first of which took place between 1918 and 1920. White points out that they occurred " ... in a wave of activity sustained after the end of the war by a trade revival accompanied by a high rate of inflation ... "127. It seems that especially in the NAC region, events were deemed much more serious. United States Trade Commissioner Bell felt compelled to write that " on the Atlantic Coast the misery and discontent among the working classes are said

to be very great "¹²⁸.

British Vice-Consul Garnett-Lomax noted that " though the labourers of the banana region are probably better paid and cared for than any workers in Colombia, they were recently involved in a disastrous strike, which assumed the proportions of a local uprising and led to serious rioting, a declaration of martial law and the death of about 200 strikers. This unfortunate affair [is] the worst labour outbreak ever known in Colombia "¹²⁹.

The 1918 strikers' movement claimed victory. White suggests it witnessed " ... the success of the action in forcing up wages by 20 - 30 % "¹³⁰. By 1920, it became clear that ruling level of wages could probably not continue to be borne. The British Foreign Office, for example, noted that there were " demands of employees asking for further increases in salaries and wages "¹³¹.

White considers that " during the '20s, price inflation and the related pressure on wages began to cut away at the planter's profit margin, though in the early years this tendency may have been compensated for by increased demand from the exporting company "¹³². The situation eased somewhat by 1922. There was a breakthrough in the wage bargaining process. British Lieut.-Colonel Rhys-Jenkins reported that " wages have considerably increased within the last three years ... [and] very few disputes occur and Trade Unions may be said to be non-existent in this country "¹³³.

Nevertheless, it was in the NAC region that organized action first took place. Although the first strikes in Colombia " were not carried out by permanent worker organizations ... [and] ... were spontaneous and short-lived "¹³⁴, significantly, " the first strikes in Colombia were among port and transportation workers. In 1918, industrial establishments were still small, and the textile mills, which employed the largest number of industrial workers, had a predominantly female labor force "¹³⁵.

Although this may suggest that neither female nor child labour was fertile ground for labour organization (which was by and large the labouring class of the interior in most industries), the first labour strike in the interior was led and won by women¹³⁶. It was nevertheless, the NAC region which led -generally speaking- organized labour action. According to Urrutia-Montoya, "... in the ports and river transport, work conditions were less attractive, pay was not high, and probably most significantly, the workers had access to the socialist and anarchist ideas that arrived with the foreign crews"¹³⁷.

The NAC region was in fact the birthplace -in 1921- of the Colombian Socialist Workers¹³⁸. The latter emphasized that "... Coastal workers in Colombia have always been more receptive to change than the highland [interior] inhabitants, as is easily seen from the rapidity with which they adapt foreign vocabulary and customs"¹³⁹. This may help to explain why it was in the NAC region that " one of the first recorded large-scale strikes in Colombian history was limited to the ports of Cartagena, Barranquilla and Santa Marta "¹⁴⁰.

Urrutia-Montoya described how the NAC region developed,

" what seems to be the first large-scale worker protest in Colombian history ... On January 3, 1918, reports of a strike among water-transport workers in the port of Barranquilla reached Bogota. It was reported that the strikers intimidated the workers who did not join the walkout, removed railroad rails, and did not allow water to be taken to the port of Puerto Colombia. The envoys of the workers and the employers reached an agreement, but the workers did not recognize it. After that, a civic guard of 'youths of all social classes' was formed to keep order in the city, and at one point the army had to fire over the heads of the strikers to disperse them. But despite these incidents, when a settlement was reached, employers *raised daily wages by 50 per cent*. The wage gain in Barranquilla was a tremendous incentive for port workers elsewhere. On January 8, teamsters and port workers in the port of Cartagena went on strike. The movement was organized by the Sociedad de Artesanos y Obreros, which was not officially recognized and probably was not a permanent organization. A tentative agreement was reached by the employers, but the Sociedad, not satisfied, changed the conditions, claimed that employers threatened not to abide by the agreement, and organized a mass demonstration which soon deteriorated into a riot. More than a thousand workers overflowed into the streets, stores were sacked, and the police were forced to fire on the workers, killing at least two persons ... The strike wave spread to Santa Marta, the third Caribbean port. There, the port workers walked out in January 11 in sympathy with the employees of the Santa Marta Railway Company [property of the UFC]. Almost immediately the strike degenerated into a riot ... As in Barranquilla, the workers were successful. They obtained a *25 per cent daily wage increase* after four days of strike. By January 24, order had been restored along the whole Atlantic Coast but the repercussions of this strike wave were to last for some time ... The nation was jolted by the appearance of a violent class conflict, and workers became acquainted with the possibility of obtaining benefits through strike action ... Two weeks later after that, the banana workers were demanding better conditions from the United Fruit

Company, but a decade went by before they went on strike in order to force the company to consider the same demands "¹⁴¹.

In 1928 strikes took place again. One reason no doubt, was what the United States National Conference Board informed. It noted that the " importation of funds from abroad became reflected in higher prices and higher cost of living and created a feeling of social unrest in the country"¹⁴². The British Foreign Office added that at the Barranquilla Railway and Pier Company, " tallymen in Barranquilla struck ... asking for wages, 120 dollars monthly"¹⁴³. But it was the banana export sector general strike in the same year that was, as White pointed out, the " culmination of the conflicts of the 1920s"¹⁴⁴.

According to White, " demands from the agricultural labour force -some 25,000 in 1928- were therefore a particular threat; and when the plantation workers began to organise in the late '20s, after several years in which wages had stagnated at around \$ 1, battle was joined "¹⁴⁵.

Abundant literature exists on the aftermath of the 1928 banana sector strike in the banana zone city of Cienaga (NAC region), for us to indulge on the subject. What is important for us to point out here is that a massacre of between 1.4 and 3 thousand people on that night of the 5th-6th December kept wages up. White suggests this was in fact one of the consequences of the 1928 massacre: " for a month or so after the massacre, few workers would go back to the plantations, and UFCO [UFC] was offering wages above those agreed in the new contract in order to draw in new labour"¹⁴⁶. These events seem to suggest the consolidation of high wages in the NAC region.

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CHAPTER IV

NAC REGION'S WAGE LEVELS

The NAC region's high wage economy was parallel to relatively strong inflationary effects that emerged at some points during the period. Here, we provide an overview of what real wages were in general for the NAC region. In a thesis of this nature, where unearthing the empirical basis is an extraordinary difficult endeavour, very severe data problems such as discontinuities emerge, as we noted earlier in the introduction.

The treatment of prices is in itself no easy task. The only consistent, reasonably reliable list of series of food prices available for years 1900 to 1922 is the one amazingly unearthed by Pardo-Parra¹ from the archives of the Beneficencia de Cundinamarca, a long established and respected Colombian charity in Bogota. By his own admission, the only doubtful figures are those for 1912, 1913 and 1914, which were taken from military rations. These figures could be filled with the use of a cubic function of the three previous and posterior years to that particularly small period of time. But it is really a matter for further research.

Pardo-Parra's food price series are listed in **Appendix 23**. The price indexes he composed from it are listed in **Appendix 24**. Price indexes in the latter appendix are consistent with the former in the following way. He uses the Colombian Departamento Administrativo Nacional de Estadística (DANE) base that is 1923 = 100 with a food price basket from the Beneficencia of \$ 526.74 for that year. In this way, for example, the price index for 1922 is $[568.15 \times 1 / 526.74] \times 100 = 108$, and so on, for the rest of the years in **Appendix 24**.

There may appear difficulties in handling the price data in the first decade. And at first sight, Pardo-Parra's food prices for years 1900 to 1908 would inevitably reveal implausible price indexes. But, it seems plausible to consider, that given the effects of the War of a Thousand Days' at the turn of the century --which was the result of very high inflation-- these food price figures really should not come as

much of a surprise.

Currency depreciated so tremendously that, according to Beaupre² in 1900, foreign exchange ranged from 360 to 1200 per cent. More recently, Bejarano³ has noted that in efforts to finance the war, government emissions of over one billion pesos took foreign exchange from 412 -at the beginning of the war- to 18,900 per cent in October 1902.

Furthermore, if Law 33 of 1903 originally established the gold peso as monetary unit, Law 59 of 1905 confirmed it and fixed foreign exchange of paper currency at 10,000 per cent. Law 69 of 1909 re-confirmed exchange of notes at the official rate of one hundred Colombian paper pesos [CPP\$ 100.00] for each Colombian gold peso [CGP\$ 1.00] (see Appendix 25). As Pardo-Parra's price indexes for these few years are incorrect, we have adjusted them (see Appendix 24) on this basis.

Even if Pardo-Parra's food price figures for 1900 - 1908 were left unadjusted, we do not utilise them in like-to-like comparisons between real NAC region and interior wages for those years because the data are unavailable. So we suggest that any implausibility in the price indexes for these years would probably not affect our general line of argumentation.

As the sources we consulted expressed wage costs in nominal terms, wages are therefore deflated in the following manner. First, in the absence of a consistent food price series for the NAC region we use one price index (Pardo-Parra's with our adjustments for the early years) for all regions prior to 1923. Our inferences are taken sceptically and cautiously but as there is little else to draw from, we have no recourse but to choose this option. Wages -and for that matter price indexes- for the NAC region have never been studied historically before.

Detailed and laborious analysis would show nominal regional differences would persist in the real data during this particular set of years. Some would suggest it is obvious that this would hardly be otherwise, since the same price index would

be used. We suggest therefore, that it is noted that if nominal regional differences are expressed in hard currencies (such as the US dollar and the pound sterling) rather than in Colombian paper currency, some reassurance can be provided that their value could be devoid of inflationary effects.

Second, from 1923 to 1930 wages are deflated by prices using averages of DANE urban food price indexes for either the nation, the interior or the NAC region, which are established and bona fide conversion factors. However, where the origin of wages is made patently clear in the evidence, we deflate accordingly with the particular cities DANE food price index.

As the evidence we unearthed (presented further on in Chapters V and VI) is expressed in at least three different currencies, we have converted all into Colombian Gold Pesos (CGP\$'s), in our text only. This is the currency in which all the analysis in this chapter is carried out. Currencies in quoted text are left in their original denomination, save some exceptions where we have bracketed converted CGP\$s inside the quote next to the original currency. The exchange rates used here are listed in Appendix 25.

Some may suggest that non-monetary components of income for waged labour were possibly higher in the interior coffee than in NAC region banana industry. But, the interior coffee wage levels and the added food ration price equivalent which we use in our comparisons are data taken from Palacios⁴, whose research and data are widely respected as well.

As with Pardo-Parra's data, our inferences are made sceptically and cautiously as there is little else to draw from. The equivalent price of a typical food ration which Palacio's evidence indicates (and which we have added to his daily coffee wages) emerged from his research in Hacienda Jonas.

For years 1900 to 1917/18, this food ration price amounted -on average- to (i) 40 % for *agregados* (who were workers allowed to cultivate a patch of land in the

hacienda as part of their wage) and to (ii) 68 % for *chapoleros* (coffee harvesters)⁵. For years 1919 - 1930 " those under a 9 - *tarro* quota (70 kgrs. approximately) received a full ration of food, i.e., three meals a day"⁶.

No evidence of this non-monetary component of income for the NAC region emerged in our research. As it stands (without the inclusion of non-monetary elements for NAC region wage levels) however, and with the help of Palacio's data, our analysis allows us to state that in general, NAC region banana and coffee wage levels –with the exclusion of the non-monetary element– were actually higher than interior coffee wage levels which do include it.

The claim in this thesis is not meant to appear at times to be that banana wages are high and rise over the period and at other times that they are higher than other sectors. The evidence unearthed reveals several important considerations. These are that *in general*, NAC region agricultural banana real wages were (i) high; (ii) higher than other agricultural and urban sector real wages within the region; and (iii) higher than interior agricultural and urban sector real wages.

The evidence equally reveals that, although NAC region agricultural banana real wages were high in general terms throughout the period, they also experienced reasonable volatility, probably because of seasonality and labour shortage. This is why it might look as if real wages do not actually rise at all over the crucial period of 1906-1930.

However it was not violent volatility. The swings of banana real wages show they were between a range of \$0.78 and \$2.35. This is in itself an exceptional high real wage range for Colombia at the time. The average level of real wages for banana during the period is \$1.27 -at least \$0.28 over the interior coffee real wage average for the same period (or 22% higher). And the several peaks and lows experienced within the period were well within the upper echelons of regional, and indeed national levels of real wages. That is, within a generally prevailing high level of wages.

This prevailing level probably stood at the following unweighted averages for NAC agricultural real wages: (i) general agriculture 1904 - 1921 : \$0.73; (ii) cotton cultivation 1905 - 1924 : \$0.71; (iii) coffee 1911 - 1930 : \$1.05; (iv) banana 1906 - 1922 : \$1.04; (v) banana 1923 - 1930 : \$1.45; (vi) banana 1906 - 1930 : \$1.23.

The evidence also reveals that there were some exceptional cases, which were by no means a trend. Namely (i) the absurdly high interior coffee wages at the turn of the century due to the war; (ii) that NAC region coffee real wages in 1914 and 1916 were higher than banana real wages -probably due to increased shortage of labour in the Sierra Nevada de Santa Marta; and (iii) the interior male textile labour high real wages at the end of the third decade.

Some Views on Real Wages

This discussion begins with some 19th century views on the matter and thereafter analyze what the collected data on wages, expressed in real terms, has to offer.

Some food prices at the end of the 19th century provide an idea of what pecuniary amounts people in the nation as a whole had to spend on food. Provisions in the early 1870's, for example, were reported by Bunch to be sold at certain levels of prices. Table 3 below shows them. If this was the case, purchasing power probably could have not gone far. Nevertheless, Bunch believed -at the time- that "as regards these articles, [they] are nearly as equal here [Colombia] as in England"⁷. It appears then that -at that particular time- Colombians in all regions were subject to similar food consumption pricing as Britons were.

Colombia's 'general' unskilled labour was probably spending a considerable amount of its wages on food. Certainly, if in 1886 unskilled labourers in the country were earning a daily nominal wage of \$ 0.22 in addition to their food, unskilled town labourers earning a daily nominal wage of \$ 0.75 would probably have spent a considerable amount of the differential of \$ 0.52 (relative to the unskilled country labourer's wage) on food. The likelihood of lack of industry and therefore little or no consumption of domestic linkage-creating products was apparent not just in the interior but in the NAC region as well.

TABLE 3. COLOMBIAN PROVISION PRICES: 1870s
(CGP\$s)

<i>Article</i>	<i>Price</i>
Meat per lb.	0.09
Bread	0.05
Butter	0.33
Rice	0.07
Potatoes	0.02
Salt	0.01
Chicha/bottle*	0.05
Native beer	0.12
Sugar/lb.	0.22

*Source: Bunch, Robert, Letter to Earl Granville, "Industrial Classes (Foreign Countries)", Parliamentary command not converted is Papers. Accounts and Papers. Volume LXVIII (London, 1871), p. 136; Note: (i) Exchange rates from Appendix 10; (ii) * = Chicha was a fermented corn drink of the country.*

In 1888, Wheeler argued that " it was clear that, practically, not the same price but twice as much, has to be paid now for these articles of consumption as in former years"⁸. Whilst real wages in Colombia were not particularly high in general at the time working Colombians were thought by some to be better off than working English people. (If they were indeed high, it was strictly for reasons of civil warfare).

Wheeler noted to that effect that, " on the whole, they (farm labourers) are probably better off than people of the same class in England, especially as the standard of respectability and comfort, and lodgings, is much lower"⁹.

He also noted the presence of a serious decline in the purchasing power of money when he noted that " prices of all necessities of life have risen very considerably; so that the conditions of the working classes, which in ordinary times is fairly comfortable, according to their standard of comfort, has now become very hard"¹⁰. Table 4 ¹¹ below shows comparisons of food prices and labourers' purchasing power between the interior of Colombia and Canada. Wheeler reproduced it from Colombian government publications. The relevance of the data is that it shows how substantially lower that the purchasing power of wages of a labourer on the plain of Bogota (in the interior), was compared to that of the wages of a labourer of the same class in Canada.

Furthermore, it indicated the basic comparison between necessary consumer goods such as textiles. According to the document, " cheapest and coarsest outfit, including clothes, bedclothes, etc., which the poorest working woman in Colombia would generally possess, would cost in Canada 11 dol. 95 c., and could be bought by a Canadian washerwoman, earning the average wages, out of the profits of 20 days' work; though they would be of such a quality as no Canadian woman would think of using. In Bogota, the same articles cost 39 dol. 30c"¹².

TABLE 4. COMPARISON OF FOOD PRICES AND PURCHASING POWER BETWEEN COLOMBIA AND CANADA: 1888.

<i>Article</i>	<i>lbs.</i>	<i>Price(Bgta)</i>	<i>Price(Cnda)</i>	<i>lbs.</i>	<i>lbs</i>
Salt	25	1.25	0.11	42	1,363
Bread	1	0.20	0.325	17	200
Beef	1	-.	0.132	68	-.
Potatoes	25	1.00	0.17	65	882
Butter	1	0.50	0.22	5	35
Rice	1	0.17	0.055	14	109
Eggs	doz.	0.30	0.165	9doz.	54.5doz.
Sugar	1	0.15	0.065	14	109
Flour	25	2.40	0.75	22	214
Beer	gal.	1.50	0.40	1.5gls.	15gls.
Candles	1	0.29	0.11	8.5	60
Petrol	gal.	2.40	0.20	1gl.	30gls.
Soap	1	0.175	0.055	12	181
Fr/wood	cord	16.20	5.00	14crgs	140 crgs
Coal	20	0.27		220crgs.	
Chr/coal	20	1.60		1.5crgs.	
Blanket	pair	8.00	3.50		
Calico	yd.	0.22	0.04		

Source: Republica de Colombia, Gaceta Oficial, (Bogota, 1888); Note: Pr. = price; Qty. = quantity; prices are in Canadian dollars; quantities are those which a workman can buy with six day's wages on the plains of Bogota at 25 c. per day and in Canada at 1 dol. per day.

But the data also gave an indication of what the real value of Colombian purchasing power was -at least in the interior. It required " 10 1/2 months of constant labour for a Colombian washerwoman to earn sufficient to pay for them; 15 months' labour for a woman working in the fields; and more than two years' labour for the women who sell charcoal and firewood"¹³.

A significant disproportion in wages and purchasing power is obvious. Clothes were thus 228.9 % higher in price and it took 1,475 % more labouring days for a Colombian washer woman, for example, to pay for them than it would her Canadian counterpart. And of course, government duties took just under 50 % of the price paid.

In general, the data underline not only how dramatically low 'Colombian' purchasing power was, but particularly, that of the low-wage interior female labour force. In a general sense, this latter 19th century picture of the real value of money serves as an eyeopener to the reality of low real wages.

If we focus particularly on the NAC region during the first two decades of the current century, the picture is not so clear. With the exception perhaps of Urrutia and Arrubla's set of eleven food prices for the city of Barranquilla¹⁴ in 1911, there is arguably no quantitative evidence of high food prices for the NAC region for the first two decades of the present century.

Nevertheless, there is some qualitative evidence. Statements such as United States Consul Guyant's in 1919 that the " increasing cost of living [is] resulting in many strikes and labour difficulties"¹⁵ indicate a degree of the impact that high prices produced -at least by the end of the second decade.

Another is United States Trade Commissioner Bell's statement in 1921 that " the cost of living in the district [of Santa Marta was] much higher than anywhere in the interior"¹⁶ equally draws an adequate picture of what the third decade was to show.

Equally, in 1928, United States Dept. of Commerce official Guista, for example, noted that " ... it was evident that ... prosperity ... had led to considerable inflation"¹⁷. During this year as well, Rippey indicated that the " increase in wages was largely counter-balanced by the rising cost of living"¹⁸.

By the end of the third decade, high prices¹⁹ had settled in. In 1929, Guista reported that inflation was " continuing to mount"²⁰. But, by now, the full consequences of dollar cash inflows from abroad (the United States payment of indemnity monies for the appropriation of Panama and subsequent public and private loans which followed, as mentioned earlier) were felt by the nation as a whole.

Indeed, that same year the National Industrial Conference Board in the United States noted the " importation of funds from abroad became reflected in higher prices and higher cost of living"²¹. The Board added that Colombia was " passing through a period of business depression and economic readjustment made

necessary and inevitable by the inflation that characterized the economic life of the country in the last few years"²². Commercial transactions in the country, the Board said, were in " a state of stagnation ... the value of all securities, government bonds, mortgages, industrial and bank shares ... seriously depressed"²³.

Nevertheless, despite any reduction in real terms by the end of the 1930s, a high level of real wages prevailed in the NAC region throughout the period under study. Indeed, by 1929, British Consul Garnet-Lomax noted that the NAC region's labourers in the banana export sector " enjoyed remarkably high wages and their purchasing power [was] steady and relatively large"²⁴.

From the qualitative evidence unearthed this does not appear to be challenged. From the quantitative evidence on wages presented in **Chapters V and VI** further on, a reasoned case can certainly be established.

Comparison Between NAC Region Agricultural and Urban Wages

The evidence unearthed enables us to establish some comparisons and their implications between NAC region rural and urban wage levels throughout the period under observation. In order to do so we have deflated all wage levels and wage level ranges expressed in CGP\$s that emerged in the research. They are listed in **Appendixes 2 & 3**.

The evidence shows there were four levels of corporativeness. One was the banana industry which operated mainly as a large scale corporate production unit (the UFC). Cotton cultivation, although large globally, was another, mainly composed of small-scale, non-corporate production units.

A third level was the cotton textile industry which was -on the contrary- small globally, but composed of some small-scale corporate units and one particularly formidable large-scale corporate unit (Fabrica de Tejidos Obregon).

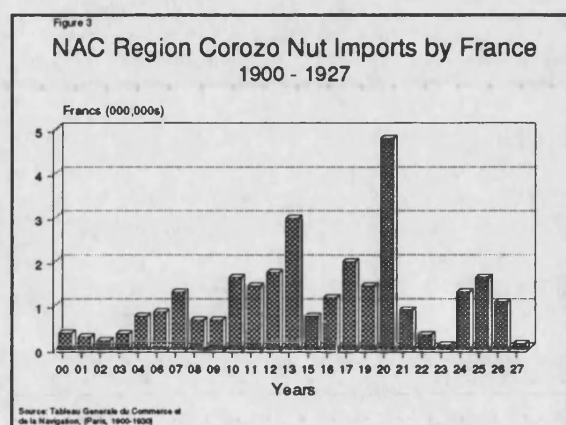
Finally, the level embodied by the NAC region's coffee industry operated on a large-scale basis. Although in fact, it showed one of the largest productive units in the nation²⁵, our case, Hacienda La Dilia Ester²⁶, throughout was basically a semi-corporate production unit.

Two additional different minor sectors in the region which operated in small scales and production units are also included. Unfortunately no wage evidence can be offered for them. Both *corozo* nut (vegetable ivory) and *dividivi* (natural dyestuff) operated as small (perhaps sometimes medium-scale) and random, non-corporate production units. The NAC region was the only one in the country to export these goods. The produce was gathered by Indigenous communities or self-sufficient peasantry for export merchants. These undoubtedly formed the bottom end of the wage scale.

Appendixes 4, 5 & 6 show their performance in the regional economy. Between

1900 and 1927 France imported an (simple unweighted) average of Fr. 1,109.7 thousand per year worth of *corozo* nut. Likewise, and in intermittent years, between 1901 and 1925, it imported an (simple unweighted) average of Fr. 318.4 thousand per year worth of *dividivi*. Germany imported more than that. Excluding years 1915-1920, between 1896 and 1930, it imported US Gold \$ 604.6 thousand per year worth of the dyestuff. Figures 3, 4 & 5 below show bar chart graphs which illustrate this data.

Some traits can be inferred from Appendixes 2 & 3. During the early half of the first decade for example, the level of agricultural wages fluctuated between \$0.66 and \$1.68. By the end of the decade, they reached a level of at least \$1.33.



In general, the evidence unearthed for general agricultural wages suggests that, except for the beginning of the second and third decades (years 1910 and 1920), when the upper limits of wage ranges were at or above \$1.68, the level of wages was around the \$0.66 point.

The level of wages in cotton cultivation wages in particular, were dramatically below the general agriculture level of \$0.66 in 1905 and just above it -at \$1.01 - in 1910. In 1924, they were at \$0.92 -just under twice the 1921 general agriculture level of \$0.53. Coffee wage levels experienced a slight fall from a range of (\$1.23 - \$1.41) in 1911 (higher than 1910 cotton wage levels of \$1.01) to \$0.90 in 1912. General agriculture wages went down at least 50 % from a range of (\$1.33 - \$1.68) in 1910 to one of (\$0.56 - \$0.69) in 1912.

Banana wage levels at \$0.69 were well above the other sectors. While just over the general agricultural level in 1904 (\$0.66) and well over the cotton level in 1905 (\$0.19), banana sector wages really showed an upward climb through to the end

of the first decade: \$0.69 in 1906, \$0.84 in 1907, up to \$0.87 in 1908, a range of (0.78 - 1.21) in 1909 and establishing itself well above that upper limit at a range of (\$1.49 - \$1.62) in 1910.

Banana wage levels were at some stages more volatile -although not violently- than coffee wages. This volatility was experienced with wage level rises and falls.

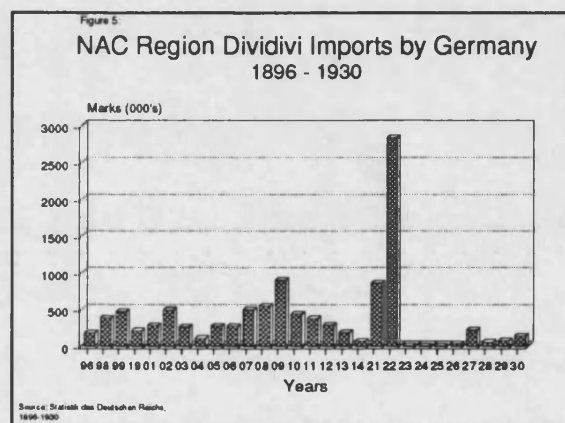
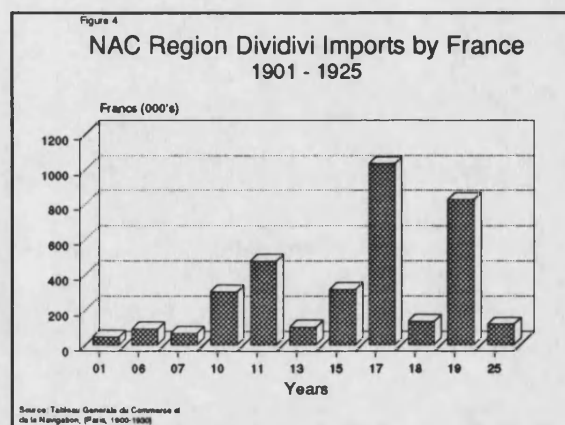
Rises -as mentioned immediately above- were not only experienced from 1906 to 1910, but in 1914, 1920, 1925, 1927, 1929 and 1930. Falls were experienced in 1912, 1913, 1916, 1919, 1924, 1926 and 1928.

The banana wage levels however, were higher than those of coffee throughout the period. The exception was in 1914 and 1916 when coffee real wages were slightly higher than banana's. This was probably due to increased shortage of labour in the Sierra Nevada de Santa Marta.

Coffee wage levels of \$0.88 in 1922 were in fact under those for cotton cultivation in 1924 which stood at \$0.92. But banana levels were higher in 1924 with a level of \$1.19 despite having fallen from its level the previous year of \$1.32.

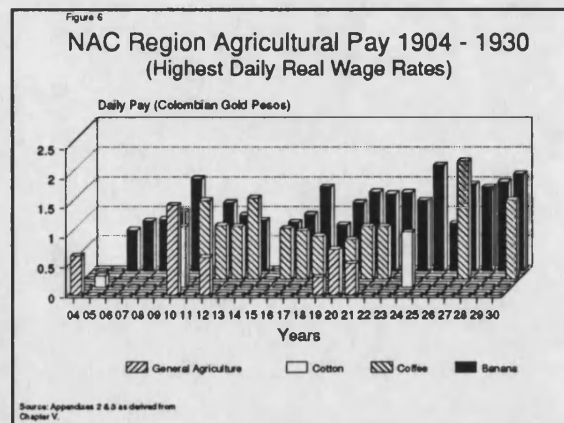
The highest values (wage range upper limits) for the NAC region's agricultural wage levels are reflected by the bar chart graph shown in Figure 6 below.

Traits from formal urban wage level data in **Appendixes 7, 8 & 9** suggest that dock and railway wage levels oscillated between the high level ranges of (\$0.80 -



\$1.58) in 1903, (\$1.34 - \$1.38) in 1910 and (\$1.31 - \$1.41) in 1929.

General unskilled common labour wage levels were around the \$0.50 point in 1903 and 1913 and showed levels between a lower limit of \$0.53 in 1914 to \$1.09 in 1924.



Skilled labour reached very high levels: (\$2.05 - \$4.11) in 1916 and from \$1.14 to (\$1.82 - \$2.05) in 1924. Manufacturing industry in general showed high levels of wages (\$0.55 - \$1.36), at least in 1924.

Although the soap industry showed a very wide range of (\$0.71 - \$4.29) in 1911, the shoe and brick industries were not behind: the former showed levels of from \$0.67 to a range of (\$1.05 - \$1.97) in 1908, while the latter showed levels below \$0.47 in 1903. The flour industry showed a reasonably high wage range as well: \$1 - \$1.14.

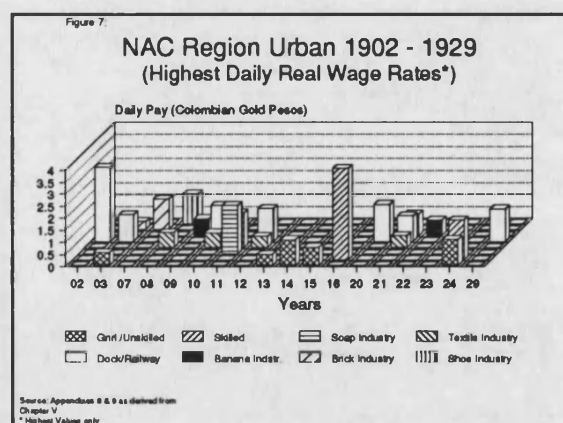
Additionally, although the urban side of the banana industry was extremely segmented showing levels of from \$0.12 to \$1.22 in 1909, the evidence shows that at the beginning of the third decade, it offered levels of between over \$0.71 - \$1.06 in 1921.

Finally, the cotton textile industry showed some consistence in wage levels from \$0.53 - \$0.71 in 1908 to \$0.27 - \$0.71 in 1921. If the highest values (wage range upper limits) for the NAC region's urban wages are considered, analysis is perhaps better appreciated by the bar chart graph shown in **Figure 7**.

These traits had the following implications: 1).- within agricultural wage levels, those of coffee and banana were, by and large above all others, particularly above cotton cultivation wage levels; 2).- banana sector wage levels, particularly in the

third decade, were well above all other sectors and throughout the period were on average, 15 % above coffee and just over 40 % above cotton. 3).- within formal urban industry wage levels, aside from very skilled labour which showed wage levels well above average, manufacturing industry wage levels were relatively high, except for

the cotton textile industry which showed lower levels than the other industries. Nevertheless, albeit low (compared to banana industry), the cotton textile industry wage levels showed relative consistency between the end of the first decade and the beginning of the third.



Furthermore, observing the data contained in **Appendixes 2 & 3**, all other things being equal, we stress several overall points. One is that between years 1904 and 1933, for the agricultural sectors with medium-scale and semi-corporate production units and the export sector with a large-scale corporate production unit, agricultural labour wage levels in the NAC region were probably not less than \$0.66 per day. It can be assumed that during the years for which there are data missing, they were not below this figure. The exception was the cotton cultivation which showed a lower wage level of \$0.19 for 1905.

Another is that for the small (and medium-scale) random non-corporate production unit sectors, agricultural labour wage levels were less than \$0.66. They were probably even lower than the exceptionally low level mentioned immediately above for cotton cultivation in 1905, if not existent at all. The reason for this was the character of the 'labour' that 'produced' (read gathered) the *dividivi* and *corozo* nut.

One would like to say more about cotton cultivation, but the data found were so scarce that they did not provide a basis for further analysis. From a low wage

level of \$0.19 in 1905, it increased first, to \$1.01 in 1910, and then to \$0.92 in 1924. Compared to 1905, these meant increases of 81 % and 79 % respectively. Common sense suggests deflation was a problem for these high levels of wages and increases as well. But this was equally so for real coffee wage levels in the interior which included non-monetary elements such as food. And, as will be seen further on, real wage levels in 1905 and 1910 for NAC cotton cultivation were above those for coffee in the interior.

Second, that in the large-scale but semi-corporate coffee sector daily agricultural wage levels (w_1) between 1911 and 1930 showed a range close to $\$0.66 < w_1 < \2.78 .

Third, that in just the large-scale corporate production unit banana export sector, agricultural wage levels (w_2) between 1906 and 1922 were consistently above average and sometimes well above average. The sector showed a range close to $\$0.64 < w_2 < \1.56 . For the years 1923-1930, the banana sector's wage levels (w_3) showed a range close to $\$0.80 < w_3 < \2.35 .

Furthermore, Appendixes 7, 8 & 9 also show some isolated aspects of the performance of formal urban wage levels for which like to like comparisons can be made. First, between years 1903-1924, formal urban wage levels (w_4) showed a range close to $\$0.47 < w_4 < \1.36 .

This excludes dock and railway labour wages (\$3.1 and \$1.58) in the early turn of the century (1902-1903) as well as the upper limits of wage ranges for at least one example of the urban soap industry labour (\$4.29) in 1911, construction labour (\$4.11) in 1916 and for highly skilled labour (\$2.05) in 1924.

In 1910, 1912 and 1921, general agricultural wage levels were higher than those for the cotton textile industry, possibly reflecting the increase set by banana cultivation wages. This included coffee, whose level of wages for 1912 and 1921 were also higher than those for cotton textile industry. And coffee wage levels

were also higher than those for industry in 1911, 1912, 1913 and 1921.

Urban manufacturing industry wage levels were probably higher than agricultural wage levels for the years for which we have no available evidence to compare with, possibly in a bid to compete with the higher wage level set by the banana sector. In 1924, for example, -a year in which we can compare- the upper limit of the general industry wage level range was higher than the cotton cultivation level.

This suggests an isolated pattern of some sort whereby small formal urban footloose manufacturing industry (with the exception of 1924) were maintaining lower wage levels than rural at least until the second decade of the century. Whether it suffered the effects of the 'pricing-out' effect of the high level of wages set by the banana export sector is difficult to prove without any available data to do so, but is within the logical bearing of our argument.

On the other hand, NAC region urban industry (after reaching an upper limit of \$2.14 in its 1911 wage level range) was probably desperately attempting to match the very high wages the banana export sector set, but failed to do so (falling to an upper limit of \$0.71 in its 1921 wage range).

It is likely that this influenced the economic development process in two significant ways: a) drawing the bottom end of the segmented rural banana sector's and otherwise priced-out export sectors' redundant labour force into the urban area; and b) eventually, relatively 'informalizing' this labour force contingent through the process of gradually lowering the reproduction cost of labour as the prospects for survival of the banana sector export economy began to dwindle.

The banana export sector probably contributed to the demise of the potential that the alternative of cotton cultivation had as provider of the input for the urban textile industry. Neither the latter nor especially the former were in a position to raise wages further in order to compete with those set by the fruit staple.

Once wage levels were cut down to appropriate size in the thirties as a response not only to mounting inflation and the depression, the shaping of informalization of the labour force in the region began to emerge.

Twenty years after the period investigated here this was confirmed. White for example, remarked that " many of the workers too left, some going to the towns in search of work, perhaps ending by swelling the *tugurio* population of Barranquilla. Others stayed, and crowded into the new poor quarters of Santa Marta or Cienaga, or squatted on a patch of land in the zone"²⁷.

Fourth, that then, this portion of the urban informal contingent of the labour force began to participate as labour for the informal economy as for example, the NAC region's contraband trade. This was symmetrical with the absence of consumer durable industry -footloose or otherwise- in the banana export sector zone of economic influence and the flourishing importance of the banana sector's merchandise stores. The bottom end of the labour force, composed of poorly paid labour in small and medium-scale, semi and non-corporate export sectors, remained outside the monetary economy.

Finally, some degree of clearness surfaces in relation to cotton cultivation's wage level in the midst of the competition arising between agricultural export sectors. Despite the dearth of data and its obvious discontinuities, cotton cultivation wage levels do appear to have jumped dramatically from \$ 0.19 in 1905 to \$ 1.01 in 1910. Well, it fell to \$0.92 in 1924, but it was still up there in the higher echelons of the wage levels of the period, at least to suggest that there was an effort to compete.

It represented significant increases of 81 % from 1905-1910 and 79 % from 1910 to 1924. Nevertheless, these wage levels were below banana sector wage levels of \$1.49 and \$1.62 in 1910, and \$1.19 in 1924. This price pressure must have forced general agricultural labour to place wage demands at least at a wage range level of \$1.33 - \$1.68 in 1910. Coffee sector labour in particular demanded a wage range

level of at least \$1.23 - \$1.41 in 1911.

It is significant to note that cotton textile industry wage range levels (\$0.53 - \$0.71 in 1908) were at approximately the level of some of the banana sector's urban wage range levels (at least within the level of cook and ship 'cargador' which earned \$0.49 and \$0.73). NAC region textile industry wage levels surprisingly reached an upper limit of \$2.14 in 1911. It also seems to have maintained a consistent competitive struggle at least until 1921, keeping wage levels oscillating between \$0.27 and \$0.71.

Other things remaining equal -and alternative or complementary important explanations aside- the collected evidence seems to suggest that somewhere between 1910 and 1912, cotton cultivation for export to the international market (not the domestic one) was priced out by banana wage range levels.

The impact set by the banana sector level of wages in the NAC region must have played -amongst other factors- an important role in diminishing the potential of the region's cotton textile industry's growth.

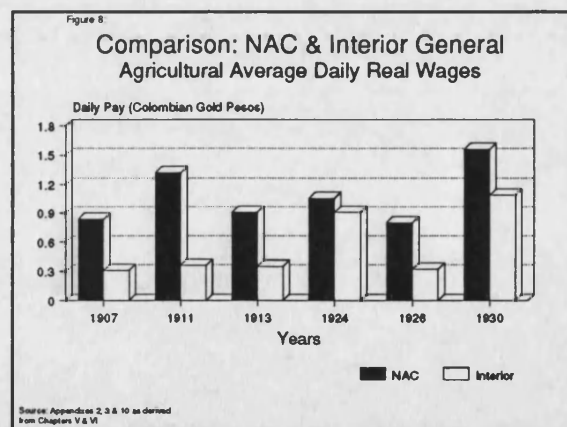
Consequently, it seems that its contribution in the demise of the region's growth and development has to be stressed. Generally, the evidence shows a significant presence of a relatively strong high-wage economy, either in dramatic bursts or in a reasonably consistent (albeit no less abrupt) way.

Some Comparisons and Contrasts between NAC Region and Interior Real Wages

The following comparisons and contrasts between NAC region and interior wage levels and ranges provide confirmation in real terms, not only of intra-regional but also inter-regional wage differentiation. The evidence (in nominal terms) follows in **Chapters V and VI**. It is especially confirmed when NAC region agricultural wage levels (namely banana and coffee) and interior coffee wages are compared.

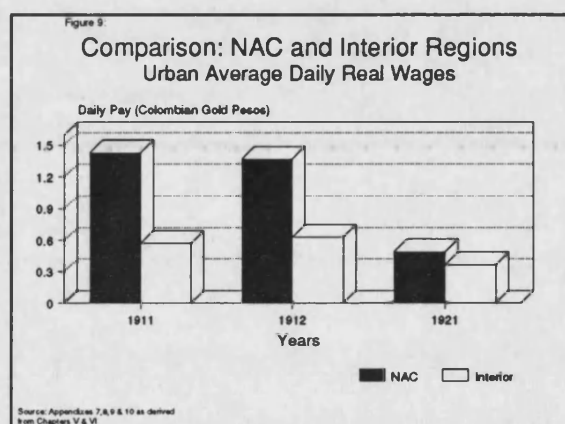
The first set of comparisons is within the context of the wage levels and ranges which emerged from **primary** sources for like years. The task of establishing like to like comparisons here is hampered by the dearth of data and therefore are scarce. Wage levels and ranges for the NAC region collected and detailed in **Appendixes 2 & 3**, are compared with data for the interior in **Appendix 10**.

First, a comparison between NAC region agricultural wage levels and their interior counterparts is considered. The least one can say is that for years where like to like comparisons can be established, during 1907, 1911, 1913, 1924, 1926 and 1930, agricultural daily wage levels in the NAC region were higher than the interior's. **Figure 8** shows the barchart graph which illustrates this comparison.



Second, the comparison between the two region's urban industrial daily real wage levels in **Appendixes 7, 8, 9 & 10** is considered. Unfortunately, as the wage data that emerged for both regions is not sufficient to be compared on a like to like basis, the least negligible like to like comparison suggests that for years 1911 and 1921 in the cotton textile industry and for year 1912 in the railway category, NAC region urban daily real wages were higher than in the interior.

Indeed, for the year 1911 in the cotton textile industry, the NAC region's urban daily real wage range of (\$0.71 - \$2.14) was significantly higher than the interior's urban daily real wage level of \$0.57. Equally, for the year 1921, the NAC region's urban daily real wage range of (\$0.27 - \$0.71) was higher than its counterpart in the interior which was of (\$0.31- \$0.42). Likewise, in the railway category for the year 1912, the NAC region's urban daily wage level range of (\$1.81 - \$0.92) was higher than the interior's level of \$0.63. Figure 9 equally shows the barchart graph which depicts this second comparison.



Thus in general, the collected data suggests that at an urban level, at least for the period 1902 - 1921, the NAC region's available urban wage levels were considerably high in comparison with those available for the interior. The comparison for 1911 and 1921 is acceptable for these two years but not for the period as a whole.

This is why we turn to a second set of comparisons which is within the context of the wage levels and ranges which have emerged from highly respected secondary sources. This is likely to provide more transparency in the rendering of conclusions about interior agricultural and manufacturing industry real wages.

One such source is Palacios who offers agricultural wage levels in the interior coffee sector. Appendix 11 shows the data which is compared with that of Appendixes 2 & 3.

From this correlation we can conclude that general agricultural daily real wages in the NAC region were notably *higher* than interior rural (coffee sector) daily real wages for years 1904, 1910, 1912, 1920 and 1921. Figure 10 shows the barchart graph which illustrates this comparison. Additionally, the NAC region cotton

cultivation wage level in 1905 at \$0.19 was just above the interior's coffee 'chapolero' (coffee harvester) wage level which stood at \$0.18.

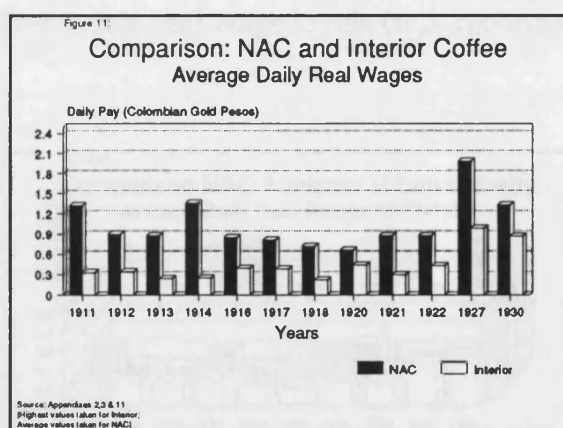
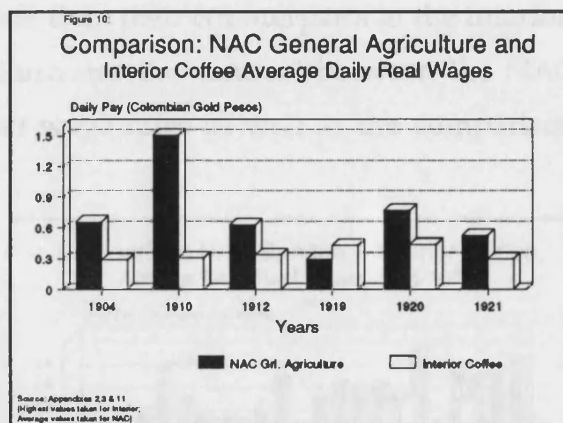
One can equally conclude that interior rural agricultural (coffee sector) daily real wage levels were remarkably *lower* than (i) the NAC region's cotton

cultivation wage level in 1910; (ii) NAC region coffee sector wage levels at least for years 1911, 1912, 1913, 1914, 1916, 1917, 1918, 1920, 1921, 1922, 1927 and 1930; and (iii) particularly, NAC region agricultural banana industry wage levels for all years from 1906 to 1930 (except for 1926 when the interior coffee sector paid \$0.06 more than NAC region banana sector did). Figures 11 & 12 show the barchart graphs which illustrate these comparisons and contrasts respectively.

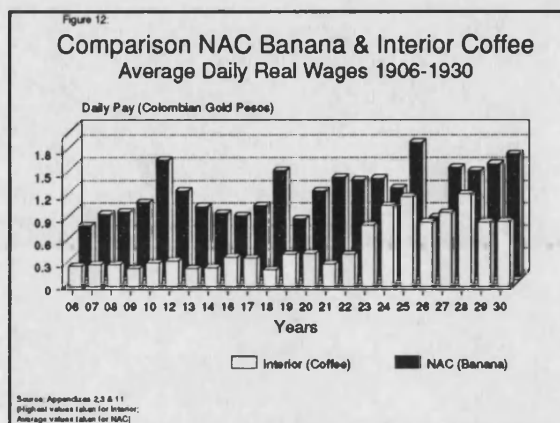
Another source we consider is Urrutia-Montoya, whose interior urban manufacturing wage levels provide a more comprehensive setting for the period with which we are dealing with. Appendix 12 shows the data which is compared with data from Appendixes 8 & 9.

One can say that at least for years 1907, 1908, 1910, 1911 and 1912, NAC region manufacturing industry real wages were higher than their counterparts in the interior. In years 1921 and 1924, at least the upper limits of the NAC wage ranges were considerably higher than the interior wage levels.

We can also add that for years 1913, 1914, 1915 and 1924 NAC general unskilled



urban labour real wages were much higher than their counterparts in the interior. Figure 13 shows the bar chart which illustrates the contrast between the NAC region's lowest and the interior's highest wage rates as well as the comparison between the former's and the latter's highest wage rates. As no NAC urban manufacturing data from 1924 onwards emerged from the sources researched we are unable to establish comparisons with data existent for the interior as listed earlier in **Appendixes 12 & 13**.

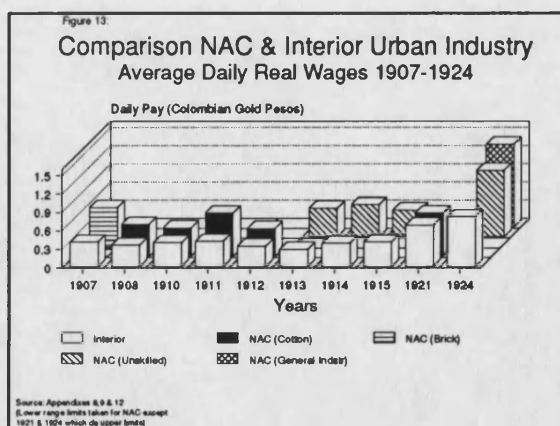


From Urrutia-Montoya's figures one can conclude that for the period 1905 - 1930, interior urban unskilled ('urbanized' rural peasantry) real wage levels, (w_5), showed a range of $\$0.24 < w_5 < \0.88 .

Previous NAC region's rural banana sector real wage levels (w_6), listed in **Appendixes 1, 2 & 3** showed a range of $\$0.69 < w_6 < \2.35 for the same period.

Equally, previous NAC region's rural coffee sector real wage levels (w_7), recorded in **Appendixes 1, 2 & 3**, showed a range of $\$0.66 < w_7 < \2.78 for years 1911 to 1930.

Clearly, if w_5 is correlated with w_6 and w_7 , the least that can be said is that in real terms, NAC region rural unskilled labour wages were higher than even interior 'urbanized' rural unskilled labour wages. Indeed, year by year, NAC banana and coffee agricultural wage levels were higher than those for



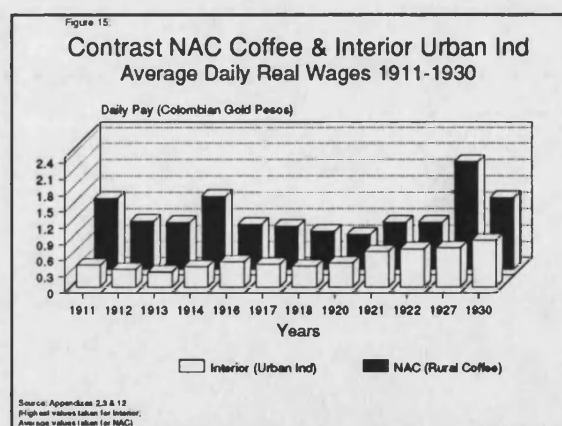
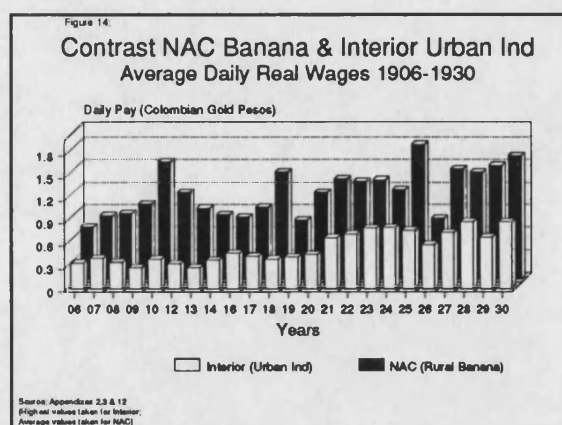
interior urban manufacturing industry. Figures 14 & 15 show the bar chart graphs which illustrate these contrasts.

For the sake of recapitulation -not repetition-, because data on NAC region urban banana sector real wage levels is scarce, one can only state that in general, most of agricultural wage levels between years 1906 and 1925 were higher than interior urban manufacturing real wage levels.

This was all the more meaningful given the fact that the cost of living for the years 1923 to 1930 was higher in the NAC region than in the interior. Average food price indexes (see Appendix 24) for the NAC region were consistently above those of the interior's. Furthermore, the cost of living in the interior was consistently lower than in the nation as a whole.

Because if data collected on real wage levels between NAC region rural banana sector real wages (Appendix 3) is contrasted with all secondary source material for interior urban manufacturing levels (Appendixes 12, 13 & 14) during these years, this shows NAC rural banana sector real wage levels were higher than interior urban manufacturing real wage levels. Figure 16 shows the bar chart graph which illustrates this contrast.

In 1926, only interior cotton textile industry male real wage levels were higher (\$1.22). In 1927, only the banana sector wage level range's upper limit was higher

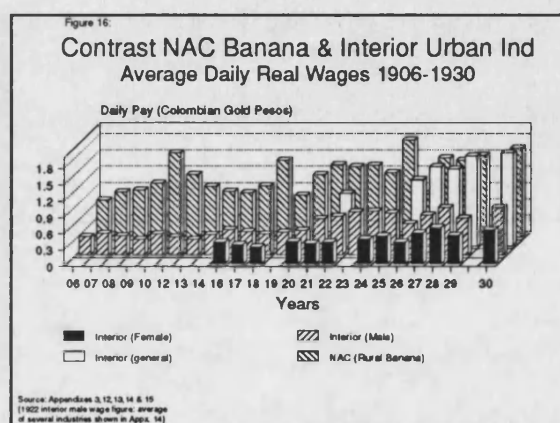


(\$1.85). In 1928, both were at par with a real wage level of \$1.42. And in 1929, one banana sector real wage level - \$1.92- was above the interior cotton textile industry male level of \$1.66. Finally, in 1930, all banana sector wage level range upper limits (\$1.94, \$1.77 and \$2.35) were above the interior's (\$1.77).

It is likely that the fact that $w_5 < w_6$ and $< w_7$ plausibly supports the case for a high-wage economy emerging in the NAC region's rural sector. This would eventually cause the slackening of linkage-creative urban industry, that is, economic stagnation.

The interior's rural sector emerged less scathed with the absence of this constraint. From 1910-1912 onwards the low-waged interior textile industry was able to perform in a more solid manner. Through the demise of urban footloose industry, the NAC region's economic growth probably stagnated.

It plausibly revealed -at this time- the paradox mentioned at the outset of this thesis: that economic stagnation took place amidst the presence of a high-wage economy.



One important proviso, however, must be made which warrants some elaboration. High wages (either equally high, or even higher than in the NAC region) were paid to male cotton textile industry labour in the interior in the later years of the period considered here. Within the particular context of the interior's low-wage economy, this was more the exception rather than the rule.

Our view is that it was particularly exceptional because the main source of labour supply in the interior's stronger growth pattern was, above all, provided by cheaper female labour.

There probably is no more established a source than Ospina-Vasquez with whom to assert and compare views as well as data. He has certainly emphasized the cheapness of interior female labour already. He showed some significant industrial interior female nominal wages arranged by him for the conglomerate of mill, textile, cigar and cigarette industries of Medellin (in the interior) for the period 1916 - 1931. They have been deflated accordingly in Appendix 13.

The data suggest interior female urban industry daily real wage levels, (w_s) showed an (simple unweighted) average range close to $\$0.31 < w_s < \0.67 . If Ospina-Vasquez's data are contrasted with the data collected in Appendixes 1, 2 & 3 for every single year of the former's figures on interior female urban industry daily real wage levels, NAC region banana as well as coffee sector rural daily wage levels were very considerably higher.

However, there seems to appear some degree of either confusion or contradiction in his figures. At least for 1922 he equally indicates that "... Coltejer [the great interior textile complex] paid males wages ranging from \$0.50 [real \$0.46] to \$2.70 [real \$2.50] and females, wages ranging from \$0.35 [real \$ 0.32] to \$0.80 [real \$0.74]. Rosellon [the other large interior textile factory] in its factory in [the town of] Envigado paid its male and female labourers (average wages of) \$1 [real \$0.93] and \$0.45 [\$0.42] respectively. In the Medellin [factory] (ex-Hernandez) it paid \$1.30 [real \$1.20] and \$0.60 [\$0.56]. The Compania Colombiana de Tabaco on average \$1.58 [real \$1.46] and \$0.91 [real \$0.84]. Another factory paid \$1.20 [real \$1.11] and \$0.70 [real \$0.65]"²⁸.

This means that for 1922 he really offers two different average real wage levels for industrial female labour. One implied by the information mentioned immediately above at \$0.60 and another at \$0.40 (see Appendix 13). These last figures suggest that just in textiles, the average female wage level was standing at \$0.50. This is very much in line with the Department of Antioquia's Statistics (see Appendix 14) for the 1922 female manufacturing industry weighted average wage level of \$0.50.

Another respected source for comparison of data is the Boletín del Ministerio de Industrias. The Colombian government indeed published some 'national' wage averages and employment figures in the cotton and textile industry²⁹ for the years 1926 to 1930 shown in Appendix 15. The data yielded weighted average wage levels of \$1.30, \$0.66 and \$0.45 for male, female and child labour respectively for this period of years. The data also show that for the same years interior textile male labour wage levels, (w_s), were surprisingly above the average levels, showing a range close to $\$1.22 < w_s < \1.71 .

Nevertheless, the textile female and minor labour supply was overwhelmingly larger than that of male labour. Indeed, for each particular year of this period, the female labour force was 97.7 %, 119.3 %, 82.7 %, 97.1 % and 63.9 % respectively larger than the male labour force. Taken together, female and minor textile labour force in the interior for the same years was 115.2 %, 147.6 %, 106.6 %, 116.2 % and 82.8% respectively larger than the male labour force.

It remains a non-sequitur therefore to argue that because a minority of particularly textile male labour in the interior earned relatively high wages in the last five years of the last decade, the case for an NAC region high-wage economy should be dismissed by pointing out a high-wage interior as well. It is not all that apparent.

The main explanation seems to be that high interior textile industry male wage levels from 1926 onward emerged because of the prevailing predominant female low-waged labour force. Textile male labour in the interior became the top end of that wage differentiated interior labour market. It emerged more as an exception rather than as the rule. A very minutely differentiated exception indeed.

Furthermore, if for the same years of 1926 to 1930, female and minor daily nominal average wage levels for the interior textile industry are grouped together, a weighted average of \$0.64 was the daily real wage level. If compared to the

lowest wage level the NAC region's banana and coffee sectors showed for those years (\$0.80 upwards), it was at least 25 % lower. Clearly, the interior cotton textile industry, and possibly interior industry in general, had no real pressure from intra-regional high-wage economies like the NAC region did. Additionally, to a certain extent, it could rely on a principally (and apparently endless) low-wage female labour supply.

Particularly useful to our argument as well is the Department of Antioquia's statistics³⁰ shown in Appendix 14 (wage levels for the interior in 1922). The above data indicate that if there was a low-wage interior, it was peculiarly a feminine and child low-wage interior. As Montenegro pointed out, " in the three textile factories towards 1916, female remuneration was approximately 50 per cent less than that of males. In the rest of the factories, differences fluctuate too much, but masculine remuneration is markedly superior "³¹.

In the Medellin factories average pay of the female labour force for the " four textile factories for which data exist, represented only 41 per cent of that which is paid to males "³². Child labour force pay between 1926 and 1932, represented " only 33 per cent of the payment to males and 47 per cent of payment to female labour force"³³.

In order to illustrate one of the factors influencing economic policy in the interior for the period 1902 - 1909, Ospina-Vasquez stressed the excess labour supply, particularly of women, noting the " ... growing and already considerable accumulation of idle hands in the cities, especially of women "³⁴.

If indeed there was 'idle labour' there can be little doubt that the excess population supply was contributing (through rural-urban migration) to excess labour supply in the interior: " [cities] ... had increased by a simple vegetative growth, which was perhaps greater in them rather than in the countryside, and additionally, there had been a markedly strong tendency towards rural-urban migration "³⁵.

Or that in fact, labour creation was " there for the taking " in a quite advantageous manner for the interior industry and its economic growth and development: low wages indeed. According to Ospina-Vasquez " ... [migration towards the city] ... in a greater extent was due to the incentive of a different life, to the vague hope of bettering their luck, not to the certainty of finding in it better paid work than in the countryside ..."³⁶. Furthermore, he said " the first factories (especially textiles) were established employing this marginal labour force [idle labour, namely females and children], that was content with very low remuneration "³⁷.

Ospina-Vasquez summed the situation up (perhaps inadvertently) by suggesting that in the interior, excess population went hand-in-hand with female supplementary income in the whole family unit, establishing 'de facto', a structural economic conjuncture whereby marginal (female) labour was taken for granted in conditions of low wage labour supply.

Indeed, " in some regions, in [the department of] Antioquia especially, the situation is worsening due to local overpopulation phenomena. The population was becoming very dense in some of the cold lands of little agricultural production ... female migration took place generally as part of a family, not as loose units ... the eventual wage was received as a supplement to the earnings of the family head ..."³⁸, the lack of national labour legislation for the nation during the first three decades of the century increased the low level of wage bargaining existent in the interior: " exploitation of young female and child labour force, as the determinant element of the process of capital accumulation ... occurs heavily, if it is taken into consideration that during the first three decades of the XXth century no labour legislation existed that would defend the workingman's interests "³⁹.

It is reasonable therefore, to acknowledge a stronger and more aggressive industrial growth in the low-wage interior because as Montenegro pointed out, " based on young female and child labour, the [interior] textile industry as well

as a greater portion of [interior] Colombian manufacturing industry was born, developed and acquired its maturity ...^{"40}.

He also noted that the first (interior) manufacturing enterprises " found a gigantic and unexploited potential market in young female and child labour force at the beginning of the XXth century ...^{"41}.

A more useful remark yet is the potential and unlimited nature of the female and child labour market in the interior. Such was the significance of the interior's low wage female labour supply that it was decided to limit a statistical study to the female labour force exclusively: " ... it is about statistics of labour force employed in factories, and even in workshops and other establishments assimilated into factories, that was not judged to be inconvenient to limit the study to them ...^{"42}.

Nevertheless, Ospina Vasquez went back on his initial view that excess female labour supply was an outstanding factor in the interior's economic progress. Although it emerges clearly that the interior was a low-wage economy, an important point is that it was mainly an excess female labour low-wage economy.

He argued female labour wages -although low- " [sic] [were] not laughable within the remuneration scale of current labour. They were not to be had as hunger wages, accepted in a compulsory fashion; they were supplements, temporarily accepted^{"43}. He also thought this particular labour force " was uneconomical, if its productivity is confronted with the remuneration it received. National products, despite low wages, would emerge more expensive than foreign ones ...^{"44}.

Ospina-Vasquez suggested that although " the provision of abundant and not too clumsy cheap labour force was an essential part of the structure of the textile business, ... the terrifying situations that have marked the initiation of industrialization in other parts -not least in England- were not witnessed ... and quickly a situation was arrived at in which industrial wages were relatively high

... this rapid transition of the cheap and abundant labour phase is perhaps the most important aspect of the evolution of manufacturing industry in Colombia in its recent phase"⁴⁵.

With this in mind, it is not difficult to comprehend why, in the NAC region, with a prevailing high level of wages in agriculture, the pricing-out of several other economic sectors took place. Where more solid economic linkages could have prevailed -namely cotton cultivation and textile production- legally imported goods (let alone illegally imported ones) were pricing out even interior produced goods. If in the low-wage interior 'linkage-creating' textile industry wage levels were not low enough to compete with foreign produce, how could one ever expect the NAC region's industry to do so?

There was only one way in which the interior economy could survive. Unable to compete with foreign products' prices, it further increased its growth at the expense of and demise of its internal competition, namely the NAC region.

Therefore, legally imported product consumption would be curtailed, illegally imported ones would be discouraged by whatever means, interior low wage female labour would become institutionalized guaranteeing employment (or at least diminishing unemployment), family unit incomes would be strengthened and the best of all worlds would be had.

Paradoxically, intra-regional wage differentiation persisted after the period under study. In the late thirties and the early forties higher wages were still existent in the NAC region's coffee sector. Wyle indicates for example, that in the interior, " according to Tomlinson, who described conditions ... in the Cauca Valley [interior of Colombia] ... the workers receive 55 to 60 centavos and a piece of panela [native brown sugar] for a day's labor. They are provided with a one-room house and are welcome to gather the bananas and plantains that grow on the hacienda. They may have a garden and a chicken if they like. At harvesttime they are paid on a piece-rate basis and receive about 8 centavos for each 3 1/2 - pound

basket of coffee they gather"⁴⁶.

In the NAC region however, " most of the laborers on the plantations in the Sierra Nevada de Santa Marta ... earn from \$ 1.00 to \$ 1.25 a day, which is well above the average for the country"⁴⁷. There is no evidence available of the non-pecuniary element in these wage levels.

At 66 centavos for the interior and 129 centavos for the NAC region, this represented -in real terms- a full 49.1 % higher average NAC region wage level. This appears to confirm strong wage differences at equal jobs between both regions (assuming equal efficiency by labourers in both regions).

Inter-regional wage differentiation therefore persisted throughout the mid-30's decade. According to Wyle, " wage rates for hired labor vary greatly from one region to another, depending on the supply of workers and the alternative opportunities for employment. Some plantations furnish food as part of the payment, but this practice is not general. Men usually receive from 20 to 30 centavos a day more than women workers "⁴⁸. Table 5 shows this data.

Despite the lowering of banana sector wage levels mentioned earlier, there is some significance to be drawn from Wyle's information of the Contraloria's coffee workers' daily wage levels, deep into the mid 1930's. It indicated that NAC region wage levels (namely male) were well above the interior's and the nation's average. In fact, men's average daily wages in the NAC region (departments of Magdalena, Bolivar and Atlantico) were placed at 72 centavos per day, a high 15 % over men's average for the interior (rest of departments) of 61.2 centavos and an 11.8 % over the whole of the nation's average of 63.5 centavos.

Several decades later however, recent research by Herrera-Soto and Romero-Castaneda suggest that Colombian minimum wages in 1978 only show that " the labourer in the banana zone has not progressed in his economic betterment and purchasing power, because only his wage increase relative to 1928

is of some \$ 1.56 and \$ 1.11, that is, (at an exchange rate of \$41), \$63.96 and \$45.51 in Colombian currency"⁴⁹.

TABLE 5. DAILY WAGES OF COFFEE LABOURERS IN COLOMBIA: 1936
(CGP\$'s)

Department	Men over 18	Women over 18
Caldas	0.89	0.59
Antioquia	0.70	0.48
Tolima	0.82	0.47
Cundinamarca	0.60	0.41
Valle	0.91	0.63
Norte de Santander	0.71	0.48
Santander	0.37	0.41
Cauca	0.39	0.44
Huila	0.69	0.38
Boyaca	0.31	0.21
Narino	0.34	0.21
Magdalena*	0.76	0.42
Bolivar*	0.73	0.49
Atlantico*	0.67	0.38

Source: Table 17 in Wyle, K., H., "The Agriculture of Colombia", *Foreign Agriculture Bulletin*, No. 1, October, 1942, United States Department of Agriculture, (Washington, 1942), p. 44; Note: * denotes the three Departments which compose the NAC region.

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CHAPTER V

WAGE DIFFERENTIATION: THE EVIDENCE

(i) *The NAC Region*

Most researched evidence discloses that in Colombia there was generally a *national low agricultural wage level range*. This was despite the slowly increasing interior urban government wage trend revealed by Urrutia-Montoya. This exceptional increasing wage level trend was the result of national government artificially raising levels in the 1920s for employment in public works schemes.

It is with this in mind that we researched and studied the development of any pattern that nominal wage differentiation in the NAC region would show. Particularly for the crucial period for 'national' development, 1900 - 1930.

We note however, that primary data for 1901 show that NAC region urban government wage levels were already relatively high at the turn of the century. Whilst a porter, a guard and a concierge at the Finance Secretariat of the Department of Magdalena in the city of Santa Marta (NAC region) earned CP\$ 20, CP\$ 30 and CP\$ 30 per month respectively, an accountant, an official editor and an *escribiente*, earned CP\$ 30, CP\$ 50 and CP\$ 70, per month respectively¹.

Railways (which first begun operating in the NAC region of Colombia) also showed an initial isolated high wage pattern for the region, separate from that of rural agriculture. This was the case for 1902. Railway wages were not necessarily abysmally low. The Barranquilla Railway and Pier Company for example, paid workmen wages of " 80 cents gold per day"².

In general however, wage differentiation for labour fared low enough in the NAC region at the turn of the century. The cost of common labour was sufficiently low to elicit the observation in 1903 that it was " so low that labor-saving machinery is not desired in this country"³.

Table 6 below for example provides a general view of labour wage differentiation for that year. It shows the daily wages (without board and lodging) paid in Barranquilla in 1903. Figure 17 shows the barchart graph which illustrates the data.

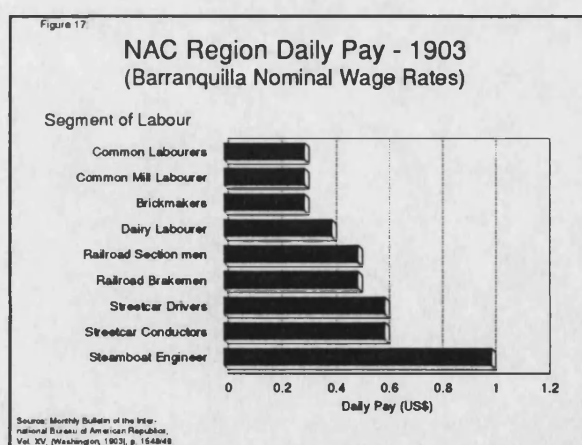
By 1904, British Vice-Consul Carr noted that the " average cost of a day's labour may be placed at 2s"⁴. And in 1905, the gathering of the cotton crop in the NAC region was carried out by women " who are paid at the rate of about 5 cents for every arroba (25 lbs.). Each woman gathers in from three to four arrobas per day ... The highest wage including board amounts to 16 cents (8d) per day"⁵.

TABLE 6. BARRANQUILLA DAILY NOMINAL WAGE RATES: 1903

<i>Type of Labour</i>	<i>Wage Rate (US\$)</i>
Common Laborers	0.30
Common laborers in mills	0.30
Brickmakers	0.30
Laborers engaged in dairy work	0.40
Railroad section men	0.50
Railroad brakemen	0.50
Street-car drivers	0.60
Street-car conductors	0.60
Engineers in steamboats	1.00

Source: *Monthly Bulletin of the International Bureau of the American Republics*, Whole No. 123, Volume XV, No. 6, December, 1903, (Washington, 1903), pp.1548-1549.

And in 1906, Fawcett, an expert in the banana industry, ascertained that labour was " cheap averaging 50 c. per day, and very good results are obtained. These results indeed compare favourably with those of Costa Rica ... where labour is dear, averaging \$1.00 a day"⁶.



In the same year, when according to British official Stronge, government was " unpopular at Bogota"⁷, United States Consul Demers assessed that in the NAC

region labour was " averaging 50 cents per day"⁸.

In the same year in a brick factory in Cartagena, " labor [was] paid ranging from 40 cents to \$ 1.20 per diem"⁹. And in 1908, United States Consul Manning indicated that " labourers [in the cotton industry] ... principally women and girls ... [earned] the average wage ... of ... 40 to 50 cents per day"¹⁰. Nevertheless, he pointed out that men in shoe factories earned " from 80 cents to 1.50 U.S. American gold dollar per day ... [and] ... apprentices earned 50 cents per day"¹¹.

It was to be Petre-Lorraine who firmly emphasised the point of high wages in the NAC region. He noted that " labour is spoken of as being very cheap. That may be true when comparison is made with prices in European countries, *but it is hardly correct when the comparison is made with East Indian or Chinese labour; for the daily wages of unskilled labourers in Colombia are nearly double those on which the Indian coolie lives in Trinidad*, [emphasis added] but only in what he considers comfort, but also with a margin which enables him to save"¹².

The aforementioned "Colombian" 'nearly double' wages Petre-Lorraine referred to were primarily NAC region wages. It seems to me therefore that wage-earners in the NAC region retained a high level of pay suddenly, abruptly.

The payment of banana wages was however, relatively higher than that paid for similar types of labour in the region. White for example, noted that " such an advantage was subject to change. Wages did rise from this period. The low sum of 50 c. paid on the banana plantations was already twice as much as the wages in the Sierra"¹³.

The suddenness and abruptness of higher pay slowly but progressively influenced the whole NAC region. Upward slopping wage curves must have alerted the region's other economic sectors. The implications of an uneven process of economic development by the presence of a market monopolizer on a world-wide scale (and monopsonist) such as the large-scale corporate unit (the UFC) was

manifest.

Able to meet the high wages resulting from shortage of labour, and since it was a large employer, the UFC allowed the banana export sector to be a paramount in setting wage patterns for the rest of the region. Indeed, owing to the great demand for field labourers unleashed by the extensive new banana cultivations, British Consul Carr directed attention to the fact that the cost of labour increased in 1909 from 50 to 80 per cent over that ruling during the first half of the year 1908¹⁴.

Primary evidence also shows that in 1909, a labourer in the banana industry engaged in 'Desmonte' (clearing hinterland), worked 190 hours at a wage of CPP\$ 8 per hour paid by the UFC¹⁵. Assuming an 8 hour working day, wages amounted to CPP\$ 64 per day.

That same week and year, three men were paid by the UFC CPP\$ 2 per cutting of a bunch of bananas. Accordingly, efficiency and production in cuttings would determine personal earnings. One man cut 3,123 bunches, a second cut 1,978 while a third cut 781 bunches¹⁶. There is no data available on the amount of time each man had available for doing his job.

Although all that can be said here is that each man earned a weighted average pay of CPP\$ 3,921.33, this shows *at least that the amount of pay offered by the UFC* was considerably attractive to some wage labour which showed a degree of high productivity.

Other primary evidence includes the time factor. It shows that on the 23rd and 24th of September, 1909, on a 'round-the-clock' working basis, 163 men from 'Loading Gangs' moved 48,118 bunches of bananas in 48 hours¹⁷.

This suggests 295.2 bunches per man and 6.2 bunches per hour per man were moved. Assuming an 8 hour day's work and taking 6.2 bunches per hour as a

proxy for the amount of bunches previously cut, this suggests that the aforementioned three men were cutting 49.6 bunches per day and earning a daily wage of CP\$ 99.20 .

While cotton cultivation in the rural area of the NAC region was apparently unable to cope with the high wages set by the banana sector, its urban counterpart, the cotton textile industry seems to have been able to do so. But this seems to have been only for a limited amount of time.

Evidence of this emerges from United States special agent Graham-Clark's findings on his economic intelligence gathering mission on cotton production in the NAC region in 1910. He came to the conclusion that wages were extremely high there. The fact he referred to the cotton textile industry in particular sets a basis upon which to argue that the industry's capacity to foot a reasonably high wage bill existed at least at that particular time.

In spite of inefficiency (making production costs high) wages were in fact higher in the NAC region than in the United States. As Graham-Clark pointed out the " weaving price paid here shows that inefficient labor costs high ... for it costs ... more to make ... [textile] goods in Colombia [Cartagena, NAC region] than in the United States¹⁸. He equally reported that " the spinners are all boys and one boy runs one side of 190 spindles, a few running two sides. They are paid by the kilo of production and make 35 to 40 cents gold a day ... the weavers are paid 1 1/4 cents a yard. Each girl runs two looms and makes about 60 cents a day"¹⁹.

So, the NAC region's cotton textile industry was, at the time, not only able to pay high wages, but high wages in relation to low productivity. This lag in productivity may have been due to inadequate technical progress. Graham-Clark in fact claimed that " under present methods the cost of production is higher than in Mississippi. The cotton is planted in July and picked in December. Pickers get \$ 25 Colombian paper per arroba (25.4 lbs.) equivalent to 1 cent gold a pound²⁰.

Labour conditions and supply in the banana sector of the Santa Marta area in 1910 were hardly ideal. Thus, wages maintained their high levels. British Vice-Consul Marshal reported to that effect that " during the year little has been done to improve the labour conditions and a demand greatly in excess of supply has raised the labour wage in agricultural and railway work rates of 4s to 5s per day, the market being almost exclusively filled from within the country"²¹. Indeed, primary data suggest that in the month of June, 1910, the UFC paid daily wage rates of CPP\$ 120 and CPP\$ 110 to a foreman and a rural labourer respectively"²².

Another NAC region agricultural sector -coffee- and urban industry in general continued to bear the rise in an assortment of wages. British Vice-Consul Marshal for example, asserted in 1911 that, in the coffee district of Santa Marta " day labour rates [were] 3s 6d to 4s"²³ and that in a Barranquilla flour factory a " labourer earned 70 to 80 cents gold per day"²⁴. In a Barranquilla soap factory, pay " fluctuated between 0.50 and 3.0 gold per day"²⁵. Equally, a soap factory paid labourers " 70 cents per day"²⁶ whilst a Barranquilla textile factory paid " between 0.50 and 1.50 gold per day"²⁷. Yet another Barranquilla textile factory " paid an average of 0.40 gold per day"²⁸.

Urban cotton textile industry labour wages paid at German entrepreneur Henry H. Helm's knitting factory in Barranquilla in 1912, were an " wage average ... [of] forty centavos gold daily per labourer"²⁹. Agricultural labour wages for the same year however, seem to have been higher. In the banana sector, the UFC paid a labourer CPP\$ 100 as his daily wage³⁰. The coffee sector wage level (although lagging somewhat behind that of the banana sector) was still high. It was even higher than the urban cotton textile industry wage level. This is what primary data from HLDE suggest.

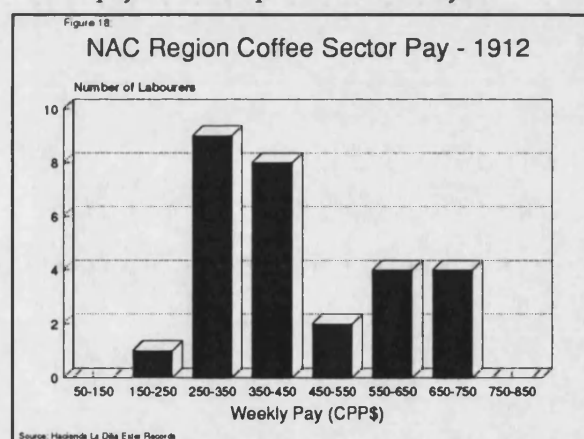
Table 7 below shows that the weighted mean average pay per week for the NAC region coffee sector was CPP\$ 390.83 (as labour there was paid at CPP\$ 16 per hour ³¹. Figure 18 shows the barchart graph which illustrates the data.

TABLE 7. NAC REGION COFFEE SECTOR PAY - 1912

x	w
1	180
1	256
1	268
4	300
1	320
1	328
1	348
1	358
1	372
3	400
1	414
1	416
1	444
2	468
2	576
1	588
<u>1</u>	<u>600</u>
24	$\bar{X} = 390.83$

Source: Hacienda La Dilia Ester. Payroll. Week from 23rd-29th December, 1912; Notes: x = No. of labourers; w = pay in CPP\$s per week of 5 days.

Wages rates in the NAC region in 1912 were high. According to Levine " in tropical and therefore less populous districts where the agricultural and pastoral industries require more labour, the unskilled workman receives higher pay, especially if this district is unhealthy. Here the rate rises to 50 or 60 centavos³². He added that in the railways, " the navy [earned] 70 to 80 centavos in the tropics"³³.



Although Kepner argues that in 1913 " fifty cents a day was sufficient to secure Colombian workers around Santa Marta³⁴, the banana sector's UFC actually paid a labourer CPP\$ 100 as a daily³⁵. In 1913, wages in the coffee sector's HLDE payments -shown in Table 8 below- were just under banana wage levels.

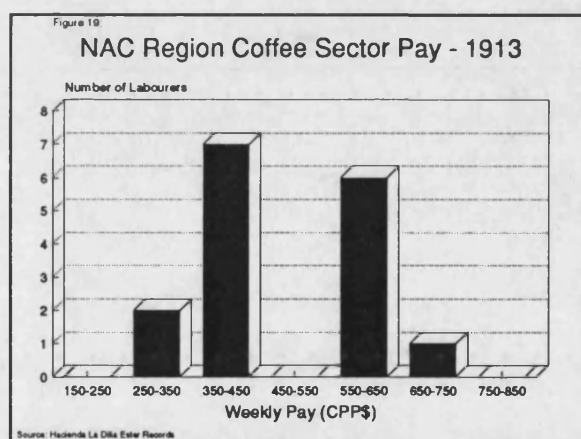
TABLE 8. NAC REGION COFFEE SECTOR PAY: 1913

w	x
3	300
1	340
1	368
4	400
1	436
1	444
1	559
1	568
1	588
1	600
1	608
1	648
1	676
18	$\bar{X} = 463.06$

Source: Hacienda La Dilia Ester. Payroll. Week from 30th December, 1912 to 5th January, 1913; Notes: w = # of labourers; x = pay in CPP\$ per week of 5 days.

Figure 19 below shows the barchart graph which illustrates the data. Despite the above, in 1914, urban wage rates were not dissimilar from rural ones. Whilst an urban area that year showed "wages paid factory employees [varied] from 0.50 to 1.50 per day³⁶, the labour force in the

banana sector was "paid at a good figure, from 60 cents to \$ 1 gold per day³⁷. The UFC records in fact show that a labourer was paid CPP\$ 100 as a daily wage that year³⁸.



HLDE records however, show that coffee sector labour became slightly less expensive. In fact, HLDE paid labour at CPP\$ 15 per hour. Nevertheless, it seems that more hours were worked per day. This is why, as Table 9 below shows, the weighted mean average pay per week is CPP\$ 524.88 (the weighted average daily wage rate in the NAC region coffee sector was therefore CPP\$ 104.98).

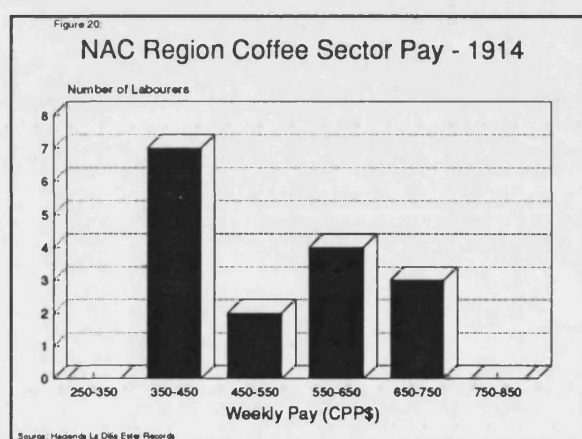
TABLE 9. NAC REGION COFFEE SECTOR PAY: 1914

x	w
1	600
1	500
6	400
1	450
1	581
1	738
1	637
1	592
1	468
1	712
1	720
16	$\bar{X} = 524.88$

Source: Hacienda La Dilia Ester. Payroll. Week from 5th to 11th January 1914. Notes: x = No. of labourers; w = pay in CPP\$s per week of 5 days.

Figure 20 shows the barchart graph which illustrates the data.

In 1915 United States Consul Guyant noted that " the wages paid male labourers ... are 0.50 to 1 per day, the average being about 0.60. Women [received] 0.25 to 0.35 daily³⁹. And in 1916, the UFC paid CPP\$ 60 as daily wage rate to labourer⁴⁰.



The coffee sector however, paid a weighted mean average daily wage rate of CPP\$ 64.62 as Table 10 shows below.

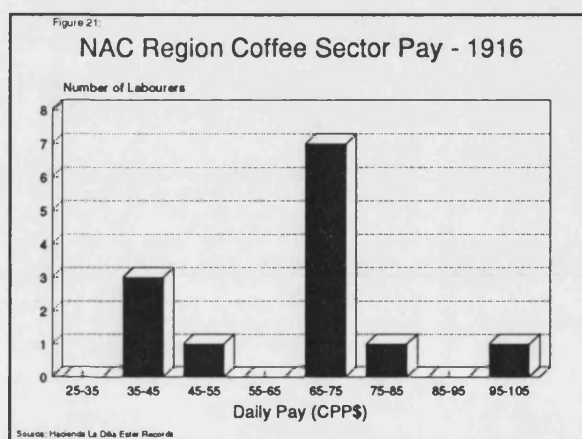
TABLE 10. NAC REGION COFFEE SECTOR PAY: 1916

x	w
3	40
1	50
7	70
1	80
<u>1</u>	<u>100</u>
13	$\bar{X} = 64.62$

Source: Hacienda La Dilia Ester. Payroll. Week from [illegible] to [illegible] 1916; Notes: x = No. of labourers; w = pay in CPP\$ per week of 5 days.

Figure 21 shows the barchart graph which illustrates the data.

According to United States Agent Ewing, skilled construction labour in 1916, for example, earned from " 1.50 to 3.00⁴¹. In 1917 a rural labourer in the banana sector was paid CPP\$ 80 by the UFC⁴². The coffee sector's



HLDE (according to Table 11 below) paid labourers a weighted mean average daily wage rate of CPP\$ 68.22 in the Sierra Nevada de Santa Marta.

TABLE 11. NAC REGION COFFEE SECTOR PAY: 1917

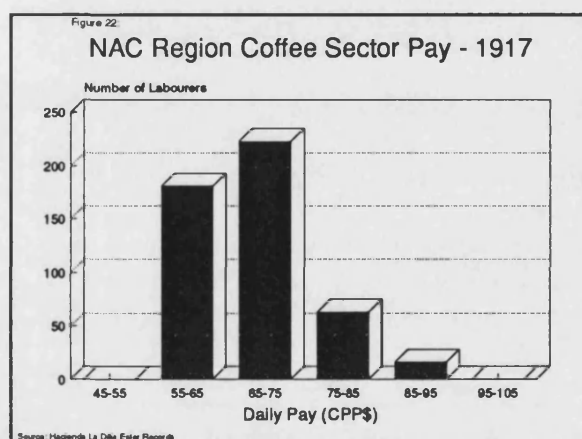
x	w
181	60
223	70
63	80
<u>16</u>	<u>90</u>
13	$\bar{X} = 64.62$

Source: Hacienda La Dilia Ester. Payroll. Weeks from 2nd September to 30th December 1917; Notes: x = No. of labourers; w = pay in CPP\$ per day.

Figure 22 shows the barchart graph which illustrates the data.

Although reference was made by United States Trade Commissioner Bell about

cheapness of labour in 1918, this suggest a momentary change of direction towards participation in the monetary economy on the part of some members of the Indigenous community of the NAC region. Bell had reported that it was in the Goajira where "cheap labor [was] obtainable"⁴³. The bottom end of intra-regional wage differentiation was at some point, found in this 'sub-region' of the NAC.



Despite this very exceptional case of cheapness of labour in the Goajira however, the more global content of the NAC region's level of wages remained a high one. United States Trade Commissioner Bell, for example, noted in 1918 that the "average wage per day for banana labourers [was] 0.80 [0.78 United States currency]"⁴⁴.

Although high indeed, evidence shows banana sector agricultural pay was much higher that year. A rural labourer in the banana sector was paid CP\$ 2 [CPP\$ 200] in 1918 by the UFC⁴⁵, while the coffee sector's HLDE, as Table 12 shows below was paying labourers a weighted mean average daily wage rate of CPP\$ 69.41 in the Sierra Nevada de Santa Marta.

TABLE 12. NAC REGION COFFEE SECTOR PAY: 1918

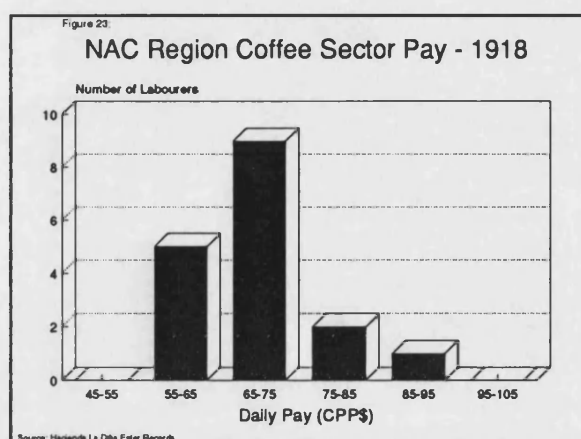
<i>x</i>	<i>w</i>
5	60
9	70
2	80
<u>1</u>	<u>90</u>
13	$\bar{X} = 69.41$

Source: Hacienda La Dilia Ester. Payroll. Week of 4th to 13th January, 1918; Notes: *x* = No. of labourers; *w* = pay in CPP\$s per day.

Figure 23 further below shows the barchart graph which illustrates the data.

The end of the 1910's decade witnessed some decline in NAC region agricultural wages. Fals-Borda mentions that in 1919, in the Hacienda La Marta Magdalena,

wage-labourers were " paid an average of 35 centavos cash, daily, without any other obligations⁴⁶. That same year however, a daily average wage of CP\$ 0.90 was paid to a rural labourer by the UFC⁴⁷. By 1920's the nature of the product and inflation had affected wages.



The latter was bound to affect the UFC's expected mark-up. According to White the banana export sector was " so subject to market instability and wastage of production through rejection of fruit, [that] wage increases were a great threat to profits. Moreover, as the average daily wages on Colombian-owned plantations was under \$ 1, percentage rises demanded were high⁴⁸.

This strengthened wage differentiation even more especially at intra-regional level. This is implied by White for example, when she noted that " during the best part of the '20s agricultural wages were kept down to between \$ 0.80 and \$ 1.20, though skilled labour made big gains - from \$ 1 to \$ 3 or more on the docks and railways - in the immediate post-war years⁴⁹.

Primary evidence however, shows that, particularly banana sector wages for agricultural labour, were higher and that they were making gains as sizable as skilled labour wages in docks and railways. Indeed, a rural labourer in the banana sector was paid CP\$ 1.50 in 1920 by the UFC⁵⁰.

In the coffee sector according to HLDE⁵¹ records, an average 50 rural labourers

per day were paid a total of CPP\$ 25,640 for six (6) days labour. This amounts to an unweighted average daily wage rate of CPP\$ 85.47 . This is not far from the figure HLDE's foreman revealed in 1984. Mr. Ricardo Marquez Alvarez declared that " in the 1920's, when my father, Luis Francisco Marquez Uribe, was La Dilia Ester's administrator, the daily wage paid to labourers was [CPP] \$ 80"⁵².

Although Pearse noted that in 1921 " common labourers in the Caribbean District get ... an average of 0.60 per day"⁵³ he also noted that " in towns ... the average is now as high as 1.20 per day for handling cargoes"⁵⁴. United States Trade Commissioner Bell noted, that for 1921, " wages ... averaged 0.80 per day for cargo handling, cartage, and similar occupations and were increased to an average of 1.20 per day"⁵⁵ and that the railway " regular wage [was] 1.20 per day"⁵⁶.

Nevertheless, banana sector wages still seem to have remained high. For instance, a rural labourer in the banana sector was paid CP\$ 1.50 in 1921 by the UFC⁵⁷. Albeit in the Barranquilla cotton mills " factory employees [were] paid on a piecework basis and earn[ed] an average wage of 30 to 80 cents per day"⁵⁸, wages in the coffee sector rose considerably that year at HLDE. As Table 13 below shows, HLDE paid labourers a weighted mean average daily wage rate of CPP\$ 98.24 in 1921.

TABLE 13. NAC REGION COFFEE SECTOR PAY: 1921

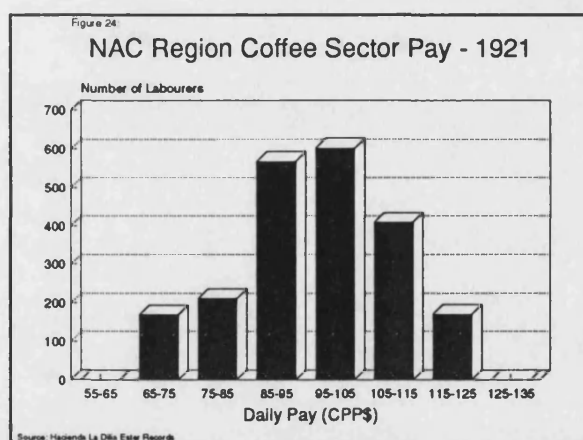
x	w
51	69.41
68	71.47
50	72.64
67	77.61
66	80.18
78	80.71
42	88.67
70	92.86
43	94.23
57	94.39
78	94.46
67	94.75
38	97.89
37	99.03
75	100.48
42	100.57
91	100.84
49	100.98
70	101.20
44	101.45
52	102.39
54	102.96
50	104.40
80	105.10
44	105.63
52	106.92
68	109.29
58	112.07
52	113.23
55	113.89
81	115.11
49	124.49
<u>40</u>	<u>129.60</u>
1918	$\bar{X} = 98.24$

Source: Hacienda La Dilia Ester. Payroll. Weeks of 25th December, 1920 to 15th January, 1921 and 11th to 31st December, 1921; Notes: x = No. of labourers; w = pay in CPP\$ per day.

Figure 24 below shows the barchart graph which represents the data.

But, while in that same year the UFC⁵⁹ was paying one of its rural labourers a wage rate of CP\$ 1.40 per day, the coffee sector's HLDE, as Table 14 below shows, was paying its labourers a weighted mean average daily wage rate of CPP\$ 95.33 in the Sierra Nevada de Santa Marta. Figure 25 further below shows the barchart graph which illustrates the data.

In 1923, British Vice-Consul Maidment reported that "wages paid are the average for the Coast"⁶⁰. These average wages followed the trend a rural labourer in the banana sector was paid - CP\$ 1.50 - during that year by the UFC⁶¹.



The following year, in 1924, another rural labourer in the banana sector was paid CP\$ 1.30 by the UFC⁶². Although common labour pay in the NAC region urban areas was slightly lower than in the banana sector, it was slightly higher than in cotton cultivation, as the International Cotton Bulletin pointed out in 1924. It reported that in "the cotton zones ... the average wage for labour in Colombia is [CGP]\$ 1.00 per day"⁶³.

TABLE 14. NAC REGION COFFEE SECTOR PAY: 1922

x	w
55	64.64
69	71.71
40	72.10
29	75.59
64	90.42
64	91.75
63	94.67
73	96.71
83	102.90
83	108.40
76	111.61
<u>93</u>	<u>120.62</u>
792	$\bar{X} = 95.33$

Source: Hacienda La Dilia Ester. Payroll. Weeks from 1st-14th January, 1922; Notes: x = No. of labourers; w = pay in CPP\$s per day.

Skilled labour however, was paid at a higher rate. Table 15 below shows the wages that prevailed in 1924 in Cartagena. Figure 26 further below shows the barchart graph which represents the data. Wage-rates were operating in significant

and distinct ways in the regional development process. By 1925, rural labour was remunerated in the banana sector at CP\$ 2 [CPP\$ 200] per day by the UfC⁶⁴. Not surprisingly, in Pearse's view, by 1926, "wages [in the NAC were] as high as in the United States and as low as 10d and 1s per day in many parts of the interior [of Colombia]"⁶⁵. Primary evidence also suggests that in the month of January, 1926, within the banana export sector 123 'cattle-rearing' (UFC 'ganaderia' account) rural labourers earned an average payroll wage of CPP\$ 101.08 per day and an actually paid average wage of CPP\$ 81.23 per day⁶⁶.

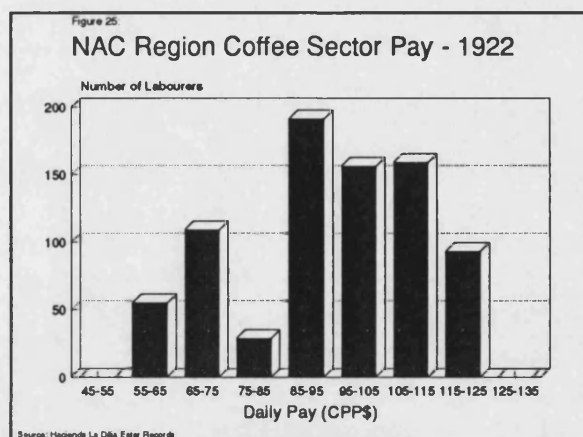
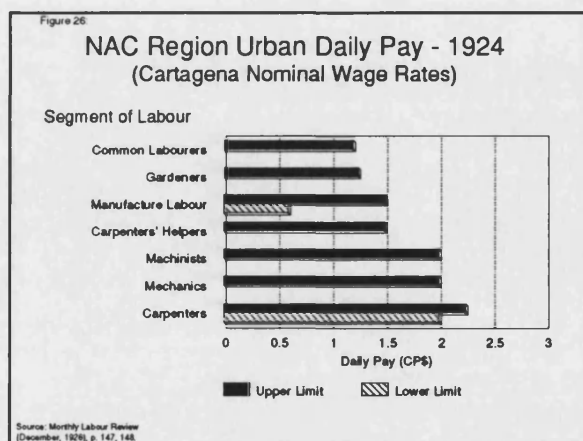


TABLE 15. NAC REGION URBAN (CARTAGENA) DAILY NOMINAL WAGES (CP\$'S): 1924

Job	Wage Rate
Common labourers	1.20
Gardeners	1.25
Manufacturing industries	0.60 - 1.50
Carpenters' helpers	1.50
Machinists and mechanics	2.00
Carpenters	2.00 - 2.25

Source: *Monthly Labour Review*, December, 1926, pp. 147- 148, as quoted by Kepner, C., *Social Aspects of the Banana Industry*, (New York, 1936), p.130.

In the same month and year, agricultural labourers earned payroll wages⁶⁷ of CPP\$ 64.74, CPP\$ 84.89, CPP\$ 125.85 and CPP\$ 130.07 respectively, an overall simple unweighted average of CPP\$ 101.39 per day. Actual paid wages⁶⁸ were CPP\$ 51.38, CPP\$ 64.40, CPP\$ 101.80 and CPP\$ 101.01 respectively, or, an overall simple unweighted mean average of



CPP\$ 79.65 .

Primary evidence from the banana sector's UFC equally suggest wages paid in January, 1926, were as detailed in Table 16 below.

TABLE 16. BANANA SECTOR NOMINAL DAILY WAGES (CPP\$):1926

Type of Work	No. of Employees	Payroll Pay	Actual Pay
1.discharging	67	83.98	80.07
2.wharf department	127	152.60	75.41
3.engineering	134	216.23	117.54
4.'picking-up'	61	535.52	524.55
5.land personnel	64	641.87	623.10
6.loading	<u>64</u>	<u>1059.41</u>	<u>1027.74</u>
	517	$\bar{X}_i = 378.20$	$\bar{X}_{ii} = 325.62$

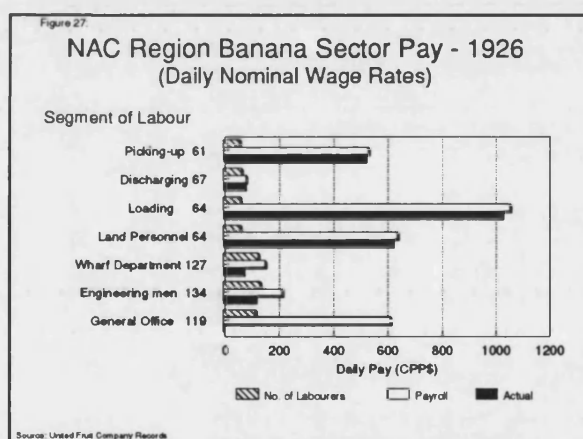
Source: United Fruit Company. Private Archives. Santa Marta Division. Payroll Index for the month of January, 1926.

Figure 27 shows a barchart graph which illustrates the data.

If it is considered that (i) personnel working in these different sections above were seasonal urban, unskilled labour operating within the banana export sector, and (ii) that according

to UFC records, there were four ship collections per year of fruit at port (based on cuttings carried on between October - January and February - May⁶⁹, some wage rate weighted averages can be showed.

First, there is the daily payroll pay weighted mean average wage rate of CPP\$ 378.20 on the one particular haul. Second, there is the daily actual (payroll pay plus deductions for merchandise store purchases, medical treatment or cash advances) pay weighted mean average wage rate of CPP\$ 325.62.



Despite the statistical description of the data above, a simple rural labourer in the banana sector however, was still being paid CP\$ 2 per day in 1926 by the UFC⁷⁰. But, the year 1927 showed considerable difference in regional wages. Indeed, the level of wages to be paid at which a contract was being negotiated with several hundred workmen from Puerto Rico was reported by the International Cotton Bulletin to be " [CP]\$ 1.20 (about 4s 10d) per day"⁷¹.

Urban labour wage rates in the region's cotton textile industry were not too dissimilar. It could be " established that in the factories and workshops that operate in the department of Atlantico [NAC region] close to one thousand labourers work daily earning maximum salaries of [CP\$] 1 and minimum salaries of [CP\$] 0.50 ... [working] children between 12 and 16 years of age do not reach 300 ... [and] earn a maximum salary of [CP\$] 0.90 and a minimum salary of [CP\$] 0.55"⁷².

Table 17 below shows rural labour wage rates in the banana sector in 1927.

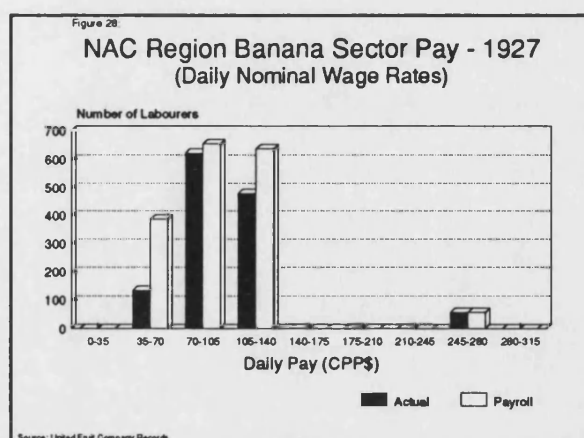
**TABLE 17. NAC REGION BANANA SECTOR DAILY
NOMINAL WAGES IN CPP\$s: 1927**

No. of Employees	Payroll Pay	Actual Pay
51	48.81	39.87
83	58.42	46.85
19	71.67	34.98
96	78.33	50.52
117	80.05	70.29
138	84.41	63.02
116	86.86	77.36
71	97.93	90.95
65	103.92	88.31
185	110.48	93.16
101	114.31	100.57
59	115.45	106.44
135	138.33	115.42
134	154.62	121.37
160	160.62	124.97
148	164.77	108.23
<u>56</u>	<u>255.04</u>	<u>251.75</u>
1734	$\bar{X} = 117.40$	$\bar{X} = 95.25$

Source: United Fruit Company. Private Archives. Santa Marta Division.
Payroll Index for the month of January, 1927.

Figure 28 shows the barchart graph which illustrates the data. These wage rates suggest first, a weighted mean average payroll wage rate of CPP\$ 117.40 per day.

The fact remains however, that still in 1927, a rural labourer in the



banana sector was being paid CP\$ 2 per day by the UFC⁷³. On the other hand, the coffee sector, according to Monsalve, " was paying male and female [labourers] daily wage rates of [CP]\$ 1.30 and of [CP]\$ 0.75 for children. During the rainy season, labour is paid by the hour, at [CP]\$ 0.10 and [CP]\$ 0.20 per hour"⁷⁴ in the Sierra Nevada de Santa Marta. If labour was paid by piecework in the coffee sector, it was done so " at [CP]\$ 0.15 to [CP]\$ 0.16 per *garrafon* [Italics added] or galon, a measure which is equivalent to 25 pounds of coffee cherries. A good [coffee cherry] collector earns a daily wage of from [CP]\$ 2.70 to [CP]\$ 3.00 by this system"⁷⁵.

It was precisely at this time that Pearse claimed that wages on the NAC were " injurious to development of the economic life in the country"⁷⁶. Indeed, Rippey has quoted the UFC's annual report to state that the UFC's annual payroll in Colombia was " said to amount to some \$ 4,000,000 -it was reported as being \$3,830,462.14 in 1927"⁷⁷.

Although we have no evidence for NAC coffee sector wages for 1928-30, it is probable that they remained at the 1927 levels -if not higher- as the nation witnessed a sharp increase in wages in 1928 as a result of foreign private investment.

It followed, as mentioned earlier, the United States indemnity payment to Colombia for the former's contribution to the latter's loss of its province of

Panama. In 1928, according to Rippy, "wages more than doubled"⁷⁸. The NAC region banana sector wage levels in 1928 certainly were confirmed to be high.

Table 18 below shows this primary evidence for the banana sector.

TABLE 18. NAC REGION BANANA SECTOR DAILY
NOMINAL WAGES (CPP\$s): 1928

No. of Employees	Payroll Pay	Actual Pay
39	50.10	44.76
78	57.43	51.76
72	96.07	69.40
86	121.16	99.18
195	158.51	115.50
<u>293</u>	<u>268.41</u>	<u>220.83</u>
763	$\bar{X}_i = 174.74$	$\bar{X}_{ii} = 139.62$

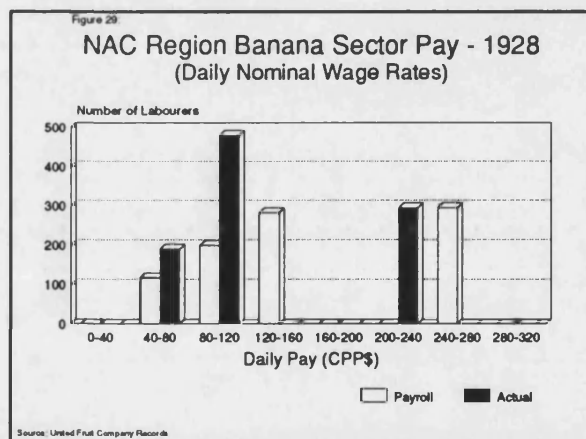
Source: United Fruit Company. Private Archives. Santa Marta Division.
Payroll Index for the month of January, 1928.

Figure 29 shows the barchart which illustrates the data. It suggests an weighted mean average payroll pay of CPP\$ 174.74 per day.

Further evidence indicates that agricultural labourers in the banana sector in 1929 kept earning relatively

high wages. Although the lack of observations for payroll pay and missing observations on two occasions of the number of labourers involved suggest averages and dispersions are not worth estimating, the data in Table 19 below do suggest a weighted mean average payroll pay wage rate of CPP\$ 106.51 per day and a weighted mean average actual pay wage rate of CP\$ 90.98 per day. Figure 30 further below shows the barchart graph which illustrates the data.

Rural labour in the banana sector however, continued to be paid CP\$ 2 in 1928



by the UFC⁷⁹ as well as in 1929 and 1930 as the UFC records⁸⁰ show. This is in line with Herrera-Soto and Romero-Castaneda's contention that wages fluctuated " between \$ 1.00 and \$ 1.65 gold pesos per day"⁸¹, with Greaves' reference to wages of " \$ 1 to \$ 1.50 daily by piecework on the banana plantations ... [whilst the] ... average elsewhere [is] 50 cents to \$ 1"⁸² and with Rollin's reference to level of wages in the banana sector: " the highest wages were \$ 2 gold per day and the lower ones were \$ 1.20"⁸³. In fact, British Vice-Consul Garnett-Lomax reported that " the workers in this [Santa Marta banana zone] region enjoy remarkably high wages ... in the banana zone an average of 6s. 6d. for farm work"⁸⁴.

TABLE 19. NAC REGION BANANA SECTOR DAILY
NOMINAL WAGES (CPP\$s): 1929

<i>No. of Employees</i>	<i>Payroll Pay</i>	<i>Actual Pay</i>
68	58.99	54.36
69	n.a.	64.25
n.a.	n.a.	71.53
401	n.a.	78.83
76	149.03	117.80
115	n.a.	135.27
39	n.a.	144.10
<u>n.a.</u>	<u>n.a.</u>	<u>160.78</u>
144	$\bar{X}_i = 106.51$	$\bar{X}_{ii} = 90.98$

Source: United Fruit Company. Private Archives. Santa Marta Division.
Payroll Index for the month of January, 1929.

All this data seems to give some weight to the suggestion that in 1929, according to the Colombian Trade Review \$ 3,839,642.00 worth of wages were paid by the UFC in Colombia⁸⁵.

Wages related to other UFC activity were also high. Garnett-Lomax confirmed that " [UFC owned Santa Marta] railway labour is paid 7s. 6d. to 8s. per day"⁸⁶ and that " rates for Stevedore on Board [were] ... Checkers on board - \$ 3.00 per day of 8 hours ... Foreman on board - \$ 1.85 per day of 8 hours ... [and] Labourers on board - \$ 1.70 per day of 8 hours"⁸⁷. This suggests that what we pointed out earlier is not too unreasonable. The banana sector seems to have been absorbing

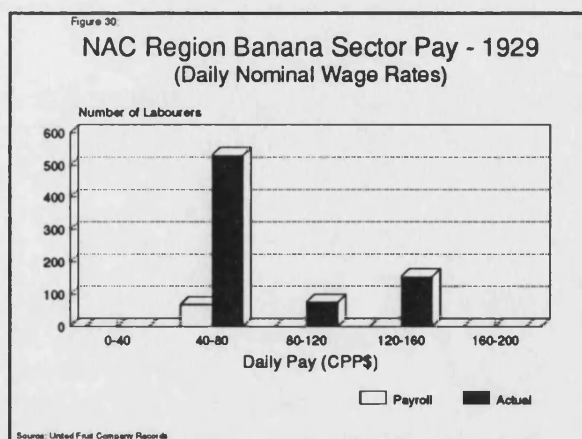
the greater part of the labour force in the region and rates of wages appear to be higher compared to other sectors.

Pearse believed that economic progress was being "achieved at too rapid a rate as it had upset the wages and the cost of living in the

country"⁸⁸. At this point however, it should be emphasised again that by the mid 1920's, investment into public transportation infrastructure reflected the lavish public and private credit from which the national and regional Colombian governments benefited. This was a result of (i) the United States government's indemnity payment for its overwhelming contribution to the nation's loss of Panama (as mentioned in an earlier chapter) and (ii) the subsequent confirmation by the Kemmerer Financial Mission of Colombia's good bill of financial health.

Therefore, in addition to the existent NAC region high-wage economy, these inflows of cash especially resulted in exceptional interior higher waged road construction labour. As the United States National Industrial Conference Board suggested, "the extremely rapid development of public works, requiring large borrowings in foreign countries, has affected not only the fiscal position of the Government, but has also created a serious situation in the interior labor market, for in order to obtain a sufficient supply of workers for the completion of the various construction projects, wages were increased above the level paid by the domestic industries"⁸⁹. The distortions of this exception in the interior is reflected by Deas' comment that in 1922, "a peon's wage employed in public works was greater than that of a mayor"⁹⁰.

But it was unquestionably heavy United States corporate investment such as the UFC's, in addition to their ability not just to decide, but to afford the payment of higher wages, which eventually negatively affected the NAC region.



Pearse confirmed this when he stated that " on the Coast, where the United States corporations have feverishly devoted themselves to ... bananas, labour is becoming so scarce and consequently high in price that the establishment or extension of cotton growing in this section or of any other industry that has to compete with the world's markets seems impossible"⁹¹.

He noted that " cotton picking is paid at a higher rate on the Atlantic Coast of Colombia than in Texas .. In addition to the demand for labour by the American corporations, the rapid development of road construction has necessitated the withdrawal of many farm labourers and the scarcity of labour brought about by this road extension has also increased wages"⁹².

By 1930, despite the prevalent disadvantageous physical conditions in the NAC region and serious problems of labour shortage, as will be analyzed in **Chapter VI**, there was still room for some sections of the region's labour force to 'proletarianize' at high premiums and for others to choose the 'leisure' alternative. Jones noted that " ... good wages [were] paid by the United Fruit Company"⁹³.

But he also added that there was an " ease of life on the lower slopes [of the Sierra Nevada de Santa Marta] where Indians may live without much work"⁹⁴. He was referring of course to monetary remunerated 'work' because, as he also indicated, " most of the labour on the coffee plantations ... make by piece work, from \$ 1 to \$ 1.25 per day, well above the average of \$ 0.50 to \$ 1.20 per day for all Colombia"⁹⁵.

He equally noted that the UFC's " holdings, divided into forty farms in several districts, require some 10,000 laborers who make, by piece work, [receiving wages] from \$ 1 to \$ 1.50 per day, 160 foreigners and 5,000 head of cattle for draft, beef and milk "⁹⁶.

By the end of the 20's - beginning of the 30's - wages in the NAC region were higher than elsewhere in Colombia. As White put it, " the effects on the [United

Fruit] company of wage increases were re-doubled by the new demands resulting from the contracted planters. Labour was in relatively short supply in the area, and ... wages were higher in the Banana Zone than in other parts of the country"⁹⁷. According to Kepner, " \$ 1.50 a day ... was given in the same year [1930] by a special commission of the Colombian congress as the average wage for banana workers in the Santa Marta district"⁹⁸. Wyle equally claimed that in " 1931 laborers in the banana fields received from 1 to 1.50 pesos a day, which was a high wage compared with other wages in Colombia"⁹⁹.

This was the epitome of banana sector high wages. Such was their effect that by 1932, the " [wage] rates were reduced to 80 centavos a day and to 60 centavos in 1933"¹⁰⁰. Kepner went further, claiming that by the end of 1933 daily wages " were returned to 49 cents"¹⁰¹.

Wyle's figures represent a decline of 46.6 % in NAC region wages in 1932 and a 60 % in 1933. Kepner's represents an overwhelming 67.3 % decline. Nevertheless, White suggests that a reduction to a 60 centavos [CPP\$ 60] wage was the UFC's response to the Depression's effects on profit and investment that produced " a massive cut in wages; in 1931, with unemployment on the plantations estimated at up to 80 %, wages went down to 60c., even lower than before the 1928 strike"¹⁰². In the UFC in 1932 she argued, " all wages below \$ 100 per month were again reduced by 10 %"¹⁰³.

(ii) The Interior

It is possible to set aside data on wage rates for the first three decades of the century found in the primary sources noted in my introduction. Some interior wage differentiation is therefore apparent for years 1888, 1900, 1903, 1907, 1909, 1912, 1926 and 1930. Wage differentiation emerges from other sources especially for years 1911, 1913, and 1927. The figures are reasonably consistent in developing a result of a relatively low-wage interior. We discuss findings from 1909 onwards.

In contrast to high NAC region wages, the interior of the country (in the department of Antioquia) showed particularly low wages in 1909. A good example was in mining. As United States Consul Demers pointed out: " mine labourers ... [were] paid from 25 cents to 50 cents per day "¹⁰⁴. In the year 1911 a beer factory in Medellin, department of Antioquia, payed a " peon's daily wage of forty "¹⁰⁵.

In the same year, Levine reported that " the population is numerous, employees find all the hands they require and wages are low. This is the case of the temperate and healthy districts such as the famous valley of Pereira, and in the high fertile districts like the plain of Bogota and in the valley of RioNegro in [the department of] Antioquia. In these districts the wages of the ordinary man does not exceed 35 to 40 centavos [gold]. In the departments of Boyaca and Cundinamarca, with their great haciendas ... the workman receives a wage apparently smaller "¹⁰⁶.

The exception in the interior, Levine pointed out, was the railway navvy who earned from " 50 to 60 centavos [gold] in the colder districts"¹⁰⁷ and urbanized peasantry in the nation's capital: " an unskilled workman earns in Bogota 60 to 70 centavos [gold] for labour which in the country is worth less "¹⁰⁸.

Wages were so low in the interior that Restrepo, although not really mentioning relevant quantitative data, was in no doubt in 1919 that, everyone in the labour

force -particularly in the coffee-producing interior- was subject to very low wages. He stated: " another very valuable natural circumstance, of which the coffee industry and all the rest in Colombia enjoy, is the cheapness of the labour force. The indigenous, black or white poor have to work in haciendas from 'sun to sun' for miserable wages"¹⁰⁹.

He did not mind profit-making. What concerned him was greediness and selfishness in labour remuneration: " ... it is not other's property that pains us, that is, the fabulous profits of entrepreneurs. What pains us is the injustice exercised upon the worker, factor of that creation of wealth, when his labour is stingily paid and he is depressed, from a social and moral point of view "¹¹⁰.

By 1927, adult male wages in the interior were as follows: " [for the department of] Cauca, 1000 labourers earn daily wages of from [CGP\$] 0.20 to [CGP\$] 1 ... [for the department of] Tolima, 600 labourers earn an average daily wage of [CGP\$] 0.60 ... [for the department of] Cundinamarca, labourers employed in industrial establishments earn from [CGP\$] 0.35 to [CGP\$] 1.50 per day "¹¹¹.

This suggests wage differentiation of average daily wage rates of CGP\$ 0.60 for Cauca and Tolima, and CGP\$ 0.925, or an overall average for the interior of CGP\$ 0.71 for adult male interior daily wages.

For minors, wages were " [for the department of] Cauca ... from [CGP\$] 0.20 to [CGP\$] 0.60 per day¹¹² or an overall minors' average daily wage of CGP\$ 0.40. And for 'women and children' wages were " [for the department of] Narino ... the average daily wage is [CGP\$] 0.35 ... [and in the city of] Bogota it fluctuates between [CGP\$] 0.30 and [CGP\$] 0.60"¹¹³ or an overall 'women and children' daily wage average of CGP\$ 0.45.

Specifically, in the coffee areas of the interior, according to Monsalve, " during the harvest, daily wages including food, are from CGP\$ 0.40 for men; CGP\$ 0.20 to CGP\$ 0.30 for women and CGP\$ 0.10 to CGP\$ 0.20 for children. The above data

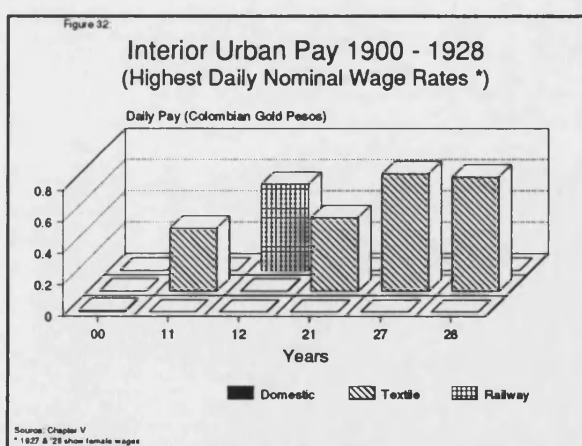
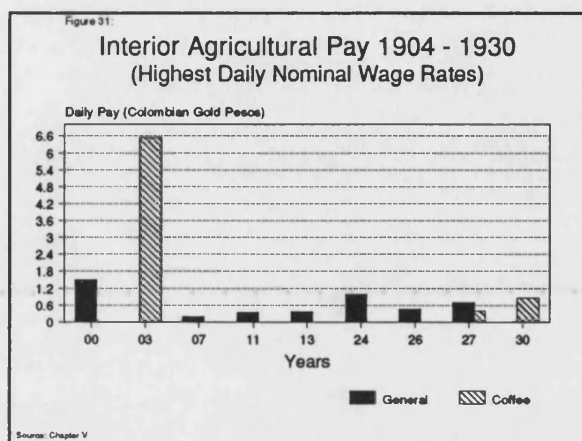
on interior nominal wages is illustrated by the bar chart graphs in Figures 31 & 32 below.

Three main points emerge when wage ranges and their limits are assessed. First, that for years 1900 to 1913, interior rural nominal daily wage rates, which we define as w_{10} , showed a range close to CGP\$ 0.01 < w_{10} < CGP\$ 0.375).

For years 1900 - 1912, interior urban nominal daily wage rates, which we define as w_{11} , showed a range close to CGP\$ 0.17 < w_{11} < CGP\$ 0.55.

Second, that for years 1924 - 1927, interior agricultural nominal wage rates, oscillated from a relatively high level of CGP\$ 1.00 in 1924 down to one of CGP\$ 0.454 in 1926. Wage rates however, leaped again in 1927 to levels of CGP\$ 0.71 for male labourers, CGP\$ 0.45 for female labourers and particularly, to a relatively high level for children of CGP\$ 0.40.

For years 1921 - 1928, interior urban daily nominal wage rates oscillated from a relatively low wage range level of CGP\$ (0.35 - 0.47) in 1921 up to wage levels in 1927 / 1928 of CGP\$ 1.71/ CGP\$1.69 for males, CGP\$ 0.75/ CGP\$ 0.73 for females and CGP\$ 0.50 for children respectively.



The main implication of the movements of these wage and wage range level is

that interior urban wages were higher than agricultural ones. At the turn of the century (1900) interior general agricultural nominal wages were between CP\$ 1 and CP\$ 1.50. A relatively high wage rate of CGP\$ 0.655 was paid in the interior coffee sector in 1903. But these were exceptional cases, as they were due to an inflation-ridden war. If anything, they were higher than urban domestic household labour, which in 1900 was between CP\$ 0.17 and CP\$ 0.33.

Nevertheless, by the beginning of the second decade (year 1911) urban wages levels were higher (CGP\$ 0.40) than agricultural wage range levels (CGP\$ 0.15 - CGP\$ 0.35) suggest. Indeed, the second and third decade re-enforce this behaviour. The urban wage rate for 1912 at CGP\$ 0.55 and the wage range levels for 1921 at (CGP\$ 0.35 - CGP\$ 0.47) were higher than agricultural wage range levels for years 1913-1926 which were placed at CGP\$ 0.375 in 1913 and at CGP\$ 0.454 in 1926. This was despite the rather exceptional fact that in 1924 agricultural wages were over twice as high as urban ones (CGP\$1.00).

Third, that for years 1926-1930, interior urban nominal wage rates were higher than their rural counterparts. Indeed, urban wages for 1927 / 1928 were at levels of CGP\$ 1.71 / CGP\$ 1.69 for male, CGP\$ 0.75 / CGP\$ 0.73 for females and CGP\$ 0.50 for children, whereas, agricultural wages were at levels of CGP\$ 0.71 for males, CGP\$ 0.45 for females and CGP\$ 0.40 for children. The coffee sector in particular showed wage ranges from CGP\$(0.10 - 0.20) to CGP\$(0.20 - 0.40) in 1927 and a wage level of CGP\$ 0.85 for 1930.

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CHAPTER VI

LABOUR MARKET IMPERFECTIONS IN THE NAC REGION

(i) Imperfections in the National and International Factor Market

The foremost influence that factor market imperfections in the NAC region had over labour mobility was expressly to decrease it. Before discussing them it is useful to have in mind that economic growth¹ or output of goods and services per head of the population depends on natural resources available and on human behaviour.

Differences in human behaviour therefore influence economic growth. One proximate cause of growth is the effort to economize. One way this effort shows itself is in mobility. According to Lewis, if the effort to economize is not made, "either because the desire does not exist or because either custom or institutions discourage its expression, then economic growth will not occur."²

In discussing the marketability of labour, and because economic growth involves change, it is necessary that labour should be mobile. If societies rely on market processes, they will dismiss labour surplus. Equally, enterprises that want labour, will bid for it by offering wages.

Labour is mobile only as far as it is dependent on wage employment. As it is hard to get labour where it needs land to satisfy everybody's requirements, one condition of economic growth is the creation of a landless class.

Creation of landless lands in the NAC region originated from the hacienda system which deprived peasants of such a factor. But the separation of people from the land generates protest against their conversion into members of the proletariat in a compulsory way.

Constraints to labour mobility surfaced from the hacienda system of ownership

of the land and by institutions that tied people to particular occupations (as *jornaleros*) and to employers (*hacendados*) such as class differentiation. Other institutions such as the extended family system or generous social security provisions existed which deprived the individual of the incentive to seek remunerative employment.

Although perhaps it may not be entirely convincing, some discussion of unearthed evidence of failures of projects to bring in foreign labour is presented here. Of all the material researched, this is unfortunately all that emerged. We can only say that undoubtedly further research needs to be done on this matter.

After all, the basis of migrant labour from abroad (or from the interior of Colombia for that matter) could not have been easy. A worker may have had to consider more than the monetary cost of moving to the NAC. Not only may he or she have been reluctant to leave familiar scenes and friends and associates and begin a new life in a very different region. He or she may still have been more reluctant to forfeit possibly more satisfactory non pecuniary elements of income. Equally, reluctance may have existed to move to a different region or country especially one with different customs.

The monetary cost of learning a new job or moving to a different place is an investment of capital. The investment probably was too high for interior people. But did the state provide investment? Did the state provide free training? Did it pay labourers' fares when moving to jobs in another region or country? Was emigration (overseas or regional) subsidized by the state? These questions are not unimportant, but are obviously material for further research.

Usually investment of capital must be made by the labourer himself. He will not make it unless he believes that the improvement in his future earnings will repay him with interest. Some labourers may not have had the necessary capital. Others may have considered that even the probability of repayment plus interest as say, increased wages for the rest of their working lives, was not sufficient to

compensate than for the sacrifice of the capital sum. And the prospect of increased earnings would probably have tempted a younger worker more than an older one.

Precisely, the most immediate relevance of population trends is connected with the age composition of the population rather than its total numbers. Adequate mobility of labour is a necessary condition, for example, if there is to be success of an employment policy that aims high. But at the time, there appears to have been no such policy in Colombia.

The ageing of the labour force actually helps mobility. So, if indeed the interior and reasonably cost-effective overseas population did not show mobility to the NAC region, it seems that they did not show signs of ageing.

Changes in demand and in technical knowledge are constantly taking place and providing incentives through the price mechanism for labour to move between occupations and industries. Perhaps as interior people were dependent on a staple industry such as coffee, which expanded its production in the twenties, meant they felt no need to move³.

This expansion was based on traditional methods of cultivation of an extensive nature, with low technology. But costs of production were kept low, as most peasant producers maintained a standard of living which bordered on subsistence level⁴.

Moreover, according to Palacios, " it is purely academic to advise the small growers of Cauca, Narino, or Santander [all interior] that instead of [cultivating] coffee, they migrate to the cities or change their type of planting: coffee, due to its secure market, and to the topographic characteristics of the land on which it is cultivated, does not have a high opportunity cost, social or private; rather it produces a relatively fair income for the peasant. Perhaps the same can be said of coffee cultivation in many individual *comarcas* (districts) of zones elsewhere, more densely planted with coffee."⁵

The impact of accelerated economic growth was felt but at specific regional centres. These were, for example, the interior coffee producing areas, the banana plantations along the Magdalena in the NAC region and the oilfields of Santander [interior].

Our argument implies that there was insufficient interregional migration within Colombia. However, much of the evidence that surfaced from the wide range of sources investigated only have to do with cultural differences. This may not be entirely plausible and undoubtedly, it would clarify matters more if these sources consulted had provided any evidence on information imperfections, costs of transportation and differences of cost of living between regions. It is a major snag that they did not and further research is welcome here.

The problem of information imperfections really boils down to this: labourers search for wage offers, and employers search for wage demands, until the expected marginal return equals the marginal cost of the search⁶. The information a labourer has on the labour market is capital. It is produced at the cost of the search and it yields a higher wage rate than on average would be received in its absence.

The return from investment on information consists in a more efficient allocation of the labour force. The better informed the labour market is, the closer each labourer's marginal product is to its maximum. The function of information is therefore to prevent fewer efficient employers from obtaining labour and inefficient labourers from obtaining the better jobs. The labour markets display the same characteristics. However, their analysis is complicated further by the lack of homogeneity of labourers. To a lesser extent, the non-wage conditions of employment, complicate matters more. We find it difficult to believe interior labourers were ill-informed about high wages offered by the NAC region's UFC. This is more so the case because of the UFC's efforts to recruit labour in the interior rather than abroad, as can be seen further on.

Concerning transportation costs, it is certain that the key to development throughout history has been transport. The burden of the interior coffee producers, where wages were relatively cheap⁷, was unquestionably that of transport costs. It is not too farfetched therefore to assume transport costs were equal burdens to interior labourers wishing to go north - at the time, the land of "yellow gold."

Regarding the difference in cost of living between regions, the best possible way of establishing them is through serious research on food-prices, as Pardo-Parra did in Bogota. This no doubt represents a most mammoth task. Certainly the government indexes in Appendix 24 show that from 1923 to 1930, the cost of living was higher in general in the NAC region rather than in the interior of Colombia.

But we should have in mind that already Palacios has pointed out early on his book that with the " succession of agricultural export cycles of short and medium-term duration . . . a certain internal mobility of resources within the Colombian economy"⁸ existed. But he very clearly stresses that "interregional migration of labour was more restricted."⁹ Not unimportant is the fact that, as mentioned in Chapter II, labourers in some interior regions were forcibly isolated by an already feeble labour market, forbidden by police law regulations to engage in working activities other than their own *hacienda*.

Palacios went further to the point by specifying that " in each of the three regions which developed coffee production ... that is ... (Santanderes), ... (Boyaca - Cundinamarca - Tolima) [all interior provinces], labour supply remained elastic except during times of conflict."¹⁰

This suggests there was great labour mobility, yes, but within the interior. The rise of occupational mobility of the labour force –as a result of the expansion of the internal markets– had essentially geographical characteristics¹¹. This is to say, it had regional characteristics.

The adjustment between industries and occupations may have been eased by an expanding population attached to different levels of productivity, costs of transport and agricultural techniques.

What is suggested here is that the theme of interregional labour mobility that affected the NAC region is difficult to address in this thesis. The lack of studies and data about the topic is one reason. However, although they may not entirely account for the insufficient flows of labour to the NAC, some aspects of academic interest are worth discussing as a possibility. They should help to clarify the argument that there was insufficient interregional migration from the interior of Colombia to the NAC region. These aspects are epitomised by factors mentioned above such as information imperfections, costs of transportation, and differences in costs of living between regions.

One must also consider the argument that non-monetary components of income (which were possibly higher in coffee than in bananas) must be taken into account --in addition to simple money wages in interior coffee, and NAC region bananas. In an earlier chapter we included these non-pecuniary elements in interior coffee real wages and found them still to be lower than NAC region banana real wages without the inclusion of these elements.

Similarly, arguments which suggest that attitudes to risk on the part of peasants with some access to land who are faced with the choice of becoming landless proletarians in banana cultivation and incomes over yearly cycles (to allow for different seasons in coffee and bananas) should equally be considered.

No evidence on attitudes to risk emerged throughout our research, but we can present some minor discussion on seasonality of employment and income over a yearly cycle. After all, analysing labour markets implies looking at the money-value of labour (for the labour-value of money as the unit of account). This is why we presented the fundamental evidence of high wages in a previous chapter.

It could be argued that these high wages are not only partially explained by factors to be discussed subsequently such as a constraint (scarcity of labour) and societal response (character of the labour force), but by the further rise in wages created by a labour shortage that higher wages initially induced.

Thus, it could be suggested that the UFC used its position to raise wages "artificially high." That is to say, that it could be argued that the presence of monopoly in the region produced even higher wage levels - above the high ones already ruling in an economy distorted by labour shortage. Exploring this is beyond the scope of this thesis.

Scarcity of labour will be discussed further on, but there was a good market reason to explain the behaviour of wages. This was in particular, seasonality of, and the perishable nature of the fruit. Undoubtedly, the seasonality and fragility of perishable foodstuffs, such as the banana fruit, required rapid and consistent work and handling. Therefore, because of these factors, an upward trend of wages became an economic reality for the NAC banana sector.

White has indeed asserted that "the dock and rail workers came to be a specialised workforce for the UFCO, the great part of their work being dependent on the orders for the banana boats. The dockers had to load the delicate banana stems without damage or bruising, and loading gangs employed under contract by United Fruit worked with the trains picking up the bunches of fruit from the plantation stations for transport to the quayside."¹²

Kepner noted that "these were not average wages but potential returns to fast workers, that relatively high wages are paid to attract laborers to new developments, and that some of these tasks . . . are performed by highly skilled itinerant workers who travel from place to place and thus are unemployed during a considerable part of the year . . . Much employment in banana districts is intermittent ... fruit is not cut every day."¹³

It is at this point that the nature of the product emerges as an additional explanation for high wages. The seasonal and perishable nature of the banana as a foodstuff, called for immediate action once vessels arrived for loading. Therefore, wages had to be attractively above average.

United States Trade Commissioner Bell for example, indicated that "banana handling . . . [was] . . . costly on account of the perishable quality of the fruit and the necessity of careful and rapid transport to steamers."¹⁴

In similar fashion, Pearse confirmed the crucial link between seasonality, perishability and high wages. He explained that " because when bananas are ripening and a steamer is waiting to be loaded there must be plenty of workers who perform their task quickly, otherwise severe losses are incurred and for that reason, high wages are paid. This has spoilt the population."¹⁵

Cultural attitudes about waged labour may be another reason (of which perhaps more evidence is available) of why there was insufficient interregional migration from the interior of Colombia to the NAC region.

Several views deal with elements such as climate, unwillingness to work, race and the interrelationship of them, as was seemingly the trend in academic thought at the time (and perhaps today). But in essence, the cultural attitudes of the people of the NAC region about waged labour are fairly well represented.

To begin with, we note what United States Agent Ewings' view was on the matter. He deemed that " as a rule, the character of the labour in the Coast cities is not satisfactory for construction work, since the men cannot always be depended upon. The climate has an adverse effect on their energy and their disposition to perform day or task work and the efficiency of labour of all classes is low."¹⁶

This remark supported United States Trade Commissioner Bell's caveat that "

labour is abundant in the cold country and scarce in the hot; laborers in the cold country are strong, energetic, sober and obedient; in the hot country, they are not so satisfactory."¹⁷ We consider this significant because it suggests early rationalisation such as the incidence of obedience upon efficiency of labour and therefore growth and development.

The NAC region invited severe misinterpretation of the nature of economic activity. Witness only Bell's observation that "cattle rearing . . . seem to appeal very much to the people on the Atlantic Coast; it is evidently an occupation requiring very little hard work, and work which need not be performed at absolutely fixed periods. It seems to be work for lazy people."¹⁸

In reality, the business of cattle rearing was, according to Fals-Borda, the " [sic] the most productive of all, an economic benefit from a co-fraternal formula [of relations between indigenous, black and white NAC region people]."¹⁹ He emphasised that "cattle wealth . . . would have not been possible without the [NAC region's] poor *gente morena* [brown people or Mestizos]."²⁰

The "natural and ecological rhythm conditioned social and economic development and ... the common people [of the NAC region] –black and Indigenous above all–without external aid created the necessary technique that converted the spontaneous movements of herds of cattle into an ordered and productive system [existent today]. Unfortunately the wealth produced was almost all for the 'whites' of other parts."²¹

Fals-Borda equally analyzed how the "[sic] [NAC region] indigenous peasant developed [mutual] interest coalitions with the dominant groups with the purpose of carrying forward economic production tasks of mutual benefit . . . as a form of *symbioses*."²²

These "symbiotic coalitions were experimented specially in the management of imported elements such as cattle and the organisation of herds and estates . . .

where *criollo* [Italics added] whites, indigenous and black [NAC region people] succeeded in inventing together a fundamental institution: the *hacienda*.^{"23}

Cattle rearing was therefore not 'work for lazy people' but for people contributing techniques that improved methods so well that indeed, after several centuries, gave the impression of 'laziness'. As Fals-Borda pointed out, the "Spaniards had no knowledge of herding cattle from one place to another . . . ; they know how to conduct sheep . . . but here [in the NAC region] they would have drowned trying to do their first *embalse*. This is no simple matter. You must know how and experience and knowing your environment do count."²⁴

Another example is British cotton expert Pearse's opinion of the NAC's labour force: " for if we begin to generalise from what we see at the Coast (and unfortunately most travellers do not enter any further, and form their opinions from what they have seen at the Coast) we shall obtain a very erroneous picture (. . .) the population consisting mostly of black people of African origin, indolent or even lazy, towns are backward; whilst in the interior we see the real Colombia (. . .) with white population, much more industrious and enterprising than at the Coast."²⁵

Coming from such an serious analyst of economic conditions, Pearse's appraisal reflects what should -by any standards- now be a discredited and inadequate colonial interpretation of development. Surely this is so because today's interpretation is diametrically different.

As Kalmanovitz noted, " 'laziness' is the attitude of permanent sabotage that the *arrendatario* develops concerning the appropriation of his surplus labour. If laziness still exists when the peasant is the owner of all his labour, it is because the tropic allows him to reproduce subsistence with very little work and a very low level of needs . . . which makes the landowners or capitalists gnash their teeth when this human type refuses to become waged labour."²⁶

Halperin-Donghi also wrote that "complaints about the invincible laziness of the hispanoamerican peasant . . . are evidence of an insoluble problem: that peasant is tried to be made a sort of hybrid that has the advantages of the modern proletariat (rapidity, efficiency due not only to generic will to work but also from a rational attitude towards labouring) and those of the traditional rural labourer in Latin America (scarce demands of wages and other rewards, *mansedumbre* [docility] to accept a discipline that -insufficiently rationalised itself- includes vast margins of arbitrariness."²⁷

It must be pointed out however, that the obvious contradiction implied in colour-cum-class differentiation in labour efficiency. This for example is implied in Whitbeck's appraisal: " In the tropics, white men as a rule, avoid physical exertion or take it only mildly. They find it more agreeable to have work done by the coloured peoples and thus have established a dependence upon them. It is neither fashionable nor agreeable in the tropical highlands to do manual labour if one is white and the fashion has long since spread into the highlands as well. The joy of physical strength and ability to achieve which are possessed by people of middle latitudes react favourably upon them. Ambition and aspiration are nourished and under some conditions, a virility of race and will to advance are maintained."²⁸

This appears not to have been so to Vergara y Velasco, who believed that "great is the race that with such small numbers occupied such vast territory in a real and material way, and was in such a vigorous way, that its *Mestizos*, centuries later, do not show even the slightest sign of atavism towards the Indigenous race, and in the country but only the tongue of Castillo is spoken, and with considerable purity. The Colombian mountain people are pure white race, and what a race! Formed in battle with a land that demands titans for its domination, asks no one favours when it comes to resistance for work and some doses of intelligence, and fortunately, immense for the Fatherland, is and shall be Latin race."²⁹

Nevertheless, the NAC region's labour force was, largely, more diversely mixed.

This played a significant role in its character. As Fals-Borda has suggested, "we may say that in the [North Atlantic] Coastal region ... the 'cosmic race', triethnical, has set in, that of which the great Mexican thinker Jose Vasconcelos spoke of."³⁰ It is possible that the economic development process was stunted in the NAC region because the ordinary people of the region had deeply embedded convictions of their preferences. They seem to have displayed a more acute political understanding of what it meant to be a factor of production and how best to make the most of it.

By contrast, interior people were seen in quite a dissimilar way. Restrepo was perceptive about these regional differences and the way it affected wage levels. He believed that the interior's labouring classes, "if it was true that their energy and dexterity are poor, it derives from precisely the same condition into which their reduced wage oppresses them."³¹

A native of the interior himself, he was disgusted with the 'aberration' and 'inhumanity' of so low pay in the coffee and mining interior: "one must react against all these aberrations that are so inhuman, are also bad economically. Free and well-remunerated work is the only one that can be an efficient cooperator of positive industries."³²

What is not considered of course, is the general ethos that has historically manifested itself with the NAC region's population as a whole. Fals-Borda best reminds us of this when he explained that "a rhythm of work and a personal conception of time and space developed in our culture that did not allow the flourishing of the lordships nor the rapid development of modern capitalism . . . these attitudes are related to the [NA] Coastal people's tendency towards neglect or apathy, with indiscipline, informality and non-committance, with a sense of humour and an allergy towards the military . . . such a realistic, isolating, self-reliable adaptation implies the recognition of the half fatalistic incidence of environmental factors that go much further than human force and control . . . Here in the [NA] Coast the watch is not the Lord and does not govern the budget,

and no strict Teutonic rigour can be applied although things are accomplished when it is less expected (or wanted)."³³

The NAC region's labour force did have many of these characteristics. Indeed, Fals-Borda suggested they "express themselves in the '*dejar*', [letting it be], that is, in allowing that things are accomplished a little by inertia before firm and personal committal with them ... its prototype, the '*dejao*', [he or she who lets it be] at first sight appears irresponsible, uncommitted, uninterested or incapable . . . but the '*dejao*' carefully observes and weighs the possibilities of his [her] possible action and withholds the necessary accumulated energy to act at the appropriate moment, which may arrive with the unexpected force of a hurricane . . . ; the '*dejao*' may attribute an economic cause (scarce resources) to his attitude, but this does not appear to be a fundamental one. It occurs in this way both among the rich as the poor."³⁴

But surely, much more important than this ethos described above, was the fact that the process of full proletarianisation in the NAC region was rather late in arriving. As Fals-Borda pointed out, "regarding the formation of the rural proletariat in the [NA] Coast, this is recent (trade union organisations do not appear here until the beginning of the XXth century and modern capitalist agriculture only broke through in the 50's decade)"³⁵

Nevertheless, things were slightly different in the NAC region from the interior. Despite the possible negative aspects of the '*dejao*' character, positive ones surfaced. One aspect is the price at which they were prepared to release their labour. As Restrepo said, "now, by ... the Coast, things are not going in such a way. These labourers will not allow it. You have to pay them, treat them well and have them contented."³⁶

This surely was the crux of the matter. As Fals-Borda noted, "what are we *Costeños* [NAC region people] really like? What is *Costeñidad* [NAC region identity] ? ... the [NAC] *Costeño* learns to tolerate his superior, not to put up with

him."³⁷

United States Trade Commissioner Bell, United States Consul Demers and British Officer Bunch agreed on this point. Demers stressed that "in the interior . . . the labouring class of people [are] easy to manage and very respectful of foreigners."³⁸ Bell went further by adding that, as opposed to labour in the hot country [NAC region], "laborers in the cold country are ... obedient."³⁹

But it was no doubt Bunch, who years before, firmly stated 'la grande difference' : " the lower classes in the interior are ... very ignorant ... submissive ... unspoiled by democracy ... *On the Coast ... the lower classes are much much more dangerous. They assert their fancied equality*[emphasis added]..."⁴⁰.

Pearse clearly appreciated that labour in the interior (as opposed to labour in the NAC region) was more servile, obedient and was prepared to labour for low wages instead of enjoying their scale of preference including leisure.

He was therefore adamant in emphasising that " in the interior [of Colombia] ... people are more preferable specimens of human nature than on the Coast"⁴¹. In fact, his curious developmental moral logic prescribed that " because in the interior the wages are much lower, the people lead a more frugal life, are working better and in general are more preferable ... than on the Coast"⁴².

Furthermore, Parrish reported that the interior peon had " many useful and admirable qualities. He is industrious, submissive, unambitious, long/suffering; in fact, constitutes an ideal labouring class, barring a certain lack of individual initiative and energy"⁴³. In the " city of Barranquilla [however], you will find them [peons] occupying minor positions of responsibility, as bookkeepers, cashiers, foremen, small shopkeepers and the like"⁴⁴.

Whether or not the NAC's labour force was coloured, discoloured, black, brown or white, disliked or liked hills, were or were not productive and efficient in

certain climates, took or did not take easily to organisation, were or were not individualistic, preferred or did not prefer to work for themselves, preferred independence to dependence, formed or did not form an appropriate supply of labour for rural export sector production, the fact of the matter remains by and large, that they were not rejecting wage labour.

They were either (i) just not bothered at all really, with any efforts of converting them from self-sufficient individuals with scales of preference including leisure, into fully and complete dependent rural wage labour proletariat in many of the export sectors, or (ii) if already proletarianized, only prepared to further that position at above average wages.

This is to say, that they were prepared to accept participation in the monetary economy (as opposed to the interior people) at considerable expense from capitalistic venture. This expense was represented by significantly high wages for the standards of the region, and more important, for the nation's agricultural export sectors.

This is what only the presence of a monopsony such as the UFC in the enclave-economy-oriented banana sector could do. Having guaranteed capital inputs world-wide to spend on shipping and marketing expenses, and guaranteed world market prices showing the considerable mark-up the UFC was in an unique position to meet the high level of wages that labour shortage in the NAC region and the reluctance of its labour force to form part of its wage economy had set to afford meeting and paying high wages.

In the very particular case of the NAC region's agricultural export sectors, scarcity of labour was strongly accompanied by choice of preferences of life including leisure. Those who chose to participate in the monetary economy as members of the region's labour force, certainly chose well.

Labour shortage and the character of the labour force in the NAC region went

hand in hand. When wages were cost-effective (i.e., high, as in the case of the banana sector) leisure-wise to the NAC region's labour force, its scarcity was aggravated in the rest of the region's economy, possibly in a directly proportional way.

If we contrast some qualitative evidence which deal with the cultural attitudes of NAC region and interior people about wage labour, the economic impact of them on regional development may be further understood. The former's attitudes seem to have been much more reprehensible than the latter's, where substantially lower wages prevailed and where the labour force's scale of preferences --as well as the price they set for their time and effort-- was at a much lower level.

There were failures of projects to bring in foreign labour into the NAC region but the evidence on this important factor, as those listed at the beginning of the section, is unavailable. Whether or not the contingents of labourers from the NAC region were black or white, of African, Indigenous or European origin, lazy or hard workers, coming from hot or from cold countries, riotous or obedient, more or less preferable specimens of the human nature, living in tiny banana leaf huts or not, it seems quite simply, that imported labourers were just not up to their jobs.

In any case, this is what British Vice-Consul Marshal believed when he commented in 1912, that in the NAC region " British West Indian labour has made no headway, and is a poor competitor with the native element and that of the Dutch Islands"⁴⁵.

There were short sparks of immigration of labour just after the 'War of a Thousand Days' were inconsequential. It probably only attracted attention to domestic racists such as the one mentioned by the British Foreign Office: " Don Carlos Uribe [possibly an interior Colombian] has often half-jokingly remarked that it was a pity a million or so of our unemployed [British] miners, etc. did not come here: they were of the white race which Colombia does want to attract"⁴⁶.

That aside, it seems reasonable to suggest that experiments of importation of labour never worked for the NAC region. It is unsatisfactory therefore, to adopt the view that " immigration is needed, not because there is any real scarcity of labour but because foreigners will teach people to be workers"⁴⁷. This was not the case in the NAC region.

Rural labour wage rates in the cotton cultivating areas of the NAC region were at such a high level that immigrant labour was being enticed. Indeed, the level of wages to be paid at which a contract was being negotiated with several hundred workmen from Puerto Rico was reported by the International Cotton Bulletin to be " [CP]\$ 1.20 (about 4s 10d) per day"⁴⁸.

Immigration of labour was never really a solution. In 1869 due to demand for labour for cocoa and tobacco in the NAC region department of Magdalena, the 'Compañía de Inmigración' (founded in Santa Marta) sought to acquire from the regulation of Colombian Law aiding immigration to the nation with the " promise of great profit of charging commission for each labourer brought to businessmen"⁴⁹.

In 1871, for example, it was certainly not recommended at all for the English by British agent Bunch, who maintained that he could not " conscientiously recommend the English emigrant of the working class, either peasant, mechanic or artisan to settle here at present"⁵⁰.

Nevertheless, Bunch did recommend the NAC region's most suited coffee areas. Indeed, he added in his report that " there was a fine and healthy region near Santa Marta on the slopes of the Sierra Nevada, close to the sea, and possessing many advantages"⁵¹.

Bunch also dissuaded emigration of Europeans to Colombia by suggesting that " there is really no field for European emigration to this country ... because life, although cheap, would not be very agreeable to the emigrant ... [and] ... he must

learn a new language, in the next he must change all his habits ..."⁵². There was apparently also the additional of the " traditional Spanish jealousy of foreigners"⁵³.

However, it was suggested that emigration to the NAC region was –by all means and accounts– not to be had. Bunch clearly stated in 1875 that " as regards the question of European immigration to Colombia, I can only report what I have stated in former reports. On the Coast it would be madness, on account of the climate if for no other reason"⁵⁴.

There was immigration of labour in the last years of the 19th century to what was then of course, part of the NAC region - Panama. In 1897 " two batches of labourers were imported, the first from Sierra Leone, the second from Jamaica. The latter has given satisfaction, as is invariably the case where Jamaican labour has been employed upon the [Panama] canal, whilst the former was a most unfortunate and costly experiment, since nearly the whole of the Sierra Leoneese were prostrated with Beri-Beri ..."⁵⁵.

Colombians themselves were not overenthusiastic about European immigration. In 1901 Vergara y Velasco praised Colombian labour and was hopeful that " until now it has not been spoilt by immigration and if it is true that we need it with urgency, the Lord willing, we should never know it if it is to present itself as in American countries, the Argentine, for example"⁵⁶.

With the war, scarcity of labour rapidly became a problem. The difficulty for obtaining labour for coffee production in the NAC region's Santa Marta area led not to a pattern of immigration but to experiments in 1900, 1902 and 1903 in the introduction of West Indian labour. British Consul Jesurun indicated in 1900 that " in the month of October last year 60 labourers were engaged and shipped to work in a coffee plantation at Santa Martha, Colombia"⁵⁷.

Jesurun also emphasised that " more were required, but men seemed afraid and

kept aloof fearing that at any time the Colombian government or the revolutionists would press them into service"⁵⁸.

According to British Vice-Consul Gillies, however, " the result [of experiments in immigration of labour] was not satisfactory"⁵⁹. A year later, British Vice-Consul Carr reported that although " some attempt at immigration from the West Indian Islands is made in a desultory way, the labour problem is yet far from being solved"⁶⁰.

At the time, as Petre-Lorraine pointed out, it was felt that " so far, no serious effort has been made to overcome the labour difficulty by the encouragement of immigration"⁶¹. He believed the best solution to the problem was not necessarily immigration. As he saw it, " if peace is really assured, the population should increase rapidly in a country of such vast agricultural resources. But it is hardly possible that the question of the shortage of labour should be solved by immigration"⁶².

The banana sector ended the experiment of importation of West Indian labour in 1905. According to British Consul Carr this resulted from West Indian labourers " having proved unsatisfactory and costly"⁶³. Indeed, Adams, referring to the Santa Marta district, remarked in 1914 that " here is one place in the tropics where the Jamaican negro does not dominate the labor field ... most [native Colombians] have been attracted here ... by a certainty of good wages. They are an excellent class of workmen, strong and active and of good habits"⁶⁴.

Colombians attracted by the banana sector wages were mainly from within the NAC region. The HLDE foreman, Mr. Marquez Alvarez remembered that " personnel engaged in the *zona* [banana zone of the Santa Marta district] was brought from Maria La Baja [department of Bolivar in the NAC region]. Coffee labour for the Haciendas Maria Teresa and La Victoria [Sierra Nevada de Santa Marta] originated in this order: Mamatoco, Bonda and Gaira [department of Magdalena in the NAC region]"⁶⁵.

The banana sector also resisted immigration some time after. One reason for the resistance may have been the interior's demand for its contribution to the NAC region's banana sector labour input. In fact in 1921, Taylor, the UFC's manager, declared that the press "publish news transmitted by correspondents in this city, relative criticism to the United Fruit Co. for having replaced Colombian employees by black Jamaicans and Northamerican citizens imported recently. This constitutes more than an inaccuracy, a lie, for, much to the contrary, the company, investing enormous sums in transport and food, has brought in the last four months nearly 1000 [interior people such as] Santandereanos, Cundinamarqueses, Boyacences, [and] Antioqueños for agricultural labour in its farms, moved by the anxious necessities of these Colombians from the interior of the Republic. I rectify this for the conservation of [your] prestige [in your] newspapers [and so that you may] warn correspondents [that they] place more careful scruples on the transmission of news"⁶⁶.

It was further informed that " during 1924 the United Fruit Company extended the banana plantations. This gave rise to a considerable amount of employment of a temporary nature. This was supplied from workers from other departments, who have now returned, leaving labour conditions practically normal; ... there is very little prospect for ... immigrants, because they do not understand the language, and it is difficult for them to adapt themselves to local customs and the Colombian laws"⁶⁷. If the fact that there was some supply of labour from other departments was substantially true, then to that extent, intra-regional wage differentiation as well as the UFC's strategy of segmentation would have been reduced momentarily.

But although temporary employment from other departments may have materialised, it was only so for a very short period of time. " *Cachaco era raro el que llegaba a laborar* [sic][it was rare for an interior person to arrive as labour][in the NAC region] " said Marquez Alvarez⁶⁸.

This suggests that any reductions in intra-regional wage differentiation and the

UFC's segmentation strategy which could take place, would be true but to a very exceptional and limited extent - a stretch of time in 1924. So, although (still, by the late 1920's) labour shortage continued to attract immigration, it did not actually mobilise in the amount of numbers that would reduce inter-regional wage differentiation.

The NAC region's cotton district appears to have attracted immigration. As the International Cotton Bulletin reported in 1927, "in view of the scarcity of labour and with the object of encouraging the immigration of agricultural workers, houses will be provided on certain conditions for immigrants"⁶⁹.

But in the end, if immigration needed to be encouraged, it had to be of rather a different nature than waged labour. As the International Cotton Bulletin pointed out, "hitherto, the government has not encouraged immigration other than small capitalists. Special attention will be given now to granting of suitable lands to settlers. The present laws provide for a free grant of 62 acres"⁷⁰. It seems to me that the NAC region was never in a position to overturn its labour shortage economy with immigration solutions which would eventually have cut the dramatic upsurge in wage trends (by Colombian standards).

(ii) Reluctance of NAC Residents to Join the Monetary Economy

Another imperfection in the labour market of the NAC region was the reluctance of its residents to become fully integrated to the region's wage economy. This was linked to the character of the region's labour force. As a societal value it influences economic development and growth. The NAC region's labour force reluctance to be drawn into the wage economy was reflected in the high level of wages set by the UFC.

Economic analysis of labour supply is based on the observation that, given the fixed amount of time in a certain period, a person's decision to supply labour is in simultaneous fashion a decision to demand leisure time for self. This suggests that the supply of labour may be analyzed in the same way as the demand for leisure. Consequently, any price change has two distinct effects on the quantity demanded: an income and a substitution effect.

Within the context of demand for leisure (i.e., the supply of labour) the income effect of higher wages implies an increase in the demand for goods including leisure, and probably leads most labourers to want to work less. The substitution effect of higher wages however, implies that labourers are 'purchasing' their own leisure time giving up their hourly wage. In this way, the wage rate is the 'price' of leisure. When the wage rate rises, leisure therefore becomes dearer relative to other commodities that the labourer may want to buy. Therefore, a wage increase would induce labourers to buy more leisure time and more goods. The substitution effect of higher wages probably leads most labourers to want to work more. In terms of the market as a whole, therefore, higher wages could lead to a larger or a smaller quantity of labour supplied.

What we suggest here is that, despite the fact that some portion of the scarce labour force present in the NAC region had undoubtedly showed signs of an elastic demand for leisure, paradoxically, the banana export sector's wage policy revealed that (at least in this particular sector) a substitution effect of higher

wages outweighed the income effect. A higher level of wages did not lead the greater part of the region's labour force towards an incentive of less rather than more work. Neither did the level of high wages lead to an assumption that all the region's labour force enjoyed a perfectly inelastic demand for income.

With the foregoing suggestion in perspective and within the context of the NAC region's labour shortage economy, whatever aggregate amount of labour supply that existed was composed mainly of (i) those who, like the *Goajiro*, had some contact with the monetary economy as seasonal 'pseudo' waged labour (in the sense that they were gatherers of produce in exchange for very little cash or necessary goods such as tools) but were not necessarily part of a labour force per se; (ii) those who like the *Kogi* had or desired no participation as waged labour but equally bartered for cash and goods; and (iii) those already proletarianized and part of the monetary economy such as 1.- subsistence farmers or minifundistas and/or peons within the *hacienda* system and 2.- relatively small numbers of very acculturated Indigenous communities such as the *Sanka* and *Ika* which "lived under the influence of catholic missionaries and with daily contact with Colombians"⁷¹ or the *Kankuama*, which nearly totally absorbed the Colombian *mestizo* population"⁷².

The first two components of the NAC region's labour force were Indigenous communities that either marginally formed (the *Goajiro*) or did not form (the *Kogi*) part of the labour supply for export sector areas of economic exploitation which would consider them an obvious source for such supply. In the region's minor export sectors such as *dividivi*, *tagua* / *corozo* nut (gathered in the tropical forests) and coffee (picked high up in the Sierra Nevada de Santa Marta), one could appreciate that the natural labour force to be utilised was the *Goajiro* for the first two and the itinerant *Sanka*, *Ika* or *Kankuama* for the latter. We suggest that this labour force section's demand schedule for income was probably near to perfectly inelastic.

However, one must have in mind the fact that the widespread belief at the time

that Indigenous communities would not join the monetary economy as integrated waged labour because they lacked the capacity to appreciate the purchasing power of money. It follows therefore that they had to be persuaded to acquire wage-earning habits. Once persuasion was accomplished, the caveat was the suggestion that an income effect would take place. That is, that high wages should not be paid because they would entice the labour force to work less. It is likely that this was the case for the *Goajiro*, perhaps to a lesser extent for the itinerant *Sanka*, *Ika* or *Kankuama*. And it would be astonishing if it were the case for the *Kogi*.

The *Goajiros* " ... could undoubtedly be civilized into useful laborers for the benefit of their civilizers ..." ⁷³ as Eder remarked. In more than one way they showed some desire to establish contact with the monetary economy as wage-labourers. Peck for example, noted that the " Indians [*Goajiro*] ... are practically independent. They gather forest products such as tagua nuts [vegetable ivory] breed useful horses and do some trading at the port of RioHacha in [the department of] Magdalena" ⁷⁴. Indeed, the *Goajiro* was " exclusively responsible for its [dividivi] collection ... [and] ... they barter with the civilised merchants for rum, maize, *panela* [brown sugar blocks] and textiles" ⁷⁵.

Nevertheless, the *Goajiro's* contact with the monetary economy was ill-fated. As Reclus emphasised in the mid nineteenth century, " le commerce tel qu'il est compris aujourd'hui saura-t-il en echange de leur paix, leur donner autre chose q'une servitude deguisee, la misere et les joies sauvages puisees dans l'eau-de-vie ? Trop souvent deja le beau mot de civilisation a servi de pretexte a l'extermination plus ou moins rapides de tribus entieres " ⁷⁶.

The *Goajiro* were, as Wollaston pointed out, " a very vigorous and warlike people" ⁷⁷. Despite the negative consequences of contacting the monetary economy, they were and remain today fiercely independent and proud of their life-style preferences. This helps understand why they did not substantially form part of the labour supply for the high-waged banana sector.

So, as mentioned earlier, the *Goajiro* would contact the monetary economy as seasonal 'pseudo' waged labour only to the extent that it served some purpose in the consolidation of their immediate barter needs, which satisfied the use-value of the commodities exchanged. They were therefore not necessarily subject to show either an income or a substitution effect particularly because wages paid for *dividivi* and *tagua / corozo* gathering were sufficiently low so as not to warrant either effect.

In light of several negative effects embodied (disruption of societal structure) in the contact with the monetary economy produced for the *Goajiro* and their short-term barter attitude towards wages, it should come as no surprise that the very high wages offered by the banana sector would ever dent the nature of their attitude and character.

The *Kogi* in the Sierra Nevada behaved in even stricter fashion. Although they composed a relevant source of labour supply in the Sierra Nevada coffee sector, they never chose to become part of the monetary economy as waged labour. They had no need to. There was certainly neither " usury nor economic uncertainty"⁷⁸ in their life-style although they did barter with " mestizos of nearby villages"⁷⁹.

United States Trade Commissioner Bell refers to these Indigenous people as *Arahuaco* ⁸⁰. This is the way the first Spanish chroniclers first addressed them " at the beginning of the XVIIth century ... [a name] somewhat obscure but probably derived from the name of a certain region in the septentrional ridges"⁸¹. Perhaps the real reason the Spaniards addressed the *Kogi* as *Arahuaco* had something more palatable about it: that the word *Arhuaco* was said to mean 'oro escondido' (hidden gold) ⁸², a most sought after commodity. It was certainly 'hidden' because, as has been suggested very recently, the true significance of gold was not as a measure of personal wealth but for its divine generational powers, its standing for a superior celestial world visited by entranced *shamans* (priests), its fertility and its possession of an almost magical transforming power⁸³.

These communities did indeed display gold and very probably took heed in hiding whatever the Spaniards did not lay their hand upon. With the new value attributed to gold by these new arrivals, it seems logical that selling labour was not in their interest. This could have been the reason why, as Bell confirmed, " the region [Sierra Nevada de Santa Marta] of the mountains inhabited by these Indians is well suited for coffee growing up to an elevation of 10,000 ft., but these Indians [Kogi] do not form a supply of labour, which is the factor that has determined the slow development of the coffee industry in the Sierra Nevada"⁸⁴.

As a part of the region's labour force the *Kogi* were simply not quite so prepared to abandon the scale of preferences which constituted its standard of living (of which one must include leisure) rewarded by their subsistence economy in order to enter the monetary economy and therefore be abruptly rurally proletarianized. The *Kogi* did not need to 'integrate' the monetary economy. Even Eder stated: their " wants [monetary economy consumption] are few"⁸⁵.

As Reichel-Dolmatoff recently wrote, " what benefit would they [the *Kogi* obtain from such integration ? What could we teach them ? Amongst the *Kogi* there is no criminality nor delinquency, in our sense; there is no drug abuse nor political violence. There is no prostitution nor usury nor economic instability. Their religion is profoundly consoling; their philosophy of life positive, affirmative of the challenge constituted by existence. What do we expect to teach them ?"⁸⁶.

Consequently, any wages offered by any economic sector for which there would exist willingness and desire to substantially upgrade the latter section's wage-labour status, had to be cost-effective to it. Minor sectors such as *tagua* / *corozo* nut, *dividivi* and undoubtedly coffee in the NAC region, did not satisfy these conditions. Rather, the contrary effect was to result. At least qualitative evidence suggests that the banana export sector did break ground in this respect.

The fragments of labour force for the minor sectors (*Goajiro*, *Sanka*, *Ika* or *Kankuama*) probably showed demand schedules for money which tended to

remain inelastic. By the same token demand schedules for leisure tended to remain elastic. We suggest that in the case of the banana sector, the opposite took place. That is, its part of the labour force undoubtedly showed that its demand schedule for money became elastic while their demand schedule for leisure seems to have become inelastic.

The failure of the NAC region's coffee sector to decrease its labour costs probably had much to do with the *Kogi's* scale of preferences in their lifestyles. This ruled out the need to gather coffee berries in the Sierra for whatever the level of wages being offered. We suggest the dominant factor was the preference for leisure. Some might have argued that at the time, the desire was for work for no wage whatsoever. Indeed, analysing reasonably similar world-wide economic situations at the time, Greaves suggested what is indeed the case in the NAC region. She wrote that "not the rashest proponent of the theory of native insensibility to monetary inducement has said that given the opportunity the native cannot spend money. What is claimed is that they will not earn it"⁸⁷.

In the case of the banana sector, the 'proletarized' category of the labour force that it attracted appeared prepared to continue to be wage labourers but only at above average wage rates. It was not just because of the profitable release of their labour at the prevailing high price that this particular grouping of the labour force engaged in wage labour. It was also related to the scale of preference. US Trade Commissioner Bell for example, pointed out how the NAC labour force was fairly confident and decisive in their choice preference for the type of labour they were prepared to engage in. He believed that in the banana zone of the NAC region, "the men are good at machete work and cutting and handling bananas, but do not like heavy labor, such as track work or ditch digging for irrigation, etc."⁸⁸.

This portion of the labour force seems to have believed that the banana sector's wages were profitable at the prevailing price of sacrificing whatever their previous subsistence or *hacienda* / enclave economy rewarded them in leisure time. Because there certainly was little else apparently taking place (other than paying a very

high 'price' for leisure) when leisure time arrived in the banana sector. As Kepner pointed out, "leisure time in banana regions is a great void"⁸⁹.

This would seem to confirm why the substitution effect offset the income effect of higher wages in this particular segment of the NAC region's labour force working in the banana sector. Leisure time was not only a void, but a very expensive one. It seems to us that those segments which did not formerly join the banana sector labour force, such as the *Goajiro*, *Sanka*, *Ika*, *Kankuama* and especially the *Kogi*, were simply not interested in becoming waged labour. In fact, Kepner indicated that "comparatively few full-blooded Indians are employed in the banana industry; those who take part in it occasionally are itinerant workers"⁹⁰.

Of course, some would be more prepared to dismiss the independently minded decision making of the several classes of the labour force which was available to the existent export sectors in the NAC region. But at the same time, serious academic opinion could only diminish the stature of such views. Consider for that matter, Greaves' opinion regarding British tropical colonisation, that "what is condemned as laziness or dislike of work on the part of the native has often been in essentials a reluctance to expend a large amount of effort upon inefficient and poorly remunerated forms of labour"⁹¹.

(iii) The Element of Monopsony Presence

Labour market imperfections in the NAC region included the monopsonistic power of a single large employer --the UFC-- to set a regional price for wages, which --we suggest-- other employers had no economic alternative but to accept.

As a monopsony the UFC supplemented the region's labour factor by homogenizing the regional economy's scarcely endowed labour resources. The instrument of homogenization was the high wage it met and the prevailing high level it set. This in itself was a strong market imperfection.

Circumstances regarding availability of labour apparently were not adverse for the banana export sector in the early years. British Consul Carr indicated that in 1905 " field labourers for the lowland cultivations have been more plentiful, now that banana plantations have been worked to better advantage than at any time during the past five years"⁹².

But sooner, rather than later, Carr's views changed : " the demand for labour is greatly in excess of the supply and but for this scarcity the development of banana cultivation would proceed more rapidly. Up to the present only natives have been employed in this work, but unless labourers can be brought from the interior in sufficient numbers to supply the demand, employers will be forced to bring men from the West Indian Islands which they are unwilling to do, as previous attempts in this direction have not given satisfactory results"⁹³.

Only the small-scale non-corporate production units of the banana sector remained a viable investment and attracted whatever labour was available in reasonable numbers. These would eventually be absorbed by a large-scale monopsonist corporate monopoly such as the UFC. According to Petre-Lorraine " ... hours of labour have been curtailed. The necessary result has been the abandonment of the more valuable kinds of cultivation, requiring more labour, in favour ... of banana growing. The want of labour operates adversely to the

development of cotton and coffee growing, as well as that of sugar"⁹⁴.

No doubt, the banana sector faced some particularly difficult moments due to scarcity of labour. In a report (written on the 21st of December, 1918 but published on the 20th March, 1919) United States Trade Commissioner Bell estimated that " the lack of tonnage during the war for the movement of bananas caused many workers to emigrate to Cuba to work in the cane fields and sugar mills. During the past two years 3,000 men have left the district. It would at this time be impossible to secure as much as 500 men to labour on any new project"⁹⁵.

Surprisingly however, in another report (written on the 21st December 1918 but published on the 26th March 1919) Bell claimed that there was " sufficient labour in the district for all of the plantations now bearing, including those of the United Fruit Co. when these are being cut"⁹⁶.

However, the setting of high wages by the international monopoly took center stage in the drama of economic detriment to the region, the UFC's additional role as a monopsony further aggravated the problem because it increased labour scarcity.

The existence of a labour shortage in the NAC region seems to have been perpetuated by the fact that the available labour was strongly absorbed by the high-waged banana sector. As the Colombian Ministry for Industry put it in 1932, " it is not possible to find labourers there [Santa Marta banana area] for work other than the cultivation of the banana. In earlier days banana wages did not allow the successful undertaking of any different job and labourers do not understand anything different from their disciplines in the yellow industry. When there is no export, they feel they are out of work, that they are really without work, although next to them they find a coffee grower or a cattle raiser looking for hands for their tasks"⁹⁷.

Despite the exhausting case for scarcity of labour there would seem to be some degree of contradiction in the general sense. It reflects a particular facet of urban and rural supply of labour.

Although historically the larger percentage of all regions' labour force was engaged in primary sector economic activities (57.2 % in 1870, 70.1 % in 1925 and 62 % in 1945)⁹⁸, the average annual growth rate of twelve major cities were significant: 3.8 % for the intercensal period 1905 - 1918 and 3.7 % for 1918 - 1938⁹⁹.

Regional capitals (such as Barranquilla, Cartagena and Santa Marta in the NAC region) therefore drew considerable rural-urban migrants from their region's departments. The problem of scarcity of labour was essentially a rural one and also a seasonal factor. It is apparent that labour in urban areas such as Barranquilla and Santa Marta was reasonably well supplied. United States Consul Demers confirmed this in 1906 : " plentiful and efficient labour [in the Barranquilla industry] seemingly superior to the Jamaican labour is to be obtained"¹⁰⁰.

But it was in the beginning of the 20's that the NAC regions' urban industrial areas seem to have begun to strip the rural areas of labour. As United States Trade Commissioner Bell suggested, " labor is plentiful in Barranquilla, but not in the cotton district in the interior of [Department of] Atlantico"¹⁰¹. Bell understood this crucial phenomenon and perhaps was one of the first to envisage the nature of rural-urban migration as the factor which aggravated scarcity of labour in the countryside for some very important potential linkage-endowed agricultural sectors.

Therefore, by this time, within a labour shortage economy, urbanisation (not rural export sectors) absorbed some important fractions of the region's tight labour supply in straightforward competition with the high wage banana sector. As Bell put it, this was " coming from the outlying districts to the Coast cities being attracted by the factory employment , the better conditions and the better wages

procured in dock and freightwork"¹⁰².

If labour was always scarce in the NAC region, then cotton cultivation and the textile industry could have been used to high wages, but the monopsonistic presence of the banana sector helped increase labour scarcity, wages and therefore outpriced both cotton cultivation and textile production.

(iv) Labour Shortage

All the previous discussion on the reduction of mobility of labour by a series of imperfections, meant employers in the NAC region faced labour shortage. Scarcity of labour is understood in the sense that the demand for labour at the ruling money wage exceeds the available supply.

When there is labour shortage, employers have an incentive to raise wages. Assuming perfect labour mobility full employment would be reached. Employers could increase their profits if they could employ more labourers even at a higher wage.

More labourers would only be had by drawing them away from other employers. Luring labour away from other employers at a higher wage following the dictates of self-interest, amounts to bidding up money wages. Which is why the previously mentioned imperfections affected the regional wage-level basically by way of increasing it.

Scholars writing on Colombian historiography have failed to point out a major aspect of regional economic development: the availability of labour supply. Here, we argue that, at least in the NAC region there was labour shortage. With the exception of the south-western part of the Colombian interior (the Gran Tolima province) the NAC region showed the lowest percentage distribution of population in Colombia for years 1870, 1905, 1912, 1918, 1928 and 1938 respectively¹⁰³. The region therefore represented 12.2 %, 10.5 %, 13.4 %, 15.1 % and 15.8 % of the nation's population¹⁰⁴.

From a qualitative point of view, the evidence for labour shortage, although not copious, is reasonably convincing. For practical purposes we have chosen to emphasise it chronologically, beginning with the 1870's, when sugar cultivations in the region near Cartagena were amongst the first to be mentioned as victims of the labour constraint. British sources pointed out then that the " climate and

rich soil are peculiarly adapted to the growth of the sugar cane. The chief difficulty hitherto to its cultivation to any extent has been the scarcity of labour"¹⁰⁵. British Acting Consul Diez also reported and confirmed that in the NAC region " there is surely a scarcity of labour"¹⁰⁶.

In the 1890's, British Vice-Consul MacGregor indicated that " the great obstacles to all kinds of enterprises consists in the want of native skilled labour which is an article that cannot be improvised"¹⁰⁷.

Labour shortage also affected steamboat transportation and its economic cargoes' handling. According to MacGregor, the need for labour was for many years " a great difficulty in the steamboat business on the river Magdalena ... until about ten years ago [1880's]. The companies engaged in this business were entirely dependent on foreign skilled labour"¹⁰⁸.

Despite this, by the mid 1890's, there was some degree of normalisation of the need for labour. As MacGregor pointed out, the steamboat companies as a " precaution of training native apprentices in their workshops and on board their boats ... are at the present time tolerably independent of foreign skilled workers"¹⁰⁹.

Sparsely populated areas hinder the development of their economies. As British Vice-Consul MacGregor put it, as a result of " the scarcity of population which is barely sufficient to produce the agricultural articles (and not all of them) necessary for the sustenance of life, and to attend to the coffee planting, mining, and other industries"¹¹⁰, manufactures generally did not appear to be profitable. Indeed, this factor impediment to the region's economic development led to suggestions that labour should be imported to the region. Importation of labour however, as we shall see further on in this chapter, was never a solution for labour shortage in the NAC region.

Labour scarcity had been commonplace nationally and particularly in the NAC

region since the 1870's. Civil war further aggravated the shortage of labour. By the end of 1899, internal national political feuds gave rise to conflict. British Consul-General Huckin claimed that " a fresh revolt broke out, which developed into perhaps the most disastrous civil war Colombia has ever suffered. The revolution lasted until June, 1903, and it is said that these three years cost the country something like 200,000 lives"¹¹¹.

This 'War of a Thousand Days' (1899-1903) proved to worsen the state of labour supply for the nation. In general, Villegas and Yunis described how " population centres remain nearly deserted and many of its inhabitants reduced to misery"¹¹². They added that in the NAC region " flourishing population centres in other times such as Magangué, have lost its commerce and gone back to a primitive state"¹¹³. The region contained the principal seaports and was therefore severely shaken. As Villegas and Yunis pointed out, " export products (especially hides and coffee) piled up for years at the ports unable to leave for their markets"¹¹⁴.

The war proved to be fatal for overall economic progress. The war reduced the working population, further enhanced the gravity of scarcity of labour, and diminished purchasing power as wages were showing very little progress at the time. Revolution, as United States Consul-General Beaupre noted, " ... wrought havoc with substantial interests of the country; fortunes ... disappeared in the engulfing calamity; importing houses that a year ago were rich and strong today would find it impossible to liquidate; foreign exchange ... ranged from 360 to 1200 per cent, and selling importing goods for currency so enormously depreciated could result in nothing but disaster"¹¹⁵.

It was equally clear that the revolutionary war " more than decimated the able-bodied population"¹¹⁶. It was therefore bound to have affected the Santa Marta area of the NAC region. According to Petre-Lorraine, " the great check on the rising prosperity of Santa Marta is to be found in the want of population"¹¹⁷. He estimated the area's casualties, as " quite 10 % of the able-bodied population

of the district [Santa Marta] was destroyed in the revolution and even before this there was a deficiency of labour"¹¹⁸.

In general, of course, the effects of the War were national and opinions during and a few years after the chaos tended to lay the blame for any lack of economic progress on the violent actions. Vergara y Velasco asserted in 1901 that " in a nutshell, from the industrial point of view all, or nearly, is to be accomplished, and nevertheless, all industry possible in the tropics are possible in Colombia in specially advantageous conditions. The balance, in this aspect, is nil ... What is therefore the cause for such backwardness ? The civil wars."¹¹⁹.

British Minister Barrett in 1906 was convinced, that " were it not for the many civil wars that have drained their lifeblood and exhausted their energies, they [Colombians] would be one of the richest peoples in the world"¹²⁰. By 1907 however, US Consul Demers reported it was " very gratifying to be able to state that, after the five years of financial crisis and the national difficulties and universal commercial standstill that followed the close of her last civil war, Colombia is now entering into a new era of commercial and economic development ... Peace is well established in the country and confidence has once more been restored"¹²¹.

None other than Petre-Lorraine summed up the situation more clearly : " Much as Colombia has suffered from civil war waged for the gratification of personal ambitions, never really for the affirmation of principles or the establishment of forms of government essential to the body of the people, its recuperative powers, due to its enormous natural resources, have served, even in the short intervals of tranquillity, to rehabilitate it to a great extent, only to be hurled back into the abyss by the next revolution. So matters have gone on for nearly a century, with the result that the country is, in many ways, as Mexico was in 1876, very much when it was visited ,in the first quarter of the 19th century, by Humboldt, Mollien, Cochrane, Hamilton and others"¹²². He also added that " no radical change can be expected in the immediate future, if ever"¹²³.

As a consequence of shortage of labour, a sharp rise was experienced in the demand for labour and its price due to the emergence of shorter working days. For example, in 1904, British Vice-Consul Carr reported that " demand for labour increased"¹²⁴. The result was that " not only is the nominal cost of a day's work high, but it is made yet higher by the fact that the number of working hours has been curtailed, so that more than seven hours a day can hardly be counted upon"¹²⁵. The price of labour was to reach even higher levels, especially in ... and due to the banana sector.

Scarcity of labour affected " in a most injurious manner the progress of other industries and the general welfare of the country"¹²⁶. Labour shortage undoubtedly affected production in the NAC region. British Consul Gillies for example, reported that " one of the most important problems ... to solve sooner or later is that of labour, the scarcity of which is being seriously felt by those interested in agriculture, mines and railways, in fact directly or indirectly it affects all classes of the community. For this reason no substantial development in agriculture can take place until this defect is remedied"¹²⁷.

First, labour shortage affected the coffee sector. British Vice-Consul Carr indicated in 1905 that despite the quality of the coffee bean and the excellent land and suitable altitude of the Santa Marta area, the reason why the coffee industry was not being extended more rapidly there was " scarcity of labour"¹²⁸.

Petre-Lorraine confirmed this view: " there is, however a considerable opening for coffee-growing on the slopes of the Sierra Nevada de Santa Marta ... for 1904; ... the industry is steadily progressing, with excellent results as regards the quality of the produce. Here ... labour is a great difficulty"¹²⁹.

In 1906, British Vice-Consul Carr emphasised the fact that " the cultivation of coffee in the Santa Marta slope of the Sierra Nevada is not being extended much, owing to the difficulty in getting suitable labour for that work [and that the] Coast natives appear to have a dislike of living in the hills, and while a sufficient

number can be obtained for the cultivations of the plantations when the crop season comes on it is impossible to secure pickers in sufficient number to harvest the berries quickly and consequently a considerable portion of the crop is lost or damaged by being left too long on the trees. The solution of this problem has yet to be found"¹³⁰.

The NAC region's coffee sector was relatively more affected than the interior's by this problem. First, as a result of the decimation of the labour supply during the war and secondly, by the effects of the banana export sector's high wages. The condition of the coffee trade at the outbreak of the revolution, on the 18th October 1899, was that the NAC region's coffee sector was in as appropriate a position as that of the interior. Coffee production nationally witnessed a considerable upsurge in the 1880's and early 1890's due to the rise in world prices. However, prices plummeted dramatically after 1896. By 1899 prices, according to Berquist, averaged " half the level maintained during the first half of the decade"¹³¹.

Indeed, Berquist suggested that the origins of both economic and political crisis faced by the Colombian national government in 1899 " lay ultimately in the changes wrought in Colombia by the rise of the coffee export economy ... each crisis influenced and intensified the other, creating a problem that was much greater than the sum of its separate parts ... generating the conditions which led to, seemingly and inevitably, to civil war"¹³².

Unquestionably, it was not profitable for the interior's coffee trade to engage in the endeavour. Diminishing transport costs accrued more to the NAC region's (Sierra Nevada de Santa Marta) coffee. A United States Monthly Bulletin's report stated for example, that " marketing the crop ... costs about 4 cents per pound to put coffee in New York, including commissions, etc. and as the costs of production on the estates can not be reduced to less than 4 cents coffee growing in Colombia is not a paying business with the rate below 8 cents per pound in New York. The high cost of putting coffee in New York is chiefly due to the poor means of transport to the Coast"¹³³.

British Consul Dickson confirmed the view that with the exception of " ... a few coffee estates near the Magdalena River, the general opinion which I have been able to elicit is that it is not a paying business to grow coffee in Colombia with the price below 4d. per pound in New York"¹³⁴.

In the years before the war, the well reputed Colombian coffee was produced in moderate quantities. Since supply was limited, the price went up, and, as a result, coffee was overplanted throughout the country¹³⁵. In fact, Dickson believed " this would replace the quina [quinine] industry"¹³⁶. He also reported that monies were to be " advanced; ... credits ... given to many who were desirous of enlarging their plantations; and ... [that] coffee was very often sold before it was produced"¹³⁷.

But one predominant factor was not taken sufficiently into consideration. This, according to Dickson was " the limited amount of labour available"¹³⁸. As he pointed out, labourers were " eagerly sought after and with competing prices they rushed from one plantation to another"¹³⁹. Furthermore, the Monthly Bulletin reported that " it was quite difficult to secure adequate labor"¹⁴⁰.

The result was, as British Consul Dickson noted, that " a large number of coffee plantations have been abandoned, in the whole or in part, because the available capital, estimated for three years expenses was all spent in the first year owing to the unforeseen rise in wages caused by the rush"¹⁴¹. Indeed, the rush contributed to the creation of a momentary upwards push in the interior's coffee sector wages. But this rise in interior wages was never comparable to the more persistent NAC region's wage-push effect, which arose as a result of banana sector's high wages.

In addition to this, capital was spent " before the returns from the crop planted had begun to come in"¹⁴². Even more significant, the war brought to an end the spree of coffee growing, and the effect on labour was strongly detrimental. During the " first months of the war, work continued in an intermittent way, but as the disaster spread, the employment of male labour became impossible ... labour was

then scarce, but from the limited account must now be deducted the considerable number of labourers who perished during the war"¹⁴³.

Second, labour shortage affected the cotton sector. Cotton cultivation in the NAC region certainly suffered from the same burden as coffee did. British Vice-Consul Gillies was in no doubt that labour shortage was the " one factor which seriously hinders the development of the cultivation of this article"¹⁴⁴.

According to British Consul Carr in 1904, " suitable labour however, being scarce and expensive, it does not seem probable under these conditions that the [cotton] will prove sufficiently remunerative to warrant its continuance"¹⁴⁵. This was true substantially, perhaps with the exception of the year 1907, when United States Consul Demers maintained that there were " thousands of good farm hands, who are today almost idle and could be hired from 40 to 60 cents per day"¹⁴⁶.

During the first quarter of the century it was frequently stated that labour was abundant in all parts of Colombia. The NAC region's cotton however, was the exception to this observation. As United States Consul Hazeltine put it, " ... numerous enterprises have been retarded or stopped due to the lack of labour. For instance, experiments have proven that the department of Bolivar [NAC region] produce an exceptional grade of cotton quite similar to South Sea Island cotton. But it was discovered that a lack of community labour rendered the enterprise impracticable if not impossible"¹⁴⁷.

Labour shortages persisted for the NAC region's cotton sector throughout the years. Blake Modica indicated that " scarcity of labour is one of the greatest difficulties to be overcome in developing the country"¹⁴⁸. He pointed out that although the cotton industry was affected by " conditions abroad in 1915 and no cotton was exported to Europe"¹⁴⁹, the "lack of labour retarded development of commercial probabilities of the product"¹⁵⁰.

For the NAC region's cotton cultivation, labour shortage was such that even by

the 1930's, according to Jones, "labour is scarce ... [and] ... expensive"¹⁵¹. Jones equally highlighted that labour shortage contributed to the NAC region's difficulties in the consolidation of some economic linkages between cotton cultivation and textile production, in contrast with interior regions. He pointed out to that effect that "these mixed [NAC region] cottons ... internally compete with cotton from regions [in the interior] having as good physical conditions and a better labour supply"¹⁵².

Third, labour shortage affected minor sectors in the NAC region. There was indeed a labour input bottleneck present. This led British Consul Carr to report that with the "cost of labour remaining the same, many sugar cane planters have been obliged either to abandon their plantations or turn their cultivations into bananas or pastures"¹⁵³. Carr also pointed out that the "increased cost of labour has made the [tobacco] industry unremunerative so that it has now become quite insignificant"¹⁵⁴.

The dire effects of the shortage of labour upon minor sectors in the region were also confirmed by United States Trade Commissioner Bell. He accounted for those such as (i) balsam of *copaiba*, placing no doubt that its production "could be greatly increased if the labour situation were better"¹⁵⁵; (ii) *corozo*, which was "easily gathered in great abundance over a wide area but the trouble is the lack of labour"¹⁵⁶; (iii) coconuts, of which he said that "it can not be predicted that the production of coconuts will increase ... [and] labour is too scarce, even though conditions are good"¹⁵⁷ and; (iv) rubber, of which its "industry ... suffers from lack of labour"¹⁵⁸.

Labour scarcity, therefore, was either increased or aggravated in other sectors such as cotton cultivation and coffee - not to say, the minor sectors such as those mentioned immediately above- by the banana sector's high wages.

Monsalve for example, pointed out that "the work in the Santa Marta banana region generates great competition to the coffee industry and that explains why

there is a shortage of labour for the collection of the bean and the high wage, due to which, a coffee cultivator in the coffee zone of the Sierra Nevada de Santa Marta, at a few kilometres from the seaport, compensates in wages what he saves in transport [costs]. Labourers prefer the banana region because work there is constant and because, due to this, they obtain an equal or superior remuneration"¹⁵⁹.

Labour scarcity and high UFC wages continued to handicap the development of the NAC region's coffee sector as Jones has pointed out. He indicated that although the Sierra Nevada de Santa Marta area possessed "admirable physical conditions in a good location near the sea ... it suffers from a shortage of labor resulting from sparse population in the hills ... [and] ... good wages paid by the United Fruit Company"¹⁶⁰.

Labour shortage in the end resulted in high wages which the UFC was able to meet. Given the small population contained in a large geographical area, the imperfections present in the labour market and the resulting labour shortage, real and significant obstacles to export sector production in the NAC region.

Labour shortage -a constraint in labour as a factor of production- badly affected employers other than banana industry in the NAC region. And immigration does not seem to have been a solution to the problem of labour scarcity in the NAC region.

(v) UFC: Intra-Regional Large Scale Corporate Segmentation

As seen in Chapter V, wage differentiation was widespread in the nation as a whole. Because of the reasonable weight of the evidence found, we elaborate here in some detail this other imperfection in the NAC labour market: the UFC's strategy to internally segment its labour force. It was accomplished in a way in which it could produce a number of non-competitive (segmented) internal labour

markets within the company.

Imperfection is not just a shortcoming or a transgression of the orthodox economic model. It is a major frailty. It is not just a blemish, but an inadequacy. And, because the framework of analysis is not an equilibrium but a dynamic one, orthodox economic theory is unable --for example-- to adequately explain dispersion of wages across labourers.

Therefore, before proceeding to reveal the UFC's implementation of a segmentation strategy, we suggest a very brief economic analysis of dispersion of wages -particularly in the banana sector- will not go amiss. It is possible that some may not find it obvious why the fact of dispersion in itself indicates segmentation, rather than the operation of the market. But we are not suggesting that here.

Segmentation in the narrow sense --which is how it is used in this thesis-- is a strategy. And like the UFC's practice of outwork --to illustrate an example which is a means of increasing flexibility, shifting risk and reducing costs-- segmentation is a market imperfection. And as such, it is neither supplied nor demanded within the normal operation of the market as labour --as a commodity is. We suggest and hope this clarifies the logic of our argument.

Moreover, competitive theory of the labour market predicts the equilibrium wage rate for a given occupation in a given area should be uniform across firms, for labourers of a given quality. But the indication of surveys has frequently been the existence of dispersion of wage rates. It follows therefore, that some dispersion of wages, is a normal feature of all labour forces in the broader sense, reflecting (not indicating) segmentation.

Dispersion reflects different skills, scarcities of types of labour and different types of efforts. And this is why we suggest, that in order to form some estimate of the nature of the dispersion of wages within the NAC region, we show (as in Tables 20 & 21, further below) some averages and measures of dispersion for the coffee

and banana sectors. These reveal (especially for banana) large rather than small heterogeneity.

After all, the dispersion of wages of the UFC, for example, would be large as they reflected differences in the quality of the labourers or their jobs, or cover several segments of its internal market. Dispersion would have been smaller insofar as intra-UFC segmentation would be eliminated.

In the narrow sense, we suggest dispersion is clarified even further, if it features conclusive asymmetry, as in the analysis that follows. Which --if we may say so-- links the logic of our argument more closely with the available data. We equally suggest it is likely to link up with the specific empirically testable proposition, that there was complete --rather than fragmentary-- asymmetry in wage levels in the coffee and banana sectors.

TABLE 20: NAC COFFEE SECTOR WAGE ASYMMETRY, HETEROGENEITY & DISPERSION

	1912	1913	1914	1916	1917	1918	1921	1922
Weighted Mean Average _(i)	3.9	4.6						
Weighted Average Wage Rate *	0.8	0.9	1.05	0.7	0.7	0.7	1	1
Standard Deviation	1.1	1.3	1.3	0.2	0.1	0.1	0.1	0.2
Dispersion	large	large	large	large	avrg.	avrg.	large	large
Coefficient of Variation	0.3	0.3	0.3	0.3	0.1	0.1	0.1	0.2
Heterogeneity	yes	yes	yes	yes	yes	yes	yes	yes
Median Wage Rate*	3.9	4.2	4.8	0.70	0.70	0.70	1.01	1.0
Modal Wage Rate*	3.0	4.0	4.0	0.70	0.70	0.70	1.0	1.2
Lower Quartile*	3.0	3.7	4.0	0.50	0.60	0.60	0.93	0.90
Upper Quartile*	4.6	5.9	6.2	0.70	0.70	0.70	1.1	1.1
Asymmetry	yes	yes	yes	yes	yes	yes	yes	yes
Coefficient of Skewness	0.4	0.3	0.5	0.02	0.7	0.9	-0.3	-0.3
Coefficient of Kurtosis	-0.4	-1.4	-1.3	-1.3	0.2	1.1	-0.2	-0.9

Notes: (i) Pay in CGP\$ per week; (*) Pay in CGP\$ per day.

Observations of wage rates from the NAC region coffee and banana sector suggest asymmetry in their distribution and heterogeneity in their patterns. This is likely to link with dynamic as opposed to static equilibrium. The degree of spread or dispersion that the standard deviations of these wage rates display and the accompanying heterogeneity that variation coefficients yield are large enough to stress the magnitude of wage differentiation in the labour market.

At any rate, the results of the analysis seem to suggest that it is only these economic sectors that highlight a structure of wage differentiation in the NAC region. But it was in the NAC region with the presence of its banana sector large-scale corporate production unit, the UFC, where the impact of segmentation was intensely experienced.

Segmentation is a fairly precise and narrow concept. It is one type of labour

market imperfection but cannot be used synonymously with labour market imperfection. Segmentation of the internal labour market was the result of the

TABLE 21: NAC BANANA SECTOR WAGE ASYMMETRY, HETEROGENEITY & DISPERSION

	1926 _p	1926 _a	1927 _p	1927 _a	1928 _p	1928 _a	1929 _p	1929 _a
Weighted Average Wage Rate*	3.78	3.26	1.17	0.95	1.75	1.40	1.07	0.91
Standard Deviation*	3.16	3.34	0.42	0.39	0.81	0.68		
Dispersion	large	large	large	large	large	large		
Coefficient of Variation	0.8348	1.0244	0.3615	0.4039	0.4633	0.4850		
Heterogeneity	yes	yes	yes	yes	yes	yes		
Median Wage Rate*	2.16	1.16	1.11	0.93	1.59	1.16		
Modal Wage Rate*	2.16	1.18	1.11	0.93	2.68	2.20		
Lower Quartile*	1.53	0.80	0.84	0.70	1.21	0.99		
Upper Quartile*	5.36	5.25	1.55	1.15	2.68	2.20		
Asymmetry	yes	yes	yes	yes	yes	yes		
Coefficient of Skewness	1.1069	1.0549	0.9571	1.8753	-0.0240	0.1581		
Coefficient of Kurtosis	-0.0477	-0.3032	-1.3891	6.4012	-1.4652	-1.5907		

Notes: (*) Pay in CGP\$s per day; p = payroll pay; a = actual pay; (payroll and deductions for merchandise purchases, medical treatment or cash advances).

UFC's corporate strategy to treat different categories of workers differently. It resulted in different recruitment processes, different patterns of job mobility within the firm, and different forms of payment.

Here we are not attempting to demonstrate labour market segmentation by a firm. Demonstration of segmentation within a firm would have to proceed through an institutional analysis. It would have to show how different types of workers were recruited into the firm by different processes.

It would equally have to show how they were then treated quite differently in terms of the factors affecting their wages and employment conditions. It would also have to show how they would have different career paths within the firm.

We do not attempt here, to demonstrate internal labour market segmentation in this manner because this is not the vital part of this thesis' argument. What it does attempt is to emphasise the importance of this type of imperfection, by revealing evidence of the UFC's segmentation strategy.

Nevertheless, if the reason the UFC introduced segmentation within its labour force was to reduce overall labour costs, why else would it opt for labour market segmentation as a strategy to control the labour force? All we can suggest --with the utmost possible care and caution-- is that, if this was really so, then the net effect of the UFC's introduction of the strategy within its operations, seems to have been to lower its wage costs.

We equally suggest that because the UFC was a prominent monopsony, its position allowed it to segment its internal labour force and, in effect, pay the low wages it could optimally pay.

But the UFC was equally a conspicuous monopoly in the producer market. And it is this position which explains why its wage was higher than what a competitive wage offered by other employers would have been in the NAC region.

Segmentation was therefore a type of imperfection which affected the regional wage level by being instrumental as a corporate strategy in lowering labour costs, which, because of the corporation's monopoly position became recast into high ones, relative to other employers in the region.

In general, constraints on factor mobility might well be sufficient to explain higher wages in the NAC region. But we suggest the above rationalization as a way to better understand the link between the use of the grandiose theoretical concept of labour market segmentation and specific empirically-testable propositions. That is to say, that --by means of its imperfection-- the prevailing level of wages a monopoly established, was influential with other factors, to generate economic

stagnation.

At least to some degree, orthodox economic theory can explain labour market imperfections in factor mobility. But invoking a different theory or concept, such as labour market segmentation, should enrich it. After all, ideas are not mutually exclusive, and whatever merit our logic has, it is the overall important effects observed, that matters.

One could bear in mind here, that leisure preference among the already scarce NAC region labour supply, was economically significant. Breaking it meant affording the payment of high wages and yet remaining --not only competitive, but with a 'leisurely' mark-up. It appears to us rather clearly, that the UFC qualified on these counts.

As general corporate policy however, it seems that UFC did pay the low wages it could optimally pay. Witness how determination of wages rested considerably with officials in each tropical division, who said that because they were " urged to keep down costs, they [did] not tend to pay higher wages than necessary to ensure adequate and efficient labor"¹⁶¹.

Again, with enormous care and caution, we suggest it seems plausible that it was necessary for the UFC to pay high wages in the NAC region. That is to say, without this affecting its wage bill --which for its 'monopolist' and 'monopsonist' budget, was low. By contrast, it seems to have helped the corporation maintain high profits. This is not to say that our argument is simply to state that the UFC caused higher wages in the NAC region while lowering its own wage bill. As a matter of general harmonized policy. No. We only suggest that it paid high wages because it had to. There was shortage. But at the same time, because of its corporate segmentation policy to reduce labour costs, it would appear logical that its wage bill went down, not up.

For the UFC, according to White, " agricultural labour costs were a smaller

proportion of total investment in the area; ... low wages (even if they were high relatively to average Colombian wages) did enable UFCO to keep down the price to local planters as well as boosting profits on its own produce. Low labour costs -the only item of UFCO expenditure which it was impossible to conceal from Colombian eyes- also made it easier for the company to keep down transfer prices on its own produce, an easy operation for UFCO with its ownership of transport and distribution concerns"¹⁶².

In reference to the UFC's wage policy in Costa Rica, Kepner pointed out that " the wages paid by the United Fruit Company before the economic crisis were low in comparison to wages paid in temperate regions, but were high to agricultural laborers elsewhere in Central America¹⁶³". Policy was centralised in the UFC, so this seems to have been the same case for its NAC region branch.

As Edwards has pointed out, " in theory, labour markets could be segmented because buyers with great market power (monopsonists) can achieve a more profitable overall settlement ... In this case, segmentation can be explained as an attempt to lower the overall price (wage) that the buyer has to pay"¹⁶⁴.

This seems likely to be the case with the UFC. Its monopsonistic feature allowed it to segment. Its monopolistic feature meant it set a high rather than a low prevailing level of wages. With its introduction of controlled segmentation -a market imperfection- the banana export sector contributed to the decline of economic growth and development in the NAC region.

By means of its large-scale corporate operation (the UFC), the sector achieved what seemingly has been neglected by economic historians. This was the introduction in the early 1900's of a new system of control in the regional labour process, consolidating corresponding regional labour market structures in its economic area of influence.

Historical economic evidence on the way the implementation of a segmentation

strategy by the UFC manifested itself is recorded here. As Gordon, Edwards and Reich have explained, in the early 1900's, United States corporations' "corporate managers began to organize job tasks more systematically in order to permit more control, greater differentiation among workers' tasks and greater fragmentation of informal work groups"¹⁶⁵.

We suggest it is likely that this managerial system of control of the labour process not only structured the NAC regional labour market initially, but destructured it in the long run. The consequences were the negative effects of a high-wage economy: pricing out other sectors by restructuring relatively high wages, which in turn, destructured the regional labour market.

When analyzed within the context of the NAC region's economy, what seems to emerge from this system of control, is that destructure of the labour market took place with the struggle between large and small potential economic sectors of the NAC region. The effort was to maintain a wage high enough to retain labour within each economic sector until it was not possible to be competitive with the banana sector's UFC wage levels.

The first dynamic effect of this process is the question of the element of human capital. Some initial practical analysis would be likely to suggest that there was a presence of straightforward differentiation due to experience on the job and fragmented informal work segmentation. That is, at least different wages for certain specific categories of workers. As there is no evidence on efficiency rates, we assume equal efficiency on different jobs.

The second effect of the process is whether different categories of work were sufficiently controlled, differentiated and segmentated. **Appendixes 19 & 20** show that this was likely to be so within the wage rate range of CP\$ 0.33 and CP\$ 3, eight different categories of work -most in the informal category. This is also likely to establish that large-scale corporate investment implemented detailed wage segmentation strategy.

The grounds upon which we argue that differentiation and segmentation were implemented, exist. There were, according to Kepner, "about 260"¹⁶⁶ different categories within the UFC. Differentiation was present within and across occupations. The labour force was made up of 'workers of different categories'¹⁶⁷.

Although it would be ideal to compare wages for some categories of workers as well as jobs outside the banana sector in order to see if the sector's wages were too high, there is enormous difficulty in doing so.

This is because of the dearth of similar data within other economic sectors. There is also great difficulty in establishing like with like comparisons across sectors for the same reason. We are able only to present data that illustrates a segmentation strategy by the UFC for years 1909, 1922 and 1926.

It was in the base, at primary wage day labour level, that systematic segmentation made its grinding effect felt. Figures indicate that by 1909 segmentation was not only considerable but reasonably significant to play an important role in delineating the economic development process of the NAC region.

Differentiation by categories was of 'urbanised' unskilled peasantry, segmented in the internal labour market as '*cargadores*', '*arrumadores*', '*empleados*' and '*mozos*'. '*Cargadores*' and '*arrumadores*', who constituted part of the 'picking-up' gangs, earned considerably high wages.

For example, 76 '*cargadores*' earned a basic CPP\$ 60 per day and up to CPP\$ 419 for 'round-the-clock' work on two vessels on the 23rd and 24th (inclusive) of September of that year.

On the same days and year¹⁶⁸, 16 '*arrumadores*' earned a basic CPP\$ 90 per day and up to CPP\$ 599 for 'round-the-clock' work. A further 74 '*cargadores*' and 12 '*arrumadores*', which formed part of 'loading gangs', earned the same basic wages

as mentioned above, and up to CPP\$ 472 and CPP\$ 944 respectively, for the same days of the same year¹⁶⁹.

No doubt seasonality and fragility of the product were good market reasons for pushing wages up. Thus, disproportionality in urban primary wages of '*arrumadores*' and '*cargadores*' probably illustrated the nature of the product and a monopoly / monopsonist's production function.

But segmentation seems to have been at the center of it. Primary data¹⁷⁰ show in a rather straightforward manner that in 1909, the banana sector through the UFC, paid a daily nominal wage of CPP\$ 10 to a mail clerk, CPP\$ 13 / 20 messengers, CPP\$ 40 to a cook, CPP\$ 50 to a servant, CPP\$ 57 to a stableman, CPP\$ 67 to a foreman on shore, CPP\$ 75 to a checker on board, CPP\$ 80 to a telephone clerk, CPP\$ 83 to an agent, CPP\$ 90 to a porter and CPP\$ 100 to an office boy.

This reflected a segmented pattern in the labour force. The differences, for example at both ends of this particular scale of wages, warrants emphasising the dramatic difference in wages between the mail clerk and the office boy.

One speculative figure for 1909 as well is that of a rural daily wage of a '*cutter*' of CPP\$ 99.20. This was significantly higher than the urban daily wage of a foreman on shore at CPP\$ 67 per day. It was just CPP\$ 0.80 under the urban office boy's daily wage of CPP\$ 100 but nevertheless, the '*cutter*'s wage was high.

This appears to be so if the daily wages earned mentioned above of CPP\$ 419 / CPP\$ 472 and CPP\$ 599 / CPP\$ 944 for '*cargadores*' and '*arrumadores*' are seen within the perspective of the conditions under which the UFC operated.

Further below, several tables show the primary evidence which reveal the UFC's implementation of its segmentation strategy. They are followed by graphs which illustrate the data.

Table 22 shows data for 1909. The data suggest a weighted mean average wage rate of CPP\$ 2.58 per day. **Figure 33** shows the barchart graph.

The banana sector's UFC continued to pay different wages to personnel holding different jobs. In 1922 for example, assuming an 8 hour working day, as **Table 23** shows, it paid checkers, *rectificadores*, *cargadores*, forklift operators, machinerymen and arrumadores weighted mean average daily wages of CPP\$ 55, CPP\$ 64, CPP\$ 65.99, CPP\$ 69.06, CPP\$ 70.13 and CPP\$ 90.58 respectively. **Figure 34** shows the barchart graph.

Table 24 equally shows the same primary evidence for 1922 but by wage differentiated quantities of personnel. The data suggest a significantly high weighted mean average wage rate of CP\$ 7.96 per day. **Figure 35** shows the barchart graph.

Finally, **Table 25** shows primary evidence for 1926 with data suggesting a weighted mean average wage rate of CPP\$ 2.52 per day. **Figure 36** shows the barchart graph.

In the final analysis, we can say three things. First, **Table 25** shows consolidated figures from evidence in **Appendix 19 & 20** by wage differentiated quantities of personnel.

Second, **Table 26** shows a much tighter frequency distribution established from a sample of just the 542 employees which are within the wage rate range mentioned immediately above. These wage rates generated a weighted mean average wage rate of CP\$ 1.74 . **Figure 37** shows the barchart graph which illustrates the data we have mentioned .

Table 27 details these categories individually as well as their corresponding averages and dispersions. Within the degree of spread or dispersion that the standard deviations of these wage rates display, and given the accompanying

heterogeneity that variation coefficients yield, the results are quite significant. Because there is simply no basic symmetry.

Third, in relation to all the 542 employees, 448 or 82.7 % were an aggregate segment. Within it three sub-segments emerged as is shown in Table 28 below and graphically illustrated in Figure 38.

**TABLE 22. LARGE-SCALE CORPORATE BANANA EXPORT SECTOR
DAILY NOMINAL WAGE RATES (CP\$'S): 1909**

<i>Wage Rate</i>	<i>No. of Personnel</i>
0.10	1
0.13	1
0.20	1
0.40	1
0.50	1
0.57	1
0.67	1
0.75	1
0.80	1
0.83	1
0.90	1
1.00	1
1.06	1
1.13	1
1.27	1
1.33	3
1.39	1
1.67	1
2.00	5
2.08	2
2.33	1
2.67	1
2.78	1
2.81	1
2.92	1
3.06	1
3.33	1
4.00	1
4.16	1
4.17	1
5.33	1
5.83	1
6.00	1
7.50	1
8.67	1
<u>13.87</u>	<u>1</u>
$\bar{X} = 2.58$	43

Source: Appendix 7.

If only sub-segment A of this aggregate or category is considered however, it can be observed that further segmentation emerged. Of the 256 employees in the sub-segment, 46.5% was made up of helpers or labourers. They constituted the greater part of the sub-segment. Labourers alone represented 28.5 % (the largest percentage) of the sub-segment. But, most significant of all, 70 labourers -27.3 % of the sub-segment- were earning a daily wage rate of CP\$ 1.50 . This was a very high wage indeed.

**TABLE 23. BANANA SECTOR SHIP LOADING PERSONNEL DAILY
NOMINAL WAGES (CPP\$'s): FEBRUARY 1922**

<i>Arrumadores</i>			<i>Machinerymen</i>			<i>Cargadores</i>		
<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>	<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>	<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>
21	5.89	47.12	4	4.43	35.44	121	3.93	31.44
19	8.85	70.80	3	6.90	55.20	119	5.90	47.22
19	15.40	123.2	4	11.27	90	178	10.27	82.16
20	15.50	124.0	4	12.00	96	161	11.00	88.00
<hr/>			<hr/>			<hr/>		
79	$\bar{X} = 90.58$		15	$\bar{X} = 70.13$		579	$\bar{X} = 65.99$	
<hr/>								
<i>Forklift Operators</i>			<i>Watchmen</i>			<i>Desarrumadores</i>		
<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>	<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>	<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>
12	3.93	31.44	2	1.75	14	12	0.60	4.8
12	5.94	47.52	2	2.88	23.04	12	0.80	6.4
16	10.35	82.80	2	4.88	39.04	16	0.80	6.4
16	12.50	100	2	5.13	41.04	14	0.80	6.4
<hr/>			<hr/>			<hr/>		
56	$\bar{X} = 69.06$		8	$\bar{X} = 29.28$		54	$\bar{X} = 6.04$	
<hr/>								
<i>Checkers</i>			<i>Rectificadores</i>					
<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>	<i>No.</i>	<i>\$/hr.</i>	<i>\$/8 hrs.</i>			
1	4	32	1	40				
2	40	1	6	48				
3	7	56	3	9	72			
2	10	80	1	10	80			
<hr/>			<hr/>			<hr/>		
8	$\bar{X} = 55$		6	$\bar{X} = 64$				

Source: United Fruit Company. Extracto[s] de Cuentas. Payroll para el Embarque No. 2.374, S/S "Reventazon", Embarque No. 2.375, S/S "Motagua", Embarque No. 2.376, S/S "Esparta", [y] Embarque No. 2.77 S/S "Matapan". Semana que termina el 18 de Febrero de 1922.

**TABLE 24. LARGE-SCALE CORPORATE BANANA EXPORT
SECTOR LOADING GANGS' DAILY NOMINAL WAGE RATES: 1922**

<i>Wage Rate (CP\$'s)</i>	<i>No. of Personnel</i>
0.60	12
0.80	42
1.75	2
2.00	3
2.88	2
3.93	121
3.96	12
4.00	1
4.43	3
4.88	2
5.00	3
5.13	2
5.50	15
5.89	21
5.90	119
5.94	12
6.00	1
6.90	3
7.00	2
8.85	19
9.00	3
10.00	3
10.27	178
10.35	16
11.00	161
11.27	4
12.00	4
12.50	16
15.40	19
<u>15.50</u>	<u>20</u>
$\bar{X} = 7.96$	821

Source: United Fruit Company. Extracto[s] de Cuentas. Payroll para el Embarque No. 2.374, S/S "Reventazon", Embarque No. 2.375, S/S "Motagua", Embarque No. 2.376, S/S "Esparta", [y] Embarque No. 2.77 S/S "Matapan". Semana que termina el 18 de Febrero de 1922.

**TABLE 25. LARGE-SCALE CORPORATE BANANA EXPORT SECTOR'S
SAMPLE 667 EMPLOYEES DAILY NOMINAL WAGE RATES:1926
(CP\$'s)**

<i>Wage Rate</i>	<i>No. of Personnel</i>	<i>Wage Rate</i>	<i>No. of Personnel</i>
0.33	5	3.25	5
0.40	1	3.33	11
0.50	26	3.50	14
0.67	14	3.66	1
0.75	6	3.67	3
0.83	26	3.75	3
1.00	28	3.83	16
1.17	12	3.97	1
1.20	1	4.00	7
1.25	7	4.17	7
1.33	7	4.50	2
1.40	1	4.67	3
1.50	108	4.83	1
1.60	5	5.00	7
1.66	4	5.33	2
1.67	15	5.50	2
1.70	1	5.67	2
1.75	45	5.83	6
1.80	1	6.23	1
1.83	4	6.25	1
2.00	79	6.67	1
2.16	3	7.07	1
2.17	7	7.50	3
2.20	1	8.00	1
2.25	19	8.33	1
2.33	8	9.17	1
2.50	33	10.00	3
2.67	13	11.67	3
2.75	19	12.50	1
2.80	1	13.89	2
2.83	8	16.67	3
2.93	1	18.06	1
3.00	33	18.83	1
3.16	1	20.83	1
<u>3.17</u>	<u>1</u>	<u>41.67</u>	<u>1</u>
		$\bar{X} = 2.52$	667

Source: Appendixes 19 & 20

**TABLE 26. LARGE-SCALE CORPORATE BANANA EXPORT SECTOR'S
SAMPLE 542 EMPLOYEES DAILY NOMINAL WAGE RATES:1926
(CP\$'s)**

<i>Wage Rate</i>	<i>No. of Personnel</i>
0.33	
0.40	1
0.50	26
0.67	14
0.75	6
0.83	26
1.00	28
1.17	12
1.20	1
1.25	7
1.33	7
1.40	1
1.50	108
1.60	
1.66	4
1.67	15
1.70	1
1.75	45
1.80	1
1.83	4
2.00	79
2.16	3
2.17	7
2.20	1
2.25	19
2.33	8
2.50	33
2.67	13
2.75	19
2.80	1
2.83	8
2.93	1
<u>3.00</u>	<u>33</u>
$\bar{X} = 1.74$	542

Source: Appendixes 19 & 20

**TABLE 27. AVERAGES AND DISPERSION OF LARGE-SCALE
CORPORATE WAGES: 1926
(CP\$'S)**

	<i>average daily rate</i>		<i>standard</i>
	<i>mode</i>	<i>mean</i>	<i>deviation</i>
maid	2.50	2.16	6.59
laundress	0.67	0.78	0.60
clerk	2.50	2.01	2.63
servant	0.50	0.80	1.44
orderly	0.83	1.13	1.98
cook	0.83	1.11	1.06
helper	1.50	1.83	4.54
labourer	1.50	1.56	9.90

Source: Appendixes 19 & 20

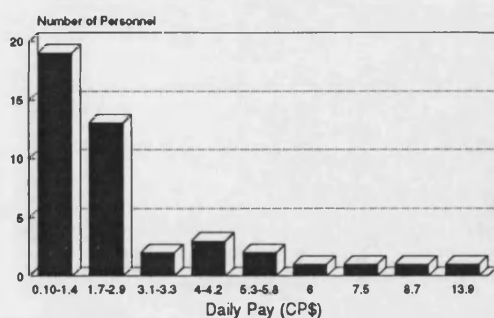
**TABLE 28. OCCUPATIONAL DISTRIBUTION OF LARGE-SCALE
CORPORATE WAGE EARNERS: 1926**

<i>Occupational Group</i>	<i>No. of Personnel</i>	<i>% of all 542 Quoted Employees</i>
A: maids, laundresses, servants, clerks, orderlies, cooks, helpers or labourers	256	57.1
B: helpers or labourers	119	26.6
C: labourers	73	16.3

Source: Appendix 9

Figure 33

Large-Scale Corporate Banana Sector Pay Daily Nominal Wage Rates - 1909



Source: United Fruit Company Records

Figure 34

Large-Scale Corporate Banana Sector Pay Shiploading Nominal Daily Wages* - 1922

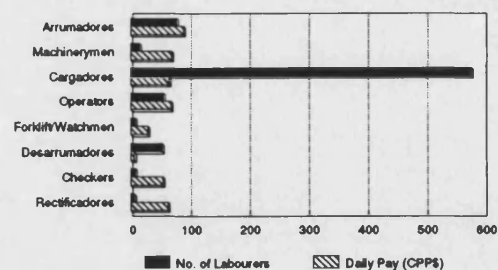
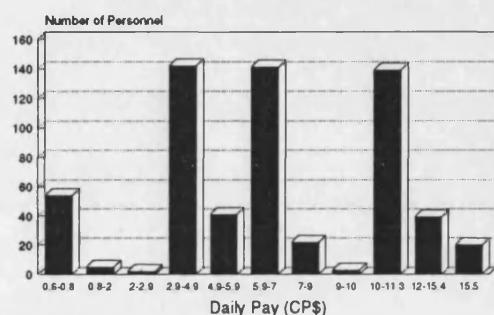
Source: United Fruit Company Records
*Wages are weighted averages based on an 8 hr. day

Figure 35

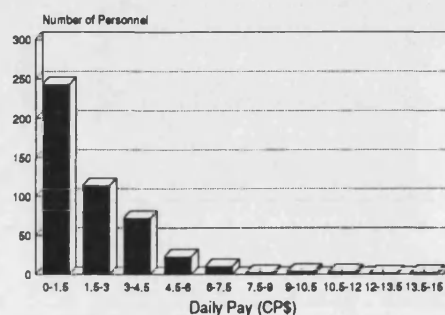
Large-Scale Corporate Banana Sector Pay Daily Nominal Wage Rates - 1922



Source: United Fruit Company Records

Figure 36

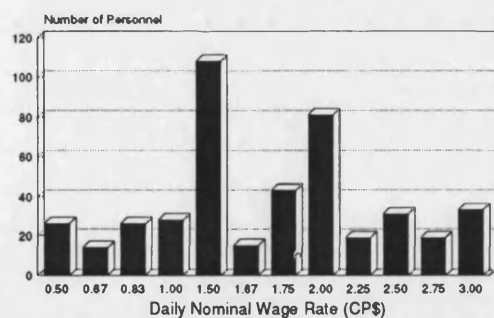
Large-Scale Corporate Banana Sector Pay Daily Nominal Wage Rates - 1926



Source: United Fruit Company Records

Figure 37

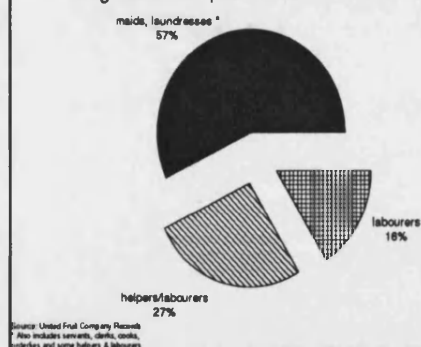
Large-Scale Corporate Banana Sector Pay Sample of 542 Employees - 1926



Source: United Fruit Company Records

Figure 38

Wage Earners' Occupational Distribution Large-Scale Corporate Banana Sector: 1926

Source: United Fruit Company Records
*Also includes seamstresses, clerks, cooks, gardeners, and some helpers & labourers

In the final analysis, this chapter suggests that imperfections in the national and international factor markets served to reduce labour mobility to the NAC region. The various imperfections affected wage levels in different ways. We suggest it is plausible that these constraints on factor mobility could help explain the higher level of wages in the NAC region.

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CHAPTER VII

THE LINK BETWEEN HIGH WAGES AND STAGNATION

(i) High Wages, Low Linkages

The link between high wages and stagnation in the NAC region is difficult to prove, because of the dearth of hard quantitative primary data. It goes without saying that common sense is needed in the discussion of such data. Especially in the difficulties that ensued in the handling of the price data we have collected for the first decade of our study. And even if the increase in real wages in cotton cultivation in the NAC in 1905-1910 may be explained by deflation.

If wages in the cotton cultivation sector of the NAC region's economy were part and parcel of a long-term contractual relationship between a company and the region's labour force, it would make sense to say that high cotton wages in the region were only due to deflation.

But here is an economic history case where only smallholders in a labour shortage environment, grow cotton profitably for the domestic, not the international market. Barely affording the running wage rates, and without handing out long-term contracts to whatever field labourer they could get their hands on.

We therefore suggest common sense be equally injected into the discussion of our qualitative evidence. Our suggestion is that the link with hard data between high wages and stagnation is relative to the eye of the beholder. We suggest the link is unquestionably made with our qualitative evidence. We suggest the logic of the argument defensible by the general views of commentators throughout the period --not just this thesis' author-- that the wage variable was an extraordinary one.

Some pieces of data are indeed hard to reconcile --let alone digest. And there is certainly work to be done. But whether it be wage pressure, excessive protection or any other one that may emerge in the future, we do not believe they are

mutually exclusive. But we do not have to decide that in this thesis' logic. What matters is the important effects.

Other things may well have been going on. We set forward initially, to reasearch the wage variable. We unearthed amazing --albeit incomplete-- data. We encountered the wage variable head on. We argued its main overall tendencies as best we could.

Despite existent deflation, we suggest there is no logic in the region growing in general, during the period, with such enormous costs. Therefore, our first part of the argument is that there is no evidence that high wages brought acceptable linkages to the regional economy.

According to Pearson¹, the linkage or leakage capabilities of an economy suggest that initial investment result in second types of indirect gains for an economy. Be it of national or regional nature, this should be so, provided there is a consistent pattern of relationships, i.e. linkages. These gains have normally been assumed to be positive. However, Hirschman² has suggested that their economic benefits or costs may indeed turn linkages into leakages. This leads us to suggest that aspects in the NAC region that should have promoted linkage were, in the end, conducive to leakage. Such seems to be the case regarding imperfections found in the region's labour market.

The notion of '*linkage*' --and its antithesis, the notion of '*leakage*'-- initially has industrialisation --or the lack of it-- in mind. Both notions subscribe --nevertheless-- to items such as those mentioned immediately above. We suggest they strongly influence primary production. This is compatible with the *staple thesis*. Indeed, *one thing may or may not lead to another*. The evidence in this thesis seems to suggest that there be the potential for sustained '*linkage*' to take place. This operated through the influential requirements of both the banana or cotton staples. '*Leakage*', nevertheless, seems to have reflected true reality.

Backward linkages, for example, deal with input expenditures. This helps to assess the importance of the supply, expansion or stagnation of inputs. The backward-linked industry in the NAC region that had the potential to provide increasing returns was probably cotton. The result, however, seems to be that immobility of labour became a sufficiently scarce regional factor. This in turn, aggravated the cost of establishing a consistent, long-term linkage.

There is evidence that the banana sector brought the staple itself into commercial use. It created returns as high levels of wages. However, these were not conducive to economic development. We suggest the explanation be that the effective demand these wages represented, were absorbed by company stores, or by labour contractors. Some of it went in those two directions. We assume the rest went into the '*residual*' (leisure). It did not --however-- vent a surplus for trade for the NAC region. While the export of the fruit did create significant employment, it also created havoc in the end by releasing the basis for underemployment and informality.

The banana sector paid high wages. Such a payment of wages should have had consumption or final demand linkages. If compared with each factor's likely income from alternate 'linkage' employment --i.e. the cotton sector-- this seems plausible. The net incremental factor income --equal to the net gain calculated for the banana sector's direct contribution to regional income-- would enable those who received factor payments, to show larger expenditure patterns. If data on such net incremental income were available, with estimates of the propensity to purchase goods and services, it would be more feasible to answer the question about whether additional (or only) final demand created by the banana sector produced the necessary stimulus to create or expand an industry, endowed with sufficient linkage. It is difficult --if not impossible-- to get such data.

While there is no evidence that the fruit induced higher rates of domestic savings, there is some evidence that some degrees of wages were recycled to the sector's large-scale corporate unit, the UFC. This was accomplished by the purchase of

goods from its merchandise stores. In this way, the staple was not establishing linkages with other sectors of the region's economy. It seems that rather the opposite happened. That is, leakages were created producing obstacles –such as we have suggested- the possibility of the pricing out of cotton. We suggest this could have contributed to economic stagnation.

High wages probably created sufficient margins to save. The extent of and directions of savings --however-- are unknown. What is known only suggests that not much went into regional industrial linkage-creating activities --or warranted economic growth. If the evidence is clear that the UFC paid high wages, what were the demand consequences of this high wage?

On one hand, regularly, an outlet for this high purchasing power must have been leisure. Pearse seems to have been strongly convinced that "the high wages which the work people along the Coast were receiving at the present time, due to Americanisation of the district, induce these ignorant people to riotous living, which of course adds further to weakening their constitutions, leading frequently to consumption."³

Setting aside ignorance and unorthodox living, what was consumption really like? Pearse reflects some degree of confusion or misunderstanding ... or perhaps both. Initially, he observed that "wages are paid fortnightly, and of course there is a good deal of drinking on the days following pay-day" ... [and] ... owing to their few needs in their house which consist largely of huts from banana leaves, they have too much money to spend on drinking and riotous living."⁴ Thereafter, he seems to have found the way the high purchasing power of these NAC region consumers --"who live in thatched huts"⁵-- was earned and disposed of, not particularly enhancing. That is, that they "spent their easily earned money on whisky, brandy, and motor-cars."⁶

Confusion arises on the underestimation of people's knowledge of taste and quality in consumption goods (be they necessary or otherwise). This is at least a

proof of penetration into the monetary economy, once the level of income is favourable. It seems to us that if consumers prefer 'leisure' to other economic options –and this is not appreciated-- misunderstanding surfaces. The point is not how easily income is earned. It is what preference surfaces in its disposal.

Pearse however, was not as straightforward as say, Roemer, when the latter suggested (50 years later) possible consumption linkage created by waged labour of Peru's fish export sector. Roemer was not being flippant when he said that "still, there is a consensus, which may not mean much, that consumption patterns in towns like Chimbote and Tambo de Mora run toward wine and women. The one industry that inevitably seems to thrive in good fishing season is one that never enters the input-output tables of the world, unless it might be buried deeply under 'services'.

Although North's phrase, 'residential industry', seems singularly appropriate to this service, it is not the sort of consumption linkage he or any of the staple theorists had in mind (or at least in print). Moreover, the brothels may be the source of unsuspected leakage from the economy. It is alleged, and on this the author has no personal knowledge, that most of the prostitutes have been imported from neighbouring countries and even further afield. If so, then to the extent they are savers, they will probably remit their incomes home, to the detriment of Peru's balance on current account."⁷

It is impossible as of yet to be economically precise about patterns of expenditure in the NAC region. Similar channels to those mentioned above about Peru, existed at the time in the region's highly waged banana export sector. It is for example, commonplace in this particular region to hear the aged speak amusingly about, particularly, a 'residential services' industry emerging, especially due to hard purchasing power of high wages the banana export sector's labour force had at its disposal.

Colombian economist Dr. Riveira Avendaño reminisced, for example, that " on

saturdays, according to the shipment the labour force would be paid about [CP\$] 200 per week. Ten per cent would be spent on interest on '*culebras*' [debts], five percent of the '*culebra*' [itself] spent mostly on *parranda* [partying]. At 4 P.M. they [the labourers] would go drinking about twenty beers each and spend [CP] \$ 2 per session [with a woman], three sessions per night. Each [labourer] had three mistresses. Each mistress cost him [CP] 50 centavos per day. They would dance *la cumbiamba* [NAC regional folk dance] with lit bank notes instead of candles"⁸.

Equally, Mr. Márquez Alvarez -former worker at HLDE and present foreman of Hacienda La Maria Teresa in the Sierra Nevada de Santa Marta- explained that " in the 1920s, a coffee labourer earning [CP] \$ 80 per day spent about [CP] \$ 25 on food. The rest [CP\$ 55][was spent] on *ron* [rum], *parranda* [partying] [and] *putas* [whores]. *Una puta de calidad* [a first quality whore] cost [CP] 50 centavos all night ... that is, from dusk untill dawn⁹. Serious academic research on these particulars seems to command little if any interest whatsoever.

At any rate, Pearse's analysis does invite the consideration of several relevant points, namely, (i) that regardless of subjective moral values of whether or not income was earned easily or with difficulty, it is an economic historical fact that purchasing power rose significantly in the NAC region above that existing in the interior; (ii) that accepting the right of the income earner to spend his or her pay on whatever he or she fancies, it is apparent that leisure took priority over consumer durable consumption; and (iii) that in the case of motor-car, whisky and brandy consumption and indeed, in Roemer and North's 'residential services' (luxury and leisure) consumption, it certainly did not help the region's developmental linkage-creating multiplier effect. It probably did so --however-- for the region's importers, as well as for the regional economies of Scotland, France and the United States.

On the other hand, high purchasing power meant expenditure on UFC merchandise stores. The system of handing scrips to labourers by the UFC undoubtedly became a consumption pattern as well. As Herrera-Soto and

Romero-Castaneda have pointed out, " the system of half-monthly pay, alongside with scrips for the acquisition of prime necessity goods from [company] merchandise stores was introduced"¹⁰. Rippy confirms this when he comments that the UFC's labour force " had a portion of their wages advanced in the form of scrip which could be exchanged for commodities at the commissaries of the company or at the stores of the banana zone"¹¹.

Although this has not been mentioned here due to lack of evidence, it seems to have contributed to the social unrest and eventual strike in the banana zone according to Ramirez del Valle. He has recently written that, "as the [UFC's] payment to its workers was carried out by a system of scrips, it also converted itself into a merchant when it would sell in its store merchandise brought from the United States. Therefore it not only harmed its own employees but the zone's population as well. Thus, that 6th of December of 1928, the labourer's strike became an uprising of the population"¹².

Indeed, the UFC invested relatively important sums in this particular trade. As US Trade Commisioner Bell has indicated, " with the exception of the local trade in native foodstuffs and ample supplies of cotton dry goods, the large \$ 80,000 stock carried by the merchandise department of the United Fruit Company and one small stock of hardware of about \$ 4,000 are the only stocks of goods in Santa Marta"¹³.

In fact, the UFC merchandise store emerged as one which the region could very well not do without. Wilson sustained the " company bought, stored and distributed tens of thousands of needed articles such as motor parts, paints, tiles, nails, screws, bolts, nuts, farm tools, riggings, ropes, cables, *coffins* [Emphasis added], stores and furniture; *of which a full list would literally run to hundreds of closely printed pages* [Emphasis added]"¹⁴.

And Rippy pointed out " much of the clothing, food, and other supplies consumed by the laborers is regularly brought into the region by the company,

which is naturally interested in having cargoes for its vessels as they return from foreign fruit markets. The company stores can usually sell supplies more cheaply than they can be bought from the local native merchants, who are often compelled to, owing to lack of a better source of supply, to purchase their wares from the United Fruit itself "¹⁵.

This seems to represent reabsorption --or recycling-- of a portion of the wage paid by the UFC to its labourers. There would undoubtedly be some reason to expect transfer pricing in the accounting of bulk buying at a probable discount in the United States. Goods at the merchandise stores in the NAC region could then be sold at some sort of profit, that could be hidden, when routed into some different account.

Kepner and Soothill seem to share share this view when they indicate that " besides purchasing goods on commissary orders, fruit company laborers, as well as higher employees, buy much for cash. Many articles are requisitioned from the commissaries for the use of the company. Although the latter may include one-third or more of the total goods carried, these requisitioned articles appear to be charged to the company at cost; the profit which the the stores are expected to make must therefore be obtained on the goods sold to the workers and to the general public"¹⁶.

This especially meant a further ingredient to a lesser return value to the NAC region; another leakage, small as it may have been. By the use of the scrip, the wage earner was constantly recycling some portion of his wage or obliged to do so, if in debt to the company's merchandise store.

As Kepner and Soothill mentioned, the " sometimes advantageous but frequently disastrous system of instalment buying"¹⁷ the UFC put into practice, eventually meant " constant debt for many who engage in it, and it involves the surrender of the purchased commodity when the payments can no longer be made"¹⁸.

Members of the labour force were also seemingly forced to trade their scrips for hard currency. As Rippy's quote of labour leader Alberto Castrillon's illustrates, " a part of his wage is in scrip which the needy laborer must sell at a reduced price"¹⁹.

Rippy further elaborates on this matter indicating that " a group of unscrupulous money-changers sprang up who often bought the scrip at a discount of 25 per cent just as they do in some southern cotton mill towns in the United States"²⁰.

Fonnegra's quote of then labour and political leader Carlos Arias illustrates Rippy's assertions above: " based on foremen and contractors' reports, the United paid *ajusteros* an advance on their pay, a sort of loan, always in scrips. The *agiotistas* would acquire the scrips, but would discount 20 or 30 per cent of its value; and as each fortnight the company deduced the loans, the wage was reduced to a few pesos"²¹.

It would not seem misleading therefore, to conclude that the demand consequences of high wages in the NAC region were unorthodox living and the UFC's merchandise stores.

North²², who incorporated the 'export base' idea into a formal and descriptive model suggested that economic development is induced by greater external demand for locally produced forestry, mineral and especially agricultural sectors. In this way, an industry of a region within a nation would generate extra local income which in turn would generate demand for regionally produced goods and services thereby creating a cumulative process. Cotton cultivation had a real long-term potential to carry out this function. The generation of extra local income from cotton was certainly existent, especially if one is reminded that considerable production was in hands of small growers.

Mention was made earlier of the existence of industry producing goods and services in the urban centres of Barranquilla and Cartagena, which were responding to some degree of effective demand. Although a perfectly cumulative

process was not thoroughly established, the potential was there. The processing of cotton into textiles took place but the fibre's export was unable to compete in international markets. Cotton cultivation thus became a domestic rather than an export industry. It therefore represented potential for greater value added, improved infrastructure and the accomplishment of external economies. But a series of labour market imperfections seem to have been impediments.

Here, the idea of 'staple growth' raises useful issues. For example, the question of the importance of examining the nature of any resource base. This either influenced, had the potential to influence, or having had the possibility to influence the NAC region's economic development, encountered severe obstacles.

The idea of the 'export base' indeed demands that more explanatory variables are introduced than just static comparative advantage. Natural resources are less versatile, homogeneous and mobile regionally than say, capital or labour²³. Regions differ in quantity and quality (resource content or composition and location proximity) and therefore production functions are not the same. Additionally, resources may be renewable. In the former case, regional availability is influenced by a wide range of topographical, climatical and vegetational conditions. In the latter, industrial location on the international scale together with politics of international strategic commerce are required explanatory variables²⁴.

Cotton and banana cultivation in the NAC region were different altogether. And in turn, the two were different from successful coffee cultivation in the interior. The three provided different stimuli, according to the technological characteristics of their production. The technical relationship between physical inputs of factors and resultant physical output influenced the extent of secondary changes elsewhere in their respective regional economies beyond just primary increase in export output.

As Montenegro pointed out, one of the " important characteristics of the interior's small plot coffee economy was its resistance to to crisis periods, especially falling

international coffee prices because the small plot's character as a basic unit of production allowed prices to decline significantly ... because labourers' livelihood still depended greatly on their owned plot-produced subsistence food products²⁵.

But, the nature of the product was different in the NAC region. The cultivating conditions and technical specifications of cotton were different from coffee. Coffee had no immediate industrial transformation upgrading levels as cotton had with textiles. Therefore the importance as an industrial processing solution as yarn imports had, bore no equivalent in the coffee business. Furthermore, regarding NAC region in particular, cultivators of raw cotton were unable to meet domestic textile industry demand certainly because of the inheritance of *hacienda* system structural rigidities such as " ruling relations of production, rent and sharecropping "²⁶, made the supplies of raw cotton " very inelastic in the short term "²⁷.

The interior coffee cultivation had an impact --undoubtedly-- on the NAC region's economy. But the significance was *commercial rather than productive*. The productive characteristics of coffee were of very low significance in the NAC region anyway, not least because of labour shortage and the predominance of high wages, but because of great concentration of property and production²⁸.

The degree of processing should have determined more or less similar external economies in interior coffee cultivation as in the NAC region's banana and cotton cultivation. They were undoubtedly at some point during the period spreading some technical knowledge, training some labour, demonstrating some new production techniques and acquiring some 'residual' skills whether organisational or supervisory. However, the expansion of the NAC region's cotton sector involved simple methods already in use in subsistence agriculture. Any potential stimulus to the region's development was theoretically greater there than growth in the banana sector which implied not only the introduction of new skills, but new organisational control systems and especially productive utilisation of a

constrained factor (labour supply) of production through the ability to influence the level of wages.

The nature of the production function of the export sector determines income distribution and in turn, the pattern of demand and the impact on local employment, as Nieto-Arteta's model of gold, tobacco and coffee suggested. Different factor combinations also affect the distribution of income to the extent that relative shares of profits, wages, interest and rent will vary according to the labour or capital intensity of the export production and the nature of its organisation, whether it be plantation agriculture, peasant farming or mining.

But, although the relative share of profits and its relationship to capital intensity would provide illuminating findings for the NAC region's banana sector's corporate unit (the UFC), *it is the level of wages it set, their relationship to the scarce labour supply, its character and the nature of a segmented labour market, which seems to have been paramount in the region's development process.*

Moreover, the internal income distribution of the banana sector favoured an isolated group. Its effective demand seems to show a propensity to consume goods imported by the UFC, not domestic goods produced in the region. It seems therefore, that the resulting distribution of income was not effective in raising demand for locally produced products. The result would seem to be the contrary. That is, if one considers that those locally produced products had been responding initially to the effective demand created by the interior coffee cultivation. Before banana cultivation emerged with any strength.

To the extent that cotton cultivation and its up-grading level of processing - the textile industry - was perhaps the most labour-intensive potential industry in the NAC region --before the banana sector consolidated itself-- it would have probably made a stronger long-term impact on employment in the region. But the banana sector's corporate unit (the UFC) was a world monopoly, subject to economies of scale in its production. This implied large capital requirements and

vast profit mark-ups which it had. Hence, extra-regional or foreign financing led to an outward flow of profits instead of providing income for the region's reinvestment. That is, returned value²⁹ tended to be low and foreign factors³⁰ high.

Furthermore, the banana industry, being a foreign investment, differed in its degree of flow of foreign exchange fluctuations and in revenue earned and retained locally by the cotton staple. Repercussions on the regional economy by the banana sector's level of wages made the maintenance of steady employment in the cotton sector difficult because of disturbing effects on real income.

These aforementioned characteristics of the banana export sector facilitated its implementation of a level of wages such that it weakened cotton cultivation's integrative process in terms of any potential stimulus the latter may have shown for the region. Staples such as the interior's coffee and the NAC region's banana emerged with some relevance, for reasons of adaptation to resource endowment and to market opportunities at the time when the staple became established.

But one thing is clear which was not before. While the level of wages allowed coffee to sustain growth and development in the interior, it did not allow banana to do so for the NAC region (although it did for its corporate unit, the UFC). It is within this context that the notion of 'staple growth' is featured. That is, that in our analysis of regional development, the study of the nature of the production function was useful for our theoretical framework of imperfection .

Discussion of issues such as the above, towards which the idea of 'staple growth' readily contributes, lead to a caveat. Although the nature of the technology of an industry, i.e., the production function, is what should enable a process of demand for factors, for initial processing, for intermediate outputs, for further processing and for distribution of income, constraints appeared unavoidable. These were a series of imperfections in national and international factor markets of the NAC region, while market opportunities in a specific time coincided with the interior

region's suitable endowment with a 'favoured' commodity such as coffee. The subsequent reduction of labour mobility created labour shortage which resulted in a higher level of wages.

We suggest that differences in wage levels (both within and outside the NAC region) and operating profitability within these levels, seem to have determined whether or not there was an upsurge or a decline and stagnation in the regional economy. This for example, took place although railways (which were first present in the NAC region) do not appear to show equalisation of wages between the interior and the NAC region.

(ii) Decline and Stagnation

The second part of our argument is the suggestion that the link between high wages and stagnation is plausible, if seen within the framework of the decline of cotton cultivation, and the collapse of the textile industry.

The issue of intra and inter-regional difference in wages is related with cotton cultivation and cotton textile industry stagnation. This seems to be so because cotton in the NAC region suddenly found itself competing with agricultural as well as urban wage levels set by the banana industry which it does not appear to have been able to meet.

Furthermore, as mentioned earlier, agricultural wages in the NAC region were higher than in the interior. Perhaps the only one with any authority on the subject who manifested this view and analysed the export of cotton along these lines was without any question, the British General Secretary of the International Federation of Master Cotton Spinners' and Manufacturers' Associations in Manchester, Arno S. Pearse. This is why his most perceptive views are accentuated.

Pearse insisted that the economic progress that had been achieved in Colombia during the end of the 1920s " upset to an appreciable extent the whole of the

wages and the cost of living in the country "³¹ . But reference to this was made particularly " in connection with the banana plantations "³² in the NAC region, where an United States corporation (the UFC) had " feverishly devoted [itself] to ... bananas, [that] labour [became] so scarce and consequently high in price that the establishment or extension of cotton growing in this section or of any other industry that has to compete with the world's markets "³³ did not seem possible.

Despite praise for the UFC's organisation, his indictment of its consequences were severe: " the Banana Company, which undoubtedly is excellently organised, whilst bringing wealth into the country is indirectly responsible for the uneconomic wages and attendant evils to the population which have spread over the whole of the North of the country "³⁴.

But, in " addition to the demand for labour by the American corporations, the rapid development of road construction ... necessitated the withdrawal of many farm labourers and the scarcity of labour brought about by this road extension has also increased wages "³⁵. As mentioned in an earlier in chapter, the exceptionally rapid development of national public works seriously affected the labour market increasing wages above levels paid by domestic industry³⁶.

Wages were so high in the NAC region, that Pearse was adamant to establish their relationship with immorality. He said the " rise in the common labourers' wages has had the effect that these people, who live in thatched huts, spend their easily-earned money on whisky, brandy [and] motor-cars "³⁷. But high wages were also " accompanying immorality "³⁸. The impact of high wages in the NAC region was such that " in this part of the country the birth rate of illegitimate children last year reached 89 per cent of all births "³⁹, and that this " riotous living of the people undermines their health "⁴⁰.

Prospects for cotton cultivation for export " as a whole along the Atlantic coast, owing to the high wages and the inferiority of the quality of labour, as compared to America, would not be able to prosper if it were to offer its cotton abroad "⁴¹.

They would be good in conditions such as those in " some parts of the United States [where] a labourer is paid less and produces much more "⁴².

Pearse indicated that " even at the present panic prices there are many parts of Colombia which could compete successfully with the United States "⁴³. He emphasised Colombia's interior low-wage areas, pointing out that " cotton prospects in the [department of] Valle del Cauca are brilliant, in Boyaca and Santander, good "⁴⁴. This was especially so in the latter " two up-country departments, as wages there are still reasonable we look forward to good results "⁴⁵.

Cotton picking was paid at a " higher rate on the Atlantic coast of Colombia than in Texas "⁴⁶. And the " cost of living in very inferior hotels on the coast of Colombia [was] almost as high as in first-class hotels in New York and certainly higher than in the centre of Texas ... "⁴⁷.

Therefore, in these "*parts of Colombia where good cotton cannot be produced at less than 15 cents per lb. lint (7 1/2 d) delivered in Europe, it will not be worth your while to start the cotton-growing industry*[Emphasis added]"⁴⁸. This was higher than the market price per pound of cotton --between 1900 and 1915-- in both the New York and New Orleans markets ⁴⁹.

Departments such as " Magdalena and Atlantico [NAC region] would have to work hard to make any profit on their cotton as *there you have an American level of wages and get less value for them than in the United States*[Emphasis added] ... "⁵⁰. Wages on the NAC region had reached such an extreme that Pearse considered it " injurious to the development of the economic life of the country "⁵¹. This state of affairs was " bound to impede the development of cotton growing "⁵². With that level of wages the country would not be expected to " compete efficiently with other countries in no matter what produce it may be "⁵³.

Wages of " one to two dollars are not the exception on the [North Atlantic] coast

and cotton cannot stand so high a charge "⁵⁴. This was much more so, if, as he told his fellow members in his report to the International Cotton Federation, that " in the banana zone a man can easily earn 3 dollars per day of about 6 hours "⁵⁵, or US\$ 0.50 per hour.

This was a higher wage per hour than selected and all occupations of both sexes in the cotton goods manufacturing industry of the United States between 1910 and 1930 ! Indeed, average earnings per hour in the said US industry ranged from US\$ 0.140 in 1910, to US\$ 0.325 in 1930 – US\$ 0.480 in 1920, being the highest wage per hour in those two decades ⁵⁶ .

A rise in banana sector wages was therefore, a rise in NAC region wages. If it did not eventually price cotton out domestically-- *it certainly made it uncompetitive in the the international markets.*

The great bulk of cotton cultivation came from this region. And is indeed what happened. It would be only in other parts of Colombia which had not yet been " spoilt by American high wages, such as the [interior departments of] Cauca Valley, Antioquia, Boyaca and Santander [where] cotton growing could be made a commercial success "⁵⁷. He eventually expected wages to " revert to a more reasonable basis. Meanwhile, the Atlantic Coast Departments [would] be able to continue to supply the mills situated in this region, as there is an import duty on American cotton "⁵⁸.

He was adamant to state that if cotton was being cultivated for export, he considered it his " duty to warn Colombia not to extend cotton growing in any parts where the cost of production (including farmer's profit) per pound lint is above 6d. "⁵⁹. Only when wages in the NAC region would " come down to a reasonable economic level, even these sections should turn out much larger quantities [of raw cotton] than they do at present "⁶⁰.

This suggests an outcome which does not seem far-fetched. Indeed the NAC

region's export of raw cotton would eventually stagnate. And cultivation of the fibre would not even be sufficient for domestic consumption, its deficit being covered by imports. Following the relationship established with raw cotton's stagnation as an export sector, the issue of the inter-regional difference in wages is related hitherto, with the cotton textile industry's eventual decline into stagnation.

Perhaps, if we could obtain the marginal product per labourer in the NAC region cotton fields, price series could be established and compared with those abroad - say, the United States' southern cotton producing areas- for the period and actually be able to link --without any doubt-- high wages to economic stagnation in the region. But we do not know how many labourers worked the fields per year. Neither do we know how many pounds of cotton these labourers collected per year. These of course are matters for further research.

We could also try and build conclusions on assumptions. After all the rule of thumb of assumptions is how the data that is available can be used to enlarge our horizons of knowledge. Again, the marginal product of cotton labourers in southern United States for the period, could be used as a proxy, to argue that economic stagnation could have been possible in the NAC region, due to precisely high wages. Another assumption could be exclusive labour mobility between the NAC region's agricultural sector and its textile manufacturing. These are equally matters for further research.

Despite claiming the most important and single largest textile company (*Fabrica de Tejidos Obregon* de Barranquilla) in Colombia until the beginning of the thirties⁶¹, the NAC region's cotton textile industry eventually lagged behind its interior (namely the department of Antioquia) counterpart which in fact, outgrew it⁶². Brew has argued this before, indicating in 1975 that the " textile industry of Medellin [department of Antioquia] began to develop later, in 1907, but in a few decades became much more important than that of the Coast "⁶³. He implied therefore, the overall decline of the cotton textile industry in the latter region.

But, interior textile factories did emerge after 1892 and before 1907, such as the Empresa de Tejidos de Bello (1902) in the department of Antioquia and the Empresa de Tejidos de Samaca (1904) in the department of Boyaca⁶⁴.

So, as there could be some misapprehension about labour costs in the NAC region, the important role it played in the decline and stagnation of its cotton textile industry in contrast to growth of the interior's could be diminished. Consider for example, the gathering of the fibre. In 1905 it was reported to be "paid at the rate of about 5 cents for every arroba (25 lbs.) ... the highest wage including board amount[ing] to 16 cents (8 d.) per day "⁶⁵.

The latter was in itself a reasonably average rural wage at the beginning of the 1900s. Nevertheless, the point has been made within this context that despite being localised far from the interior coffee market (which generated sufficient purchasing power to satisfy textile demand through imports), the NAC region had easier access to its raw materials. Brew, for example, emphasised that the region experienced few logistic problems in the transportation of heavy machinery and therefore " the Atlantic [Coast region's cotton textile] factories were able to stand up"⁶⁶.

More stimulating, however, was his argument that the NAC region's cotton textile industry had the ability to remain in such a position " because wages were cheap "⁶⁷. It would appear initially that the NAC region's cotton textile industry took off reasonably well and maintained itself due to a low-wage economy. Transportation costs were bound to be higher in the interior at the time due to a difficult topography. But the question to be addressed -the timing and explanation for the demise of the NAC region's cotton textile industry- is not in the least mentioned. It is of course answered by the setting of a high wage level in the region by the UFC.

Interior region local-market idiosyncrasies, the high risk long-term credits conceded by foreign commission houses, the increase in transport costs from the

NAC region to the interior, exchange rate fluctuations following devaluation after 1899, the tariffs imposed on imported articles especially after 1903, and the havoc wrought by the "War of a Thousand Days" (1899-1902) on the Department of Santander's textile industry⁶⁸ are all factors which may have influenced the upsurge of the department of Antioquia's textile industry.

But simply to argue (as Brew did) that the real cost of wage labour was a major additional cost for the interior (Antioquia) textile industry⁶⁹ dangerously promotes an erroneous idea that the high-wage economy which afflicted the NAC region engendered similar effects in the interior. This needs to be viewed in a clearer and more cautious context. His interpretation that the real cost of wages " increased production costs of Colombian industries between a 50 and 100 percent over their foreign competitors "⁷⁰ is a misleading one.

Graham-Clarke (the source upon which Brew based his argument) did make his conclusion in a 'national' rather than in a 'regional' sense by stating that " it costs 50 to 100 per cent more to make these plain goods in *Colombia*[Emphasis added] than in the United States "⁷¹. However, in order to make a conclusion which was to be applied nationally, clearly, he used specific NAC regional evidence. It is plain that the wages paid in 1910 which Graham-Clarke quoted were exclusively in Cartagena and not in Medellin or Samaca (interior).

His prices of wages for spinners and weavers were mentioned by us in an earlier chapter, but his emphasis on NAC region location was clear: " the weaving price here knows that inefficient labor costs high, for similar goods in the United States a weaver would run 8 looms and be paid less than 1/3 of a cent a yard, and still each one makes a great deal more per day than the *Cartagena*[Emphasis added] weaver "⁷². In order to prove that the interior textile industry's production costs were between 50 and 100 percent over foreign competition, Brew would have had to show the evidence. He did not as it was evidence from NAC region textile industry.

Nevertheless, one could speculate on Brew's argument that " lack of ability to operate the textile machinery "⁷³ was a reason for a higher " real cost of wage labour "⁷⁴ for the interior's cotton textile industry. This could be done by giving him the benefit of the doubt (despite lack of evidence) on the grounds that the interior had good supplies of low-waged labour. As, according to Clark, in analysing textile production " the same fact emerges -low-waged countries employed more workers per machine "⁷⁵, one could assume that the interior increased its real cost of labour by employing more of it per machine.

Additionally, inefficiency -not inability, as Brew suggested- could have also relatively increased the interior textile industry's real wages. This could be envisaged, as efficiency is a better word, because as Clark notes, " skill connotes a learned ability, and ... workers in different countries performed differently not just because they were trained differently or had different levels of experience in the textile industry "⁷⁶.

Indeed, Clark has illustrated how " the efficiency of workers was very closely connected to the local real wage rate. Better-paid workers were more efficient, though it is of course not obvious what is cause and what is effect "⁷⁷. As the interior was definitely adequately supplied with low-waged labour, poorly paid labour would have been inefficient enough so as to increase manning. Overmanning would have increased the wage bill and therefore the interior cotton textile industry's production costs.

This of course is a speculative argument. In the case of the NAC region it was not. There, evidence illustrated the *paradoxal situation of inefficiency alongside high wages*. First, efficiency in the NAC region's cotton textile industry did not correspond closely to the local real wage-rate. Better-paid workers were accompanied by less -not more- efficiency. Fact indeed ruled that the number of looms run varied from Cartagena to United States weavers⁷⁸ by a factor of 4:1. This is to say, that in 1910 each Cartagena weaver tended four times less equipment than its United States counterpart. These differences in labour

efficiency were quite significant.

Second, equally significant were differences in wages. This is perhaps highlighted by illustrating relative differences between Japan and the NAC region wages. Whilst the *Japanese labourer* (displaying in 1913 a spindle efficiency of 90 per cent⁷⁹) ran 190 ring spindles, with \$ 0.80 as his average weekly wage[emphasis added]⁸⁰, as mentioned in Chapter V, *Cartagena spinners*, running " one side of 190 spindles, a few running two sides, [would] make 35 to 40 cents gold a day[emphasis added]"⁸¹. That is, the wages earned by the NAC region labourer was about 2.5 times as much per week as that of his Japanese counterpart. So, despite inefficiency, wage-rates were conspicuously high. Surely, this was due to labour scarcity and the resulting high level of wages which affected the region.

In 1910 it cost 50-100 per cent more to make textiles in the NAC region -not in the interior. Furthermore, it was not at the initiation of either the NAC (Cartagena) region's cotton textile industry at the end of the 19th century (or turn of the 20th century) or of the interior's (Medellin). *Wages only matter if they are high relative to labour productivity*. But although productivity relatives for the interior cotton textile industry are not available as they are for the NAC region, given the scarcity of labour and the banana sector's capacity to set high wages, it is likely that the same percentage applied to the difference in the real cost of wages between the NAC region and the interior.

This is to say, that at the outset of the second decade of the 20th century, cotton textile industry wages in the NAC region probably had double an intervention price limit than did the interior ones. This most significant and crucial factor constituted one major contributor to the decline of its cotton textile industry. It is at this point when it began. Indeed, by 1930 Jones informed that the development of " certain industries such as the textile activities at Barranquilla ... has been possible because of the large immediate markets ... "⁸² but that continued progress of the industry was " blocked by a climate discouraging factory labour

⁸³.

The climate was of uncompetitive wages for the cotton textile industry in the NAC region. It was under these circumstances that Pearse believed " no manufacturing industry in Colombia ... can hope to aspire under present wage conditions to embark on the export trade. The manufacture of cotton and other goods succeeds solely on account of high protective duties "⁸⁴.

Eventually the interior witnessed an upsurge in wages in the 1930s and 40s that, with a more consistent purchasing power fuelled by a more solid coffee sector. Despite the " absolute lack of statistics on industry prior to 1934 "⁸⁵, Zalamea indicated in 1941 that one of the most decisive factors that had " most direct and immediate influence on industrial development in Colombia was the increase in agricultural and urban wages "⁸⁶. But he was only confirming how low wages had been in reality at the centre of Colombian industrial development, e.g., the interior of the country.

Neither tariff protection nor the increase in communications would have been enough to create the industrial development in Colombia that he was attempting to analyse⁸⁷. The fundamental basis was the " purchasing power of the Colombian people. The most rigorous customs duties and a 30,000-mile network of highways could not have created national industry while farm wages were 15 centavos and other wages were 35 centavos per day as they were some fifteen years ago [e.g., 1926] "⁸⁸. Zalamea further stated that " five million agricultural workers with a daily wage of 15 centavos and two million urban workers with daily wages of 40 centavos were economically not far removed from a tribe of cave dwellers who had to limit their commercial activity to the exchange of a basket of potatoes [interior, not NAC region staple food] for a pound of salt or a bundle of faggots for a pair of sandals "⁸⁹.

Small wonder therefore, that Zalamea claimed that " the comparison of such [present higher] wages with those paid in Colombia prior to 1930 is sufficient to give a clear understanding of one of the determining causes of the country's industrial progress. This readjustment of wages ... began to benefit national

industries from which Colombian workers could then purchase ... other commodities ⁹⁰.

Indeed, by the late 1930s the economic conditions in Colombia -especially in the interior- " began to change ... the readjustment that followed the application of such a criterion brought about an increase in farm wages to 70 centavos a day, and wages in industry reached new levels that ranged, as of December 1939, from 88 centavos in paper and cardboard factories, 1.02 pesos in soap factories, and 1.03 pesos in chemical industries to 1.81 pesos in metal construction, 1.87 in waterworks, and electrical plants, 1.89 in mining, 1.93 in graphic arts, 2.11 in beverage manufacture and 2.16 in tobacco and leather industries ⁹¹.

But if the real argument of this thesis is that imperfections in factor mobility meant employers faced labour shortage in NAC resulting in high wages that UFC was able to meet and set. Then, as a prevailing high level of wages for the rest of the region, why did not these same imperfections (which obviously existed before the UFC appeared in the scene) result in higher wages before the UFC appeared ? At least the commentators of the time -which were quoted in earlier chapters- very clearly state that resulting wages may be categorized as cheap labour when it really is not. These were the wages from the Sierra, nearly double those of the Caribbean Coolie.

In the final analysis, labour scarcity in the NAC region meant there was little incentive for labour supply attracted by banana sector wages to go to other sectors, as for instance, to cotton cultivation. According to Pearse, the UFC " steadily increased the pay to attract people, but other industries, for instance cotton growing, cannot afford the same rate of pay, as it has to face the same competition from other countries where wages are lower" ⁹².

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CHAPTER VIII

STAGNATION OF RAW COTTON CULTIVATION FOR EXPORT

As seen earlier, Chapter V revealed evidence on wage differentiation, particularly, prevailing high wage levels. But it is also relevant that the interior industry benefitted from natural protection, which the NAC region did not. It is equally relevant that deflation suggests justification of massive rises in real wages in cotton between 1905 and 1910. But --as we stressed earlier-- none of these items of analysis are mutually exclusive. Which is why we suggest it seems plausible that some of the evidence found exposed instances, when the raw cotton export sector and the cotton textile industry, were priced out by the high level of wages, set and met by the UFC.

Although the logic of our argument suggests that wage costs play a significant role in economic growth or stagnation, complementary explanations have to be considered. Rationalisations or solutions to the problematic of stagnation in this particular case are several, but particularly, increased competition from the interior of Colombia, as transport links improved was an important reason. Another was the relative dynamism of coffee and its better resistance to the 1930s depression if compared to the way in which bananas withstood the blow.

The UFC's segmentation of its labour force was also an imperfection in the labour market. It seems to have reduced the UFC's wage bill below what it would have been yet its monopoly position denoted the wage was higher than what the raw cotton export and cotton textile industry's wage could be. So, inducement of the strategy of segmentation as a significant imperfection operated as an important catalyst for the decline of the cotton industry. In the long run it was unable to operate profitably at the wage level set by the UFC.

Regional economic stagnation is exemplified therefore by the decline (i) of raw cotton as an export sector during the period under study (1900 to 1930); and (ii) of the cotton textile industry -particularly in the thirties- illustrated (as will be

mentioned further on) by the ceasing of activities of the *Fabrica de Tejidos Obregon*. The latter was especially so in contrast with the upsurge of the low waged interior textile industry.

One way we do this is by emphasising **one major aspect** of the notion of '*leakage*': high wages -a direct result of imperfection as structural rigidity- as a cause of economic stagnation. This is no more and no less a part of the antithesis of the notion of '*linkage*'. We therefore start off by linking up in a brief discussion, the decline of cotton cultivation for export and the cotton textile industry, with the issue of intra and inter-regional difference in wages which was pointed out in earlier chapters.

The other way we underline our framework of imperfections is by stressing the importance that the nature of a product (or its technological production function) had. This is done by analysing two economic alternatives for the NAC region's cotton by building upon chronological evidence.

First, we consider the alternative of raw cotton cultivation and ginning for export. The potential for economic linkage is exemplified by evidence that provides positive accomplishments. But, the portrayal of conspicuous deficiencies in both the nature of the product and its technological production function -the **other aspects** of the notion of '*leakage*'- complement the preceding explanation of economic stagnation of raw cotton as an export sector.

Second, notwithstanding the pricing out effect of high urban wages (the structural rigidity aspect of the notion of '*leakage*'), we consider the alternative of spinning and weaving for domestic consumption. For the output of cotton textiles to have taken place in the NAC region, one would have to know whether or not the region's industry used local raw material to satisfy domestic demand for cloth.

Domestic economic linkage meant production of cotton textile for domestic consumption. However, there need be no link between the export of raw cotton

and textile output for domestic consumption. If there was a deficit of domestic raw material or the wrong variety of it for domestic consumption (enough to generate imports) there is a need to know what varieties were cultivated and the type of quality of the cloth demanded domestically. It is also the reason for which a brief look is given to the question of whether government subsidy changed the variety of cotton grown to make it suitable for domestic textile production or whether the latter used superior variety for inferior quality cloth.

Within the context of this thesis' framework a recapitulation of our theoretical framework of imperfection is made. The notion of '*leakage*' is one we stress as it is one which particularly reflects the reality of the economic development process in the NAC region. Specifically, we emphasise the fact that it embodies both structural rigidity and the nature of the product. This embodiment of the concept of imperfections with the idea of the 'staple thesis' is intertwined by the antithesis of the notion of '*linkage*'.

The first economic alternative in relation to cotton that the NAC region faced, was its cultivation and ginning for export. Raw cotton (as a cultivated and exported crop) was not significant in the Colombian economy during the end of the 19th or the beginning of the 20th centuries, but within its limited export volume showed dramatic volatility. Surprisingly, the highest export figure up to 1930 for the fibre was that of 1870 with " 7,350 quintals [1,620,381 lbs. or 736,537 kgrs.] " being exported in that year¹ according to British sources in 1875.

The export figure for 1874 although dropping heavily (approximately 84 per cent) fared well when compared with exported output for many years up to 1930 as Table 29 shows below.

TABLE 29:
COLOMBIAN COTTON EXPORTS: 1870-1929

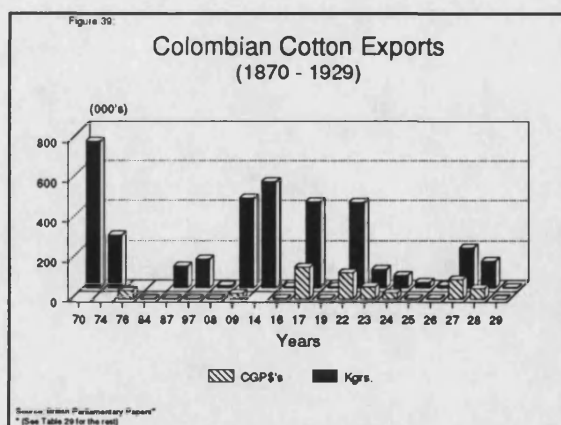
	<i>Quantity</i> (000's Kgrs.)	<i>Value</i> (000's CGP's)
1870	736.5	-
1874	264.6	-
1876	-	41.1
1884	-	1.9
1887	109.0	1.7
1897	145.0	0.9
1908	12.5	1.8
1909	451.0	27.2
1914	533.6	-
1916	7.4	2.2
1917	433.5	158.8
1919	5.7	1.6
1922	429.9	130.4
1923	93.3	60.0
1924	64.0	28.7
1925	29.6	1.0
1926	12.5	2.5
1927	201.7	97.5
1928	136.7	53.5
1929	2.0	0.1

Sources: (i) Figures for 1870 and 1874 from British Parliamentary Papers, Accounts and Papers, Vol. LXXVI, (London, 1875), p. 1125; (ii) for 1876 and 1884 from St. John, A., "Report on the Trade of the United States of Colombia", British Foreign Office, Diplomatic and Consular Reports on Trade and Finance, Annual Series No. 53, (London, 1886), p.3; (iii) for 1887 from Wheeler, M., "Report on the Trade of Colombia for the Year 1888", British Foreign Office, Diplomatic and Consular Reports, Annual Series No. 456, (London, 1889), p.19; (iv) for 1897 from MacGregor, E., "Report for the Year 1897 for the Trade of Panama", British Foreign Office, Diplomatic and Consular Reports, Annual Series No. 2088, (London, 1898), p.18; (v) for 1908-1909, 1916, 1917, 1919, 1922-1929, from "Exportacion de Algodon de Colombia, 1908-1929", Republica de Colombia. Departamento de Contraloria. Seccion 3A - Estadistica General. Comercio Exterior de Colombia, Ano de 1929, Volumen XXVIII, (Bogota, 1931), p.38; (vi) for 1914, from The Cotton Growing Countries, The International Institute of Agriculture in Rome, (London, 1926), p.37; (vii) 1916, 1917 and 1919 figures from the International Institute of Agriculture in Rome, The Cotton Growing ..., Op. Cit., p.37, and 1924-1926 figures from Garnett-Lomax, J., Economic Conditions of Colombia, (London, 1929), p. 47. are approximately. Notes: (i) quantity is in '000s of kgrs. whereas value is '000s of CGP's (Colombian Gold Pesos); both are rounded off to the nearest thousand; (ii) 1 Cental = 100 lbs.; (iii) years 1900-1907, 1910-1913, 1915, 1918 and 1920-1921 are not available; (iv) for the base of the index numbers, the method is the same used by the statistics section of the Republica de Colombia's Departamento de Contraloria for cottonseed exports as noted in Table 31. That is, with the exclusion of the figure for 1914 from the International Institute of Agriculture in Rome, an average of the five preceding years was taken.

Figure 39, shows the bar chart graph which illustrates the data in the table.

Indeed, the same British sources revealed that "shipments are limited to the supplies obtained in the neighbouring districts [NAC region].

In the past year only a little over 1,200 quintals [264,552 lbs. or 120,250 kgrs.] was exported ¹².



Thereafter, exports seemed to languish towards the end of the century. St. John's view confirmed this condition. In 1886 he commented that " the cultivation of the cotton plant has been well-nigh abandoned. In 1876 the value of cotton exported was 200,000 dol. [41,093]; [and] in 1884 the amount exported was 9,422 dol. [1,936] "³.

Nevertheless, exports showed signs of gaining some initiative in the 1890s. British Agent MacGregor indicated that in 1895, some ginned cotton was indeed being exported. This cotton originated in the urban area of economic influence within the department of Bolivar and possibly from the department of Magdalena [both in the NAC region] " from Barranquilla ... the value in 1895 amounted to \$ 8,362 [1,718] ... there were some 1,790 bales of about 450 lbs. each [805,000 lbs. or 366,136 kgrs., thus its value here comes out at about 5c. American gold per lb. "⁴.

But the initiative dwindled. Two years later MacGregor pointed out that in 1897, " there was a falling-off in the export of cotton as compared with the year previous, of 709 bales [approximately 319,050 lbs. or 145,023 kgrs.], valued at \$ 4,349 [894]; the number of bales shipped from Barranquilla does not represent the entire crop as a relatively considerable quantity is worked up in the cotton factories at Carthagen a ... besides, which a certain amount is also expected from this latter place to Europe "⁵.

Table 30 further below shows that despite problems, imports in 1900 of raw cotton and linters by the United Kingdom from Colombia were 600,000 lbs. (272,700 kgs). Imports however, dropped approximately 77 % to 140,000 lbs. (63,600 kgrs) in 1903. But British Vice-Consul Gillies reported in 1904 that " a large quantity could be exported annually if it were more extensively cultivated "⁶.

Indeed Table 30 (which displays imports by the United Kingdom) shows that 370,000 lbs. (168,200 kgrs.) were imported by the United Kingdom in 1904. Nevertheless, by 1906, imports by the United Kingdom had dropped approximately 93 percent (relative to 1900) to 40,000 lbs. (18,200 kgrs.). Nearly all

raw cotton was being " exported to France "⁷, according to British Vice-Consul Gillies. Figure 40 shows the bar chart graph illustrating the data.

The urge to make cotton a leading export crop, however, was evident. Some, such as United States Commerce Department official Pepper, believed this was impossible: " ... this will take years and possibly will require colonisation since labor is not abundant; ... there is no possibility that for a great many years the cotton itself will be manufactured in quantities to supply the domestic demand "⁸. Others, such as the British Minister at Bogota, emphasised this by reporting that for 1907 " the export of cotton is quite insignificant "⁹. It was.

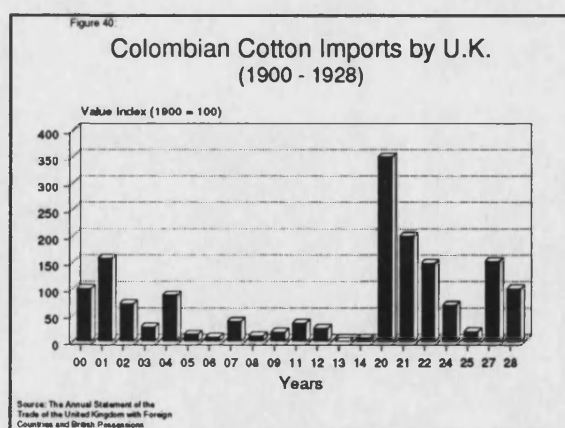
Imports picked up shyly to 150,000 lbs. (68,200 kgrs) that year. It also shows that although the United Kingdom maintained an approximate modest import average of 95,000 lbs. (43,181 kgrs) per year from 1908 to 1912, levels dropped to just about naught in 1913. Table 29 equally showed that year 1909 had the highest national cotton export figure in the first three decades of this century: 451,000 kgrs. Efforts were made " to increase the cultivation, and both soil and climate over a large area of the country are believed to be suitable "¹⁰.

TABLE 30:
UNITED KINGDOM COTTON RAW AND LINTERS
IMPORTS FROM COLOMBIA: 1900 - 1928

	<i>quantity</i>	<i>index</i>	<i>value</i>	<i>index</i>
1900	6.0	100	12.0	100
1901	5.1	85	19.0	158
1902	4.5	75	8.6	72
1903	1.4	23	3.4	28
1904	3.7	62	10.5	88
1905	0.7	12	1.7	14
1906	0.4	7	1.1	9
1907	1.5	25	4.5	38
1908	0.4	7	1.3	11
1909	1.0	17	2.2	18
1911	1.6	27	4.2	35
1912	1.2	20	3.0	25
1913	0.006	00.1	0.03	00.3
1914	0.3	5	0.8	7
1920	4.2	70	42.0	350
1921	5.3	88	24.0	200
1922	3.4	57	17.7	148
1924	1.5	25	8.3	69
1925	0.4	7	2.3	19
1927	4.4	73	18.2	152
1928	2.6	43	12.0	100

Sources: (i) figures for years 1900 to 1914 are taken from Parliamentary Papers (Accounts and Papers). British and Foreign Trade and Commerce: the Annual Statement of the Trade of the United Kingdom with Foreign Countries and British Possessions, Volumes LXXXVI, XCVIII, LXIX, LXX, XC, XCI, LXXIX, LXXX- Supplement, LXXXVIII, CXVI, CXVII-Supplement., CXIV, LXXXII, LXXXIII-Supplement., LXXXIII, CII, CIII-Supplement., CIII, LXXXII, LXXXIII-Supplement., LXXXIII, LXXVIII; Notes: (i) quantity is in '000s of Centals, whereas value is '000s of 's sterling; both are rounded off to the nearest thousand; (ii) 1 Cental = 100 lbs.; (iii) years 1910, 1915-1919, 1923, 1926 and 1929-1930 are not available; (iv) index numbers, 1900=100; (v) values of imports are c.i.f (from the source itself), i.e., they are taken to be the prices which an importer would give for the goods on a purchase in the open market if the goods were delivered to him at the port of importation, freight, insurance, commission and all other costs, charges, and expenses incidental to the purchase and delivery at the port having being paid.

In 1907, United States Consul Demers indicated that cotton cultivation was only " principally for the export trade; at least I see no possibility of its being followed by inherent manufacturing industrie "11. As production picked up strongly in the first half of the second decade this century, some stimulus for the export of cotton was felt. This generated some degree of optimism. Exported cotton went principally to France¹².



According to British Vice-Consul Bowles " unfortunately no official figures are available regarding the production of cotton in the Republic "¹³ for 1914. Nevertheless, he suggested that about " 3,000,000 kilos of raw cotton, including dirt and seed [were] exported to Europe "¹⁴. The International Institute of Agriculture in Rome reported 533,600 kgrs.¹⁵ as total national cotton exports for that year. According to United States Consul Blake-Modica, the cotton cultivation industry was affected by conditions abroad in 1915 and no cotton was exported to Europe "¹⁶. As Table 29 showed, exports crashed to 7,400 kgrs. in 1916, only to lift up to 433,500 kgrs. in 1917.

Even in the later years of the 1920s prospects for consolidation of cotton export were enthusiastic. Given the fact that the United States supplied " the world with almost 60 % of the raw material, but due to the devastation of the boll-weevil the yield per acre has been very much reduced ... Colombia could make up part of the loss "¹⁷. Additionally in the United States, " land has a higher value than here and the yield per acre is less than in Colombia "¹⁸. Table 30 shows that compared to practically a full stop in 1913, imports from the United Kingdom for example, increased dramatically to 420,000 lbs. or 190,900 kgrs. in 1920 reaching the highest import figure from Colombia of 530,000 lbs. or 240,900 kgrs. in 1921, since 1900.

Table 29 also showed that the year 1922 had a reasonably high national export figure of 429,900 kgrs. United Kingdom imports were 340,000 lbs. or 154,500 kgrs. British Lieutenant Rhys-Jenkins however, reported that " a small quantity of cotton has been exported to Spain and the United States "¹⁹. Equally, although cotton fibre was exported " in small quantities to ... Germany ... dirty and badly ginned material ... found no important market "²⁰.

Exports in the following years showed a strong decline. The Pan American Bulletin pointed out in 1924 that " Colombia does not export cotton "²¹. By 1926, the International Institute of Agriculture in Rome stressed the stagnation of exports: " Colombia does not export cotton regularly "²². Indeed, Table 30 shows

United Kingdom imports dropped to 40,000 lbs. or 18,200 kgrs. in 1925. Whilst that took place Table 29 showed national exports plummeted to 12,500 kgrs. in 1926.

Exports recovered in 1927. The United Kingdom imports figure of 440,000 lbs. or 200,000 kgrs. Table 29 showed the national statistic was 201,700 kgrs. The data in Table 30 however, seems to represent all Colombian exports.

The drop in national exports was quickly revealed the following year at 136,700 kgrs. - 118,200 kgrs. represented by United Kingdom imports. Table 29 showed that in 1929 exports crashed at 2,000 kgrs. It also showed that, except for 1870, in the first two decades of the 20th century exports following a cycle of more or less 5 years, were above the aforementioned late 19th century figures in years 1909, 1914, 1917 and 1922. They were 451, 533.6, 433.5 and 429.9 thousand kgrs. respectively.

The explanation of export decline and stagnation as well as steady increase in imports was explained by British Consul Garnett as being due " chiefly [to] the rapid growth of the textile manufacturing industry in Colombia "²³. The domestic cotton textile industry was indeed there for both interior and NAC regions, but the latter would eventually loose out to the interior.

The relative upsurge in raw cotton production which took place in the first half of the second decade of the present century also stimulated the emergence of the cottonseed oil industry as an economic linkage with some potential. Initially, as Sarta has asserted, " cottonseed was thrown away into the Magdalena river "²⁴. Thereafter, cottonseed ceased to be disposed of as waste. Rivera, ex-employee of Fabrica de Tejidos Obregon explained, " cottonseed was thrown away until it was begun to be processed in the oil factories. It was sold at \$ 20.00 per ton to the 'La Insuperable' factory "²⁵.

It was in Barranquilla where most of the oil factories were located²⁶. The

industry seems to have been established in 1906. Machinery was set up " for the extraction of oil from cottonseed "²⁷. By 1924, it was indicated that " until a few years ago the cottonseed was used only for sowing, but now oil is extracted from it "²⁸.

Nevertheless cottonseed as well as cotton-waste were alternatively exported. British Consul Gillies reported in 1907 that " cottonseed is chiefly exported to Liverpool "²⁹ or as United States Consul Manning pointed out, " exported principally to England "³⁰. And by 1918, it was estimated that cotton-waste was imported by the United States in " bales weighing 50-200 lbs ... the import duty, according to Colombian custom tariff is \$ 0.053 per Kilo, levied on the gross weight "³¹.

As an offshoot of cotton cultivation and export however, the latter's decline and stagnation signalled cottonseed's as well. Table 31 below shows this. Figure 41 shows the bar chart chart which illustrates the data in the table. Table 31 displays index numbers for cottonseed exports. These show that decline and stagnation of the seed export emerged at the turn of the third decade of the century.

Two elements (and some corollaries) played important roles in the direction that the economic alternative of cotton cultivation and ginning for export took. Both elements were within the nature of the product. The first one was the scale of agricultural exploitation. The second was the technical quality of the raw material for international competition.

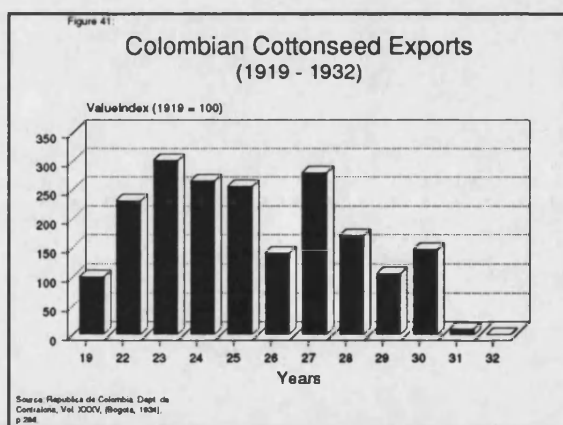
The scale of agricultural exploitation was small. Consequently, this revealed several constraints which affected the economic process, one of which was labour shortage. It seriously affected cotton cultivation because of its effect on rural wages. These were made worse of course, with the imposition of even higher wages by the banana sector, as pointed out earlier. MacGregor commented that " the great obstacle to all these kinds of enterprises consists in the want of native skilled labour which is an article that cannot be improvised "³².

TABLE 31:
COLOMBIAN COTTONSEED EXPORTS
(Index Nos.)

<i>Year</i>	<i>Quantity</i>	<i>Value</i>
1919	100	100
1922	219	231
1923	214	301
1924	116	265
1925	218	255
1926	165	140
1927	220	279
1928	124	170
1929	95	105
1930	138	146
1931	9	10
1932	0	0

Source: Republica de Colombia. Departamento de Contraloria. Seccion Estadistica General. Ano de 1932. Comercio Exterior, Volumen XXXV, (Bogota, 1934), p. 286; Note: For the base of the indexes, an average of the five preceding years was taken by Republic of Colombia's statistic section of the Departamento de Contraloria. It excluded the quantity and value figures for 1914 provided by the International Institute of Agriculture in Rome which appear in Table 29 above.

Although Pearse pointed out that cotton did "not need as much labour"³³ as coffee, the labour factor was generally one which not only led to higher production costs but to unsatisfactory methods of cultivation³⁴. As Gillies pointed out, scarcity of labour was the "one factor which seriously hinders the development of the cultivation of this article"³⁵. In addition to this, as labourers in the NAC region were "not adapted to cotton picking"³⁶, shortage of labour was aggravated.



Pearse also contended that cotton was a "very suitable crop for the small farmer, because after six or seven months from the time of sowing he can gather his crop and receive cash, which is very different from coffee, because in that case during

the first four years nothing but expenses are incurred "³⁷. Nevertheless, the repercussion small scale farming had on the NAC region's cotton cultivation potential was probably more harmful than would be envisaged. The reason for this is that small farming had to be viewed within the perspective of the historical consequences of the *hacienda*³⁸.

Indeed, this is why Demers indicated that there were " no regular cotton planters in Colombia who thoroughly understand its cultivation. The crops are raised by an infinite number of '*peones*' "³⁹. It was these people who at the turn of the 20th century benefited, as Demers indicated, from the fact that " invariably, most money is advanced to them by Barranquilla exporters on the security of their crops, for which they are paid on the spot from 75 cents to \$1 per arroba (25 pounds) "⁴⁰.

By the beginning of the second decade of the present century, small farmers and renters took over cotton cultivation from *peones*. Eventually some became small landowners. According to US Consul Demers they " own their small pieces of land or are squatters on Government lands "⁴¹. The " various attempts ... made to introduce modern methods of cultivation and to establish large plantations " met with little success⁴².

United States Commissioner Bell also confirmed that " most of the cotton is grown on small farms by individual owners or renters "⁴³. Likewise, in 1924, the International Cotton Bulletin advised that " till to-day cotton cultivation in Colombia has been carried out only by small farmers on a very reduced scale in each case " ⁴⁴. Thomson also reported in 1925 that " cotton is the most important agricultural product of the Magdalena Valley near Barranquilla, and is grown on small farms by individual owners or renters "⁴⁵.

Likewise, in 1926 the Colombian Trade Review informed that there were " no large plantations as there are no people devoted entirely to the cultivation of this fibre. The crop is gathered by numerous small farmers "⁴⁶. Indeed, this

continued to be the case well into the mid 1930s when the International Institute of Agriculture in Rome reported that " the crop is grown by small proprietors "⁴⁷.

Finally, despite it been alleged that the owners of the largest textile factory in the nation were supposedly equally " owners of extensive cotton farms in the Coast "⁴⁸, the factory was heavily dependent on these small farmers for raw cotton. Don Pedro Obregon (one of the Obregon brothers who owned the Fabrica) stated, " demand for cotton at the Fabrica de Tejidos Obregon was greater than supply and therefore the Fabrica invested in its own cotton growing in order to make demand and production adequate "⁴⁹. But, as he put it, " the Fabrica's cotton growing was more an experimental farm of 200 hectares [494.2 acres] in the village of Remolino [department of Atlantico], where in fact the irrigation pump still exists today "⁵⁰.

He said "in those days, the Fabrica depended on suppliers of cotton up to 80 %. Cotton was in the hands of individuals who had a maximum of two hectares [4.942 acres]. There was never large-scale cultivation of cotton. When spinning began, it was still the small producer who was the direct supplier of the raw material. In the exceptional case of the large supplier he was not the producer, but only a large intermediary that channelled large supplies and sold the lot to several gin mills, one of which was part of Fabrica de Tejidos Obregon"⁵¹.

In essence, cotton was for these small suppliers " little more than a catch crop "⁵². The cotton they had was " a few trees mixed with their other crops "⁵³ such as " cassava, maize and leguminous [ones] "⁵⁴. A major characteristic present amongst these small farmers was capital constraint. The International Cotton Bulletin emphasised that " no capital at all has been invested for cotton cultivation purposes "⁵⁵. And the Colombian Trade Review emphasised that " there is no doubt that, if capital were employed to develop the cotton industry very remunerative results would be attained "⁵⁶.

Small scale cultivation of cotton therefore meant staggering output of smaller

quantities at uncompetitive higher prices. But there were experimental efforts made which would probably lead to large-scale cultivation. The inhibiting factor which emerged for that particular type of enterprise was not just the that the interested party was the powerful banana sector's UFC, but the lack of the appropriate variety for large plantation schemes for export.

Indeed , British Consul Carr indicated in 1904 that in the department of Magdalena the UFC was " conducting an experimental farm on a small scale in this district, and the plants are looking fine and healthy, abundantly covered with buds, promising a good crop "⁵⁷. Petre-Lorraine confirmed this when he indicated that " ... experiments are being tried by the United Fruit Company in cotton-growing [in the Santa Marta area] with promising results, as far as the plants are concerned "⁵⁸.

He further added that " ... the American United Fruit Co. is carrying on experiments in cotton-growing near Santa Marta ... [but] ... complaints have been made of native cotton being too short in the staple; ... there is probably a possibility of improving this by imported varieties. The manufacture of cotton goods is in a most rudimentary state ... "⁵⁹. The experiments carried out during the same year seem to have turned out to be a disappointment. British Consul Carr reported in 1905 that experiments were " not sufficiently satisfactory to warrant the cultivation of cotton on a large scale consequently nothing further has been done in connection with this industry "⁶⁰.

The small scale aspect of cotton cultivation had clear consequences. Cultivation techniques of the fibre suffered which in turn rendered the final product inadequate for export. This should explain why from the early 1900s " the price obtained for the few thousand bales exported has been so low "⁶¹. Additionally, the higher level of rural wages later on destabilized a potential position from which cotton, as a staple, could help disperse income distribution in a more consistent manner. It discouraged small farmers to engage already scarce labour.

The small farmer, for example, could see no particular economic incentive in engaging the skilled cotton picker (whose wages he could not afford) who would gather an extremely delicate product in the appropriate conditions which would meet international standards. Treating cotton carelessly, just as a catch crop, inevitably resulted in inadequate cultivation standards. Likewise, the large supplier (middleman merchant but not producer) appeared to disregard these aspects.

This disregard for standards exposed crucial deficiencies in cultivation criteria such as what type of seed or tree to use, and in techniques such as planting and picking. Yet more important was that the fixing of varieties of cotton which was something not done in the country. This was an extremely laborious endeavour which required a technical preparation that was never fully mastered by the small cultivator.

This inevitably resulted in mixed varieties of cotton. It was the cleanliness of the product and low or no mixing of varieties what world markets guaranteed higher prices for. Not complying with these standards was indeed a disastrous way to compete internationally. Additionally, although government support was marginal, its initial schemes for imported seed of superior variety for the export of cotton proved counterproductive.

In relation to the anomaly of cultivation criteria, an important issue was the question of whether the cotton tree should be (in the NAC region) perennial or annual. This is certainly a significant item within the overall difficulties encountered when staples are studied by considering their technological production function. Perennial cotton had the best fibre and produced harvests as long as the tree lasted but produced low yields. Annual cotton was of an inferior quality, produced one harvest per year but high yields.

Cotton in the NAC region was indeed considered as perennial. Along the " Coast ... the perennial kind is grown, which lasts three or four years, gives one crop per

year, or two where the rainfall is propitious ^{"62}. The international cotton mission to Colombia " found some excellent cotton ... in the department of Atlantico [with] nothing but perennial cotton ... grown ... almost all ... very strong. ^{"63}. The perennial plant would " grow for an indefinite number of years, subject to diseases and old age ^{"64}.

This was attributable to " its natural characteristics and to the absence of frost in the country ^{"65}. Perennial cotton in the NAC region had " certain advantages in districts where labour is scarce and dear or where the ground is hilly and difficult to cultivate, but the fact that tree cottons encourage insect pests, providing good hiding-places for them, and that careful picking is difficult, should be sufficient reason for cultivating in preference the annual cotton wherever the conditions permit it ^{"66}.

In the first year of growth the perennial plant was " similar to the American variety in respect to its main stem and branches, and attained a height of about four or five feet. The leaves [fell] off annually, due to the dryness of the season. In succeeding years, if left to nature, the plant form[ed] a dense bush, increasing in height and in girth but never forming a tree insofar as the main stem [did] not materially thicken annually ^{"67}.

The height could reach " fifteen feet and the bush attains a diameter of two to three yards. Under cultivation the plant is pruned back after the picking season to within nine or twelve inches of the ground, and although during succeeding years the bush will increase in height and in girth, these will seldom exceed ten feet and four feet respectively ^{"68}.

Cultivation of cotton essentially showed a consistent trend of primitive cultivation techniques which also became a characteristic part of the NAC region's cotton production function. According to Don Pedro Obregon, " the way cotton was harvested was shameful ^{"69}. As British Acting Vice-Consul McDougall indicated, cotton was being " collected by men on donkeys and mules and brought to the

outskirts of the cities, where runners meet the cargoes and bargain for their masters in the stores ^{"70}. Planting techniques were equally inadequate. British Vice-Consul Gillies argued in 1904 that despite soil fertility " no serious attempt has been made to cultivate it properly; the seed is simply thrown on the ground in anything but a systematic manner and the soil is so fertile that a good crop is invariably assured ^{"71}.

Cotton growers did not take much " care about the preliminary soil preparations before sowing the seed; they are content with just a light cleaning of the land before sowing ^{"72}. Planting took place during the " first few days of the rainfall months, usually about April, and the plant grows and reaches its normal size with very little attention until the gathering of the crop ten months after ^{"73}. Although it was " much better to plant the cotton again after the crop was collected, when the old plants should be rooted up and burnt, the growers in Colombia prefer to keep up the same plantation for several consecutive years ^{"74}. Only until 1926 was it reported that " annual replanting takes place in Colombia ^{"75}.

By 1925 Thomson was stating that primitive cultivation techniques were still used: " at present it is planted without any real preparation of the soil, and weeds are chopped out with the 'machete' ^{"76}. But cotton cultivation in the interior (Bogota area) was in even a worse state. Despite the suitability of its soil cultivation was " undertaken in a very insignificant way, the soil is decidedly suitable for it, the cotton plant growing wild in the interior ^{"77}.

Faulty techniques brought adverse opinions, such as that of United States Agent Pepper. He believed that cotton was "... one of those crops which is in its infancy ^{"78}. He insisted that only " until quite recently nothing like systematic and scientific cultivation has been attempted ^{"79}. Bell further voiced a critical opinion suggesting that cultivation techniques were really not ideal: " although a considerable area has been planted from time to time, little progress has been made in real cultivation of this important crop. At present, the cotton is planted without any previous preparation of the soil, with the exception of the cutting

down and burning of the bush. Weeds are chopped out with machetes. During the first three years corn is planted between the rows of cotton plants ^{"80}.

Some cultivation techniques were adequate and suggest aspects clearly related to the nature of the NAC region's cotton production function. One was the method of pruning by cutting and burning, whereby a perennial plant was transformed into an annual one. Once perennial cotton was sowed, it lasted for "many years without need of resowing; but as after the gathering of the cotton the tree is generally cut and burned, this being equal to a complete pruning, it can be thereby considered as annual, the whole of the new grown tree being only one year old"⁸¹.

Experience in the region apparently showed some advantages were obtained by it. Trees grew only to a "limited height, permitting the easy gathering of the cotton; the length of the fibres increases and some become more delicate and fine and as branches are far more numerous the harvest is much more abundant than when the tree is left untouched"⁸². This was counterproductive. Trees of "perennial cotton [were up to] 20 ft. in length ^{"83} which was " too long ... [and] should be pruned at the moment when the first flower buds appear [in order to obtain a larger quantity of bolls and make it easier for the pickers to collect the cotton ^{"84}.

This affected cleanliness and hindered the final product for export. At the turn of the century picking techniques were going in the right direction with the NAC region's cotton presented forlorn of foreign substances⁸⁵. But eventually picking deteriorated and did not become an accomplished technique. The International Cotton Bulletin, for example sustained in 1926 that the " most primitive methods of picking exist"⁸⁶. Pearse also noted that " in many plantations ... picking was too long delayed, with the result that much cotton had fallen to the ground, to be left there for good or to be gathered with sand and other impurities ^{"87}. The same Bulletin also confirmed that "branches in most cases are cut off and allowed to remain on the sandy soil for a week before the cotton is picked"⁸⁸.

Picking was careless⁸⁹. Pearse indicated that, " not even in India is this work so carelessly done as in the Departament Atlantico, on the coast of Colombia "⁹⁰. Men would cut trees down " before picking time, leaving only a small piece of bark connecting the branches with the trunk " ⁹¹. They would then be left in that manner " from a week to a month before the cotton was collected " ⁹². The " bolls that had not opened at the time of cutting the branches burst open very soon owing to the absence of sap, and thus a large quantity of soft unripe fibre is produced which is collected with ripe and over-ripe fibres "⁹³.

The cotton capsules would then contain " nothing but weak or even dead fibres ... mixed amongst those of the ripe cotton, whose value is a most serious loss to the owners of the farms "⁹⁴. The ordeal of watching how " cotton falls on the ground and how much of it is permanently lost "⁹⁵, led Pearse to state this was a " real shame ... indeed a sacrilege. The Lord gives you the natural wealth, the cotton grows during seven months, and after all about one-fifth of the crop is lost for want of application "⁹⁶.

The lack of concern for picking techniques (which brought in more cotton pods and less fibre per weight) was therefore a problem except in some cases when fibre amounts were high. Both the United States Monthly Bulletin and the British Board of Trade claimed in 1905 that " taking a general average, every 100 pounds gathered contains 60 parts pod and 40 cotton fibre. In some cases, the proportion of cotton fibre amounts to as high as 55 % "⁹⁷.

Another serious cultivation fault was fraudulent trading practices. For example, " stones, water, etc., [were] often placed in the bales for the fraudulent purpose of increasing weight "⁹⁸. The practice was heavily criticised by Pearse during his visit to the NAC region. He recommended the severe punishment of " the frauds which are actually being perpetrated by placing inside the bales stones or other heavy materials, or by watering the cotton with the same object in view of increasing its weight. These kinds of frauds we have personally witnessed in our visits to some ginning factories on the Coast. In order that such frauds may be

easily discovered the owners of ginning factories should require for the exercise of their work a licence, and if they omit to notify such frauds or commit them themselves their licence should be withdrawn ^{"99}. This was bound to affect exports.

There was no classification of cotton. An initial serious mistake became a chain of many in relation to international markets. Cotton buyers did not " make any difference in price for quality [with] all cottons regarded alike ^{"100}. It did not " matter ... whether it is clean or dirty ^{"101}. One reason was that " whilst cotton cultivation can be carried on very little primary outlay ^{"102} by the small farmer, speculation hindered the industry. In the department of Atlantico alone there were " about 500 speculative buyers for a small crop of about 450,000 arrobas of 25 lbs. each ^{"103}.

There was no price differentiation for the cultivator whatsoever. No premiums were paid to the cultivator who tended his cotton well and picked it clean, obtaining the same price as that one " who does not bother about his field and delivers a ... dirty lot of cotton ^{"104}. No penalties were imposed on those cultivators who delivered unclean cotton¹⁰⁵. The result was that " neither the gins nor the opening machines in the cotton mill can get rid of these foreign substances [and] is the reason why all Colombian cloths show a large quantity of black and brown spots ^{"106}. As Pearse pointed out, " such cotton cannot effectually compete with the growth from other countries ^{"107}.

Some of the NAC region's cotton however, met high cleanliness standards. According to the International Cotton Bulletin, " it is on the Atlantic coast, on the Guajira, where the best staple and grade are produced; the seed cotton is being delivered to the ginneries absolutely free from trash ^{"108}. The Pan American Bulletin confirmed that " on the Goajira, where the best type of cotton is produced ... the bolls being delivered to the ginner absolutely free from trash, ginning well and supplying a more regular staple ^{"109}. Defects in the fibre such as the fact that the " staple does not run even and the cotton is trashy and gin cut ^{"110} did

not help. Despite the cotton being "trashy, nippy and badly ginned" defects were expected to be overcome because the cotton was "strong, silky and of good ginning quality"¹¹¹.

These deficiencies in cultivation techniques were reflected in the final stages of raw cotton cultivation for export purposes such as picking and ginning. A technique like picking for example, would entirely devalue the final product. As MacGregor pointed out in 1895, with "carelessness in picking, [cotton] becomes impregnated with sand and dry leaves ... the small particles of foreign substances are quite visible"¹¹². Mills could not do away with foreign substances that impregnated the manufactured drill. This, of course, greatly diminished its value, ginned cotton reflecting poor quality.

Likewise, a technique such as ginning, despite achieving some progress at the turn of the century showed poorly throughout the years. As British Acting Vice-Consul McDougall suggested in 1901, cotton was now "carefully cleaned by machinery, prepared and packed in pressed bales in one of the two establishments existing in this city [Barranquilla]."¹¹³. By 1904 quality seems to have improved. Gillies pointed out that new ginners were "turning out much clearer cotton than the old gins"¹¹⁴. He also indicated that "two new establishments (in Barranquilla) for ginning and packing cotton have recently been erected here"¹¹⁵.

By 1907 however, Pepper indicated that "the ginning [was] very poor"¹¹⁶. There were only "five gins in this city (Barranquilla) all American ... that ... were discarded ones in the States dumped over here"¹¹⁷. Likewise, there was only "one cotton mill, a small one, in this consular district (Barranquilla), the underwear factory of A., A., Aycardi and Company of this city"¹¹⁸. The mill's total equipment consisted of "one spinning machine, 15 looms and thirty sewing machines"¹¹⁹. Employment creation was reasonable and production seems to have been stimulated. Some "forty girls [were] employed and production [was] 36 dozen undervests per day"¹²⁰.

Poor ginning seems to have continued, probably making ginned cotton even less competitive for export. In 1908, unginned cotton (produced principally in the department of Bolivar) was paid by factories at a price of " 2 and a half to 4 cents per pound delivered "¹²¹. This made the " cost about 12 cents American gold per pound for the ginned cotton "¹²². The weak competitiveness of poorly ginned cotton continued apparently until the end of the second decade of this century.

According to Wakefield (manager of a cotton mill in Colombia) cotton fibre was exported " in small quantities to America and to Germany but the dirty and badly ginned material has found no important market "¹²³. But this was " greatly improved since 1918-1919 and if roller gins were introduced to take the place of saw gins the improvement would be more pronounced, in a more even staple and a cleaner production "¹²⁴.

Despite the aforementioned factors, constraints and deficiencies cotton cultivation in the NAC showed one major relevance: it was the major source of supply of raw material in the country. Provided the necessary improvements in the cultivation of the fibre, output (being the region's asset) could very well be expanded and therefore consolidate an important export sector. Indeed, it was both NAC region departments of Magdalena and Bolivar that were recognised as the geographical areas of relevant cotton production. British Vice-Consul Gillies, for example, pointed out in 1904 that it was in this region where " the production of cotton is practically limited to "¹²⁵.

There were no statistics on cotton acreage sown, but in 1905, it was reported that just for the departments of Magdalena and Bolivar [NAC region], it was estimated that there were " about 3,000,000 acres adapted to raising cotton "¹²⁶. But estimates for later years proved that although the potential for adaptation was extensive, reality proved different.

For years 1909-10 as well as for 1913-14 for example, estimates for the area of

cotton cultivation in Colombia were of an " average [of] ... 11,416 [acres] "¹²⁷. It was reported in 1915, that " the areas under cultivation [were] 11,240 acres "¹²⁸. However, British Consul Sullivan recorded that the " total area under cultivation [was] of 45,000 hectares "¹²⁹.

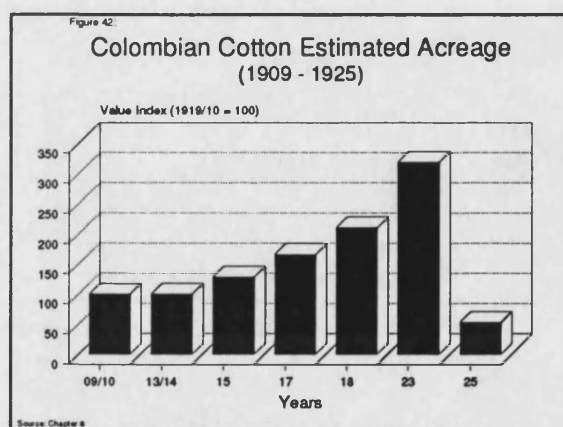
For year 1917 and 1918 they were " 19,000 [and] 24,000 acres "¹³⁰ respectively. Sullivan equally reported that there were " some 90,000 hectares " in 1923¹³¹. And a Kemmerer Papers' report (circa 1925) alleged that " there are approximately 15,000 hectares of cultivated cotton land in Colombia "¹³². Table 32 below shows the relative change of these estimates. They indicate an upsurge in increase up to the beginning of the 1920s only to plummet by the mid 1920s. Figure 42 shows the bar chart graph of which illustrate these estimates.

TABLE 32:
ESTIMATED COLOMBIAN COTTON ACREAGE

	<i>000's</i>	<i>Index #'s: 1909=100</i>
1909-10	11.4	100
1913-14	11.4	100
1915	14.7	128
1917	19.0	166
1918	24.0	210
1923	36.4	319
1925	6.1	53

Sources: This chapter's text; Notes: (i) 1 hectare = 2.471 acres; (ii) acreage values for years are 11.4, 11.4, 14.7, 19.0, 24.0, 36.4 & 6.1 thousand acres; (iii) year 1915 is an unweighted average of two sources with values being 11.2 & 18.2 thousand acres; values for years 1915, 1923 & 1925 are originally 45, 90 & 15 thousand hectares.

Despite the fact that acreage of cotton sown was not vast, peaked until the mid 1920s and then diminished, the NAC region was arguably the largest raw material supplier. Approximately " two-thirds of the entire production [was] obtained around Barranquilla and [was] sold in this city "¹³³. This 66% of national production in 1918 was the lower floor of NAC cotton production.



By 1924 it was widely accepted that the NAC region produced the greatest proportion of Colombian cotton. This is a view repeated in several contemporary journals such as *The International Cotton Bulletin*, *L'Avenir Textile*, *The Bulletin of the Pan American Union*, as well as by British Consul Sullivan and *The International Institute of Agriculture in Rome*. Thus, "seventy-five per cent of Colombia's cotton is grown on the Atlantic coast ... the whole of this district including the Departments of Atlantico, Magdalena and a portion of [the department of] Bolivar ..."¹³⁴.

Additionally, in 1925, both United States Consul Stafford and the *International Cotton Bulletin* informed that "these districts produce 90 % of the total Colombian crop"¹³⁵. The *Colombian Trade Review* in London claimed that production of department of Atlantico cotton for 1926 in the NAC had decreased (although this probably excluded the departments Guajira and Bolivar): "at present, the district near Barranquilla provides about 70 per cent of the cotton grown in Colombia"¹³⁶.

Finally, the *International Institute of Agriculture in Rome* disclosed that the districts of Cartagena and Barranquilla were "reported to produce about 90 per cent of the total crop"¹³⁷. By the thirties, the *International Cotton Bulletin* noted that "cotton production in the cotton district of northern Colombia is located in the Departments of Atlantico, Magdalena and Bolivar and the main centre for trade is Barranquilla. Not less than 75 % of the cotton grown in Colombia is raised in this district"¹³⁸.

For the limited acreage NAC region cotton accounted for, output was considerable. In 1905 British Vice-Consul Gillies observed that production was "very much below that of last year"¹³⁹. Two years later United States Consul Demers noted that "reports which I have from various growers show the last crop around Barranquilla to have been 4,310 bales of 140 pounds each with

10,168 sacks of cotton seed of 132 pounds each. This is an increase of more than 200 % over the crop of 1906 "¹⁴⁰. This led Demers to emphasise that " all of this means encouragement to the growers. This new impetus given to the natural resources of this country should also interest other manufacturers, as it will eventually mean more prosperity and a higher purchasing power, followed by more general demand "¹⁴¹.

The government made great efforts in 1907 to encourage developments in cotton cultivation throughout the country. Demers recorded that the encouragement was directed especially towards " the Atlantic Coast, where the soil is well adapted to that branch of agriculture "¹⁴². He added that the crop in 1907 " has been beyond expectation; everybody in the vicinity is now bent on growing cotton "¹⁴³. As Demers put it, central government had now " put its shoulder to the wheel by establishing an agronomical station ... for the purpose of experimentation on the different varieties of cotton "¹⁴⁴.

But, most crucial and important of all, a bounty " of \$ 1 gold, per quintal (110 pounds) [was] decreed on all native cotton ginned and baled for export until October 1st, 1910 "¹⁴⁵. This subsidy was at the time equivalent to " one third of the price which the farmers have been getting for their products "¹⁴⁶. To the farmers, this meant in 1907 a rise of " 33 % and cannot help giving the industry a tremendous boom "¹⁴⁷.

Planters who followed the advice of using freely distributed imported seeds were "amply rewarded by the high prices obtained for their raw material "¹⁴⁸. Cotton cultivation became larger and more widely extended than ever before. This, together with high prices, meant that " the increasing demand for the native product has encouraged others to engage in the industry "¹⁴⁹.

United States Special Agent Wilson noted in 1914 that production of long fibre cotton in the large NAC region cultivations was " probably being not more than 4,000 bales a year "¹⁵⁰ (about 1,912,000 lbs. per year). However, British Consul

Bowles indicated that raw cotton was produced " in small quantities throughout several departments, but ... it is probable, however, that the amounts ... consumed in the spinning mills, together with that exported from Barranquilla, represent in some measure the total production "¹⁵¹.

In 1915, the cotton " crops were estimated at 7,596,605 pounds of seed cotton ... [being] during that year comparatively small "¹⁵². British Consul Sullivan reported the crop to be " considered a poor one approximated to 3,446,000 kgs. "¹⁵³. The differences emerged due to different acreage figures provided by each source. But cotton production during the second half of the second decade consolidated itself. It was " the most important agricultural product of the Magdalena Valley near Barranquilla "¹⁵⁴.

It was estimated in 1917 at " 2,200,000 pounds and it [was] thought that [it] has increased since then "¹⁵⁵. There were no statistics on cotton crops, but estimates of crop returns returns for 1917 and 1918 were " 6,000 and 5,500 bales (1 bale = 500 pounds) "¹⁵⁶ respectively. During 1918, " the ginneries of Barranquilla, representing eight saw gins reported a receipt of 223,000 arrobas (12.5 kilos per arroba) equal to 1,847,175 lbs. of lint and 4,310,000 lbs. of seed "¹⁵⁷.

Production in 1919 was " 256,000 arrobas equal to 2,200,000 lbs. of lint and 4,928,000 lbs. of seed "¹⁵⁸. It was estimated that " from the increased planting in 1919 ... the production for 1920 [would] double "¹⁵⁹. Prices for 1919 were reported by the International High Commission as " high; ... total production [being] sold without trouble"¹⁶⁰. Colombian cotton was selling in Liverpool " for \$ 0.24 per pound "¹⁶¹. Local mills were " competing successfully with foreign mills and offer higher prices than in the United States, although the former have not improved the quantity or appearance of the cloth manufactured. However, the material is strong, wears well and is well-liked in the country "¹⁶².

Nevertheless, during 1920, due to " low prices ... many cotton growers have not replanted their area "¹⁶³. Despite offering higher prices than corresponding prices

in the United States, Trade Commissioner Bell indicated that cotton mills both in the NAC region (Barranquilla) and the interior (Medellin) were finding it " ... impossible to obtain a sufficient supply of raw cotton and to obtain cotton that is clean for ginning "¹⁶⁴. Cotton mills both in the NAC region as well as in the interior were not able to meet demand by this time. This occurred although " they ... offered all sorts of inducements to planters to grow it "¹⁶⁵.

A reason for this deficit in production was the nature of the product itself. Output diminished because the cotton plants began to " produce cotton from 7 to 12 months after sowing depending on the temperature "¹⁶⁶. The tree was " sown in April or August, according to rains and local conditions; ... picking [took] place during the months of March and April. An average cotton plant [would therefore have] a life of six to seven years ... after [which] date the plant [was] rooted up and new seeds sown "¹⁶⁷. Furthermore, replanting was not thought necessary.

Indeed, both United States Trade Commissioner Bell¹⁶⁸ in 1921 and Thomson, of the Royal Society¹⁶⁹, in 1925 agreed with the proposition that replanting was not necessary for five years. Bell suggested however, that small efforts in production techniques later resulted in some increase in output contradicted his foregoing view that even high prices were not solving production deficits.

In effect, in 1921 " one thousand pounds per hectare [were] produced the first year, 2,000 the second, and an equal amount the third "¹⁷⁰. As a start was made with the introduction of " irrigation and tractors "¹⁷¹, the 1924-1925 crop of " the Cartagena and Barranquilla districts was estimated at about 3,585 thousand pounds, as compared with 1,836 thousand pounds in 1923-1924 "¹⁷².

Production in 1915 was comparatively small. During the period from 1915 up to 1923, it was significant. Both the International Institute of Agriculture in Rome and the the International Cotton Bulletin, as well as the Pan American Bulletin in 1924, agreed that the " area under cultivation has more than doubled, the demand having increased rapidly with the erection of new factories. Today,

the production may be well estimated over 16,000,000 lbs. "¹⁷³.

British Vice-Consul Lee also estimated in 1924 that the total cotton production in the NAC region (departments of Atlantico & Magdalena) did not exceed "250,000 arrobas this year, it being calculated that there are approximately 8,500 hectares under cultivation"¹⁷⁴. The following year, United States Consul Stafford reported that the 1924-25 crop of the "Cartagena and Barranquilla districts of Colombia was estimated at the height of the picking season to be about 7,500 bales of 478 lbs. compared with 3,840 bales for the same districts last year"¹⁷⁵.

The NAC region continued to be the main raw material supplier well into the early and mid-Thirties. In 1930, the International Cotton Bulletin claimed that "the cotton crop ... for the Barranquilla district is estimated at 8,750,000 pounds of seed cotton, according to local growers of which 1/3 went to local mills, the rest being shipped to mills in the other districts of Colombia "¹⁷⁶. And in 1931 it claimed that "the cotton crop in the coastal section of Barranquilla consular district was harvested in February, and was reported to be about 750 metric tons (one metric ton equals about 4.6 bales of 478 lbs.) of ginned cotton. The crop [was] considered very poor "¹⁷⁷.

Production "reached 2,060 metric tons of 2,205 lbs. each"¹⁷⁸, in 1932 and was estimated "at 1,280 tons"¹⁷⁹ in 1933 and "at about 1,200 tons"¹⁸⁰ in 1934 according to the International Cotton Bulletin. However production was placed "at 1,600 metric tons"¹⁸¹ by one of the principal cotton consumers. The small crop was "ascribed to the severe winter"¹⁸². For 1935, it was reported that the "departments of Atlantico, Magdalena and Bolivar [NAC region] produced 1,200 tons. Consumption was approximately 3,000 tons in excess of production"¹⁸³.

A larger degree of the evidence shown above represents national aggregates. Regional disaggregation of production for the NAC region is difficult to estimate. However, as we saw earlier in this chapter there are some significant indications of approximate percentages that can attributed to the NAC region's production

estimates. These have been applied in calculations which appear in **Appendix** . Discontinuities that may appear in it may be a result of inaccuracies in the unearthed evidence despite the reliability of British and United States sources.

Table 33 below shows index numbers for the region's production. **Figure 43** shows the bar chart graph which illustrates the data.

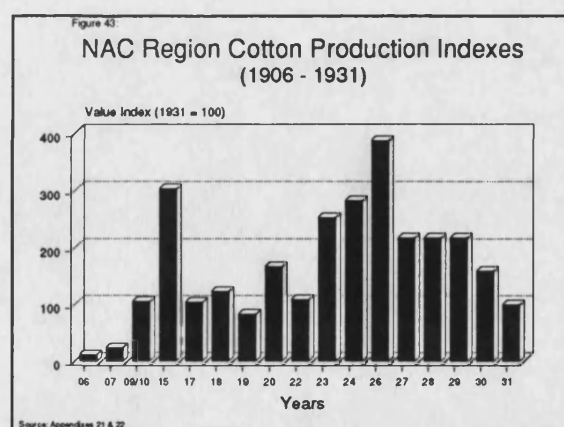
TABLE 33:
NAC REGION COTTON PRODUCTION INDEXES
1906 - 1931

<i>year</i>	<i>Index (1931=100)</i>
1906	12
1907	24
1909/10	105
1915	303
1917	104
1918	123
1919	83
1920	167
1922	109
1923	253
1924	282
1926	387
1927	217
1928	217
1929	217
1930	159
1931	100

Source: Appendix 21 & 22

The index numbers of production estimates show that despite obstacles and perhaps insignificant production figures (if compared internationally) cotton relatively grew in a sustained manner from very little output indeed in the early years of the century to its peak in the mid 1920s -particularly

1926. Thereafter, although declining, output was maintaining at least higher levels



through to the end of the twenties than through the second decade of the century (with the exception of 1915). More important, raw cotton, despite deficiencies in cultivation criteria and techniques as well as reduced acreage, was therefore not only available but supplied in its largest quantities by the NAC region.

Figures for the fibre's yields however, performed better. United States Special Agent Wilson noted that yields of large plantations in the NAC region were of an " average of about 333 lbs. of lint per acre "¹⁸⁴, or 151.5 kgrs. per acre. According to 1915 production and acreage figures provided by British Consul Sullivan¹⁸⁵ (and mentioned earlier here), yields were of 76.6 kgrs. per hectare (or 30.9 kgrs. per acre). In 1920 it was estimated that the " average yield per acre [was] 240 pounds of cotton lint "¹⁸⁶, e.g., 109.1 kgrs. per acre.

The practice by 1922 was that " an average of only 3,000 or 4,000 plants to the acre [would] be planted, the rows between [still] being utilised for other crops "¹⁸⁷. Yields per acre varied " with the season, the district or the soil and with successive years growth "¹⁸⁸, in the delta of the Magdalena (river) crops had yielded " the first year after sowing, 100 lbs., second year 135 lbs., third year 200 lbs. of lint cotton per acre "¹⁸⁹, or, 45.5, 61.4 and 90.9 kgrs. per acre. In a good season these " weights would be considerably increased and it is estimated that 300 lbs. of lint per acre could be obtained in the third year "¹⁹⁰. That is, 136.4 kgrs. per acre.

British Consul Sullivan reported in 1923 that in Colombia " the estimated yield had risen to 7,300,000 kgs. derived from some 90,000 hectares "¹⁹¹. This was more or less an annual estimated yield of 81 kgs. per hectare or 32.8 kgrs. per acre. The International Institute of Agriculture in Rome on the other hand, maintained that in 1924, " the average yield of seed cotton per acre is about 700 pounds, which is equivalent to about 210 pounds of lint "¹⁹² or 95.5 kgrs. per acre.

Lee¹⁹³ however, reported yields in 1924 which were 29.4 arrobas per hectare (810.2 lbs. per hectare), roughly 149 kgrs. per acre¹⁹⁴. Lee added that the potential was twice as high: " production of 60 to 70 arrobas per hectare can

readily be produced with irrigation "¹⁹⁵. Nevertheless, the International Cotton Bulletin reported that for 1924 " the average yield of cotton per hectare is 750 kilos "¹⁹⁶ or 303.5 kgrs. per acre.

However, for the same year Vice-Consul Lee estimated that approximate yield for ginned cotton was of 44.1 kgrs. per acre. Indeed, he indicated that there were " approximately 1,500 trees of seed cotton per hectare and the average production per tree is 1/2 lb., which gives 30 arrobas per hectare of seed cotton or 240 lbs. of ginned cotton. This latter figure is approximate only as figures as low as 14 arrobas and as high as 65 arrobas per hectare are recorded, all depending on the amount of rain between the months of April and October "¹⁹⁷.

A Kemmerer Papers' report (circa 1925) alleged that " up to 10,000 cotton plants can be grown on a hectare of ground. The average production is figured at 750 kilos per hectare. Sixteen plants produce approximately one kilo of clean fibre "¹⁹⁸, that is, a yield of 303.5 kgrs. per acre. But in general, it was estimated in the mid 1920s that yields were about 262.8 kgrs. per acre, computed on the following basis: " a pound of cleaned cotton [was] at the rate of 1 lb to each seven trees; the total production from an hectare (10,000 trees) [being] 1,428 lbs. ; the estimate [would] vary considerably according to localities and circumstances "¹⁹⁹.

Finally, it was recorded for 1926 that yields were " about 250 lbs. per acre "²⁰⁰ or about 113.6 kgrs. per acre. Table 34 below shows index numbers which provide some indication of the yearly relative change in yields, showing peaks at the beginning and through the mid 1920s. Figure 44 shows the bar chart graph illustrating the data. Yields were " higher than other countries where scientific cultivation has been adopted "²⁰¹.

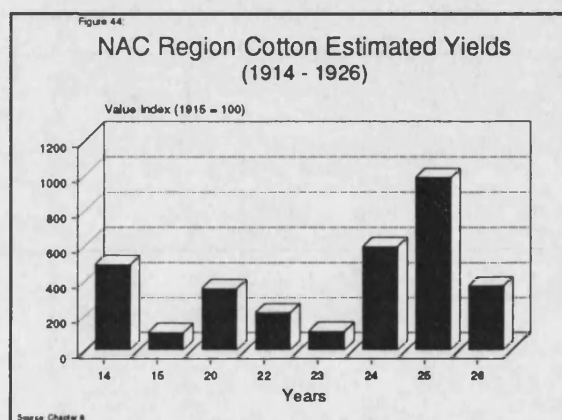
It would be expected that albeit good yields, reduced acreage accompanied by staggering output would result in relative loss for cotton suppliers. Especially in light of high cultivation costs (other than wages). They were certainly higher in the NAC region than in the United States. Graham-Clarke estimated that it was

TABLE 34:
ESTIMATED COTTON YIELDS PER ACRE
(000'S KGRS.)

<i>year</i>	<i>amount</i>	<i>Index Nos. (1915 = 100)</i>
1914	151.5	490
1915	30.9	100
1920	109.1	353
1922	65.9	213
1923	32.8	106
1924	182.7	591
1925	303.5	982
1926	113.6	368

Source: Chapter 8; Notes: (i) 1922 value is unweighted arithmetic mean of 45.5, 61.4 & 90.9; (ii) 1924 value is unweighted arithmetic mean of 95.5, 149 and 303.5

" under the present methods ... higher than it would be in Mississippi "²⁰². Both Peck and a Kemmerer Papers report indicated that there was " an expense per hectare of \$ 50 "²⁰³ or \$ 20.23 per acre. Wakefield confirms this when he calculated that " cultivating will cost per year about 20 dollars 65 cents per acre "²⁰⁴.



But this amount " also covered the cultivating of the yucca and Indian corn grown on the same ground side by side with the cotton "²⁰⁵. Two years later, with the inclusion of (apparently) ginning and transport costs, in 1924, the cost of cultivation was estimated by the International Cotton Bulletin²⁰⁶ to be about \$ 167.50 per acre. This included ploughing an acre at \$ 15.00, nine pounds of seed costing \$ 0.50, thirty two working days of cultivation worth \$ 32.00, seventy working days gathering crop worth \$ 70.00, and pressing and baling, cleaning, removing wool and freight to next market costing \$ 50.00.

By 1926, Pearse informed that in the interior's department of Cauca " one of the large farmers showed us his calculations of the cost of raising his cotton from which we convinced ourselves that over the last two years it had been below 5d. per pound on the plantation "²⁰⁷. This was roughly under \$ 25 per acre (cheap

by NAC region standards).

Yet, paradoxically, it seems cotton cultivation in the region was relatively profitable at least in the mid 1920s. The Kemmerer Papers' report advised that " returns are sometimes as high as \$ 300.00 to the hectare, on the basis of 25 cents per pound for ginned cotton "²⁰⁸. Peck confirmed this ascertaining that they " may be \$ 300 "²⁰⁹. The Kemmerer report added that " cotton ... is usually sown in conjunction with corn and tobacco. The returns from the latter two take care of the cost of growing, so that the cotton is really all profit "²¹⁰.

The indication is therefore that cotton was all profit, at least at \$ 101.18 to the acre²¹¹. This seems to have been the case as indeed, in 1926, the Colombian Trade Review informed that " the Society of Agriculturists reports that, in accordance with data obtained from different parts of the country, the profit per acre obtained by the small planter is between \$ 50 and \$ 100 per annum "²¹². This mid 1920s profit certainly coincides with peak output figures for the same years seen earlier in Table 30.

It would probably be unwise however, to ascertain any direct relationship between one variable and the other. By 1934, although profit figures were not available, cotton cultivators were being paid import prices. Indeed, according to the International Cotton Bulletin, " local manufacturers have decided to pay growers the equivalent of the cost of imported American cotton -that is, c.i.f. cost plus custom charges "²¹³.

Whatever profitability there was for cotton cultivators originated in production for domestic consumption rather than for export. The crucial reason that emerged for this was the 'variety' or quality of the product. International cotton standards imply a complex set of measures. But, in general those approved by the United States Department of Agriculture, the Liverpool Cotton Association, the Manchester Cotton Association, the Syndical du Commerce des Cotons du Havre and the English Federation of Master Cotton Spinners Associations in the 1920s were straightforward.

Mature cotton fibre displayed the all important characteristic of a peculiar torsion which seemed to be an acquired property. It was not present in wild cotton but increased with careful cultivation techniques. The number of windings or turnings was very variable and in general and approximate terms, inversely proportional to the fibre's diameter²¹⁴.

First, cotton was classified in the international market according to length. According to Clark, the " price of cotton increased with the fibre length, and though yarn of a given fineness could be produced with cottons of various fibre lengths, the yarn was weaker if cheaper cotton was used "²¹⁵. Lengths were classified as long (fibre length over 1.34 in.) medium (fibre length between 1.10 and 1.34 in.) and short (fibre length between 0.87 and 1.10 in.) staples²¹⁶.

Second, cotton was classified according to quality. Each of the classes of fibre lengths was subdivided into standards, according to mayor or minor grades of product cleanliness such as: Type 1 (Superior), Type 3 (Good), Type 5 (Medium), Type 7 (Regular) and Type 9 (Inferior)²¹⁷.

The principal long staple cotton varieties were the Sea Island, the different Egyptian classes and the upgraded American Upland classes. The main medium staples were the ordinary classes of American Upland, while the acknowledged short staple was represented by the cotton varieties from India²¹⁸.

Sea Island cotton, embodying the greatest torsion, was the finest cotton variety and used by the textile industry for the spinning of the finest and best threads. American Upland was mainly utilised by the Lancashire textile industry for the production of medium quality threads. For its conditions, Egyptian cottons were preferable for the manufacture of first quality cloth which had to show a soft and shinny finish. Indian cottons were, in their greater part short and coarse²¹⁹.

In the last quarter of the 19th century, it seems the quality of cotton in the NAC region was not acceptable. In 1875 for example, British sources revealed that the " quality produced is gradually falling off "²²⁰. But this was due to the fact that for " several years no fresh lands have been put into cultivation "²²¹

However, in a specific area of the NAC region (the Goajira department) the finer cotton was produced which was similar to Sea Island cotton. In 1895, according to MacGregor, cotton there was " of good quality resembling the Egyptian cotton. In fact, the original seed introduced here in the early sixties was Egyptian "²²². Indeed, it was on the Goajira " where the best type of cotton is produced, both for staple and grade "²²³.

The longest staples of Colombian cotton would " pull 1 1/4 to 1 5/16 inches and the lowest sample will not come short of 1 1/16 to 1 1/8 inches "²²⁴. Therefore, Guajira (in the NAC region) cotton pulled and felt " similar to Sea Island cotton; it is clean, creamy, soft and lustrous "²²⁵.

Next in quality to the Goajira cotton, was the " staple grown on the delta at the mouth of the Magdalena, especially in the vicinity of Remolino [department of Atlantico, NAC region]. This [was] shorter in staple, 1 3/16 to 1 1/4 inches and somewhat harsher, but it is a good and regular cotton "²²⁶.

In fact, the quality of the region's fibre appears to have been acknowledged as an established one, positively competing (price-wise) above the well appraised Sea Island cotton in 1905. This presumably encouraged the maintenance of acceptable quality. United States Consular Agent Granger stated that " in the departments of Magdalena and Bolivar [NAC region], cotton-growing is an established industry and is being rapidly extended ... cotton whose staple is so long as to bring higher prices in Manchester, when picked clean, than the Sea-Island cotton "²²⁷.

Additionally, United States Special Agent Wilson noted " some cotton of long fibre is raised in scattered patches, the total probably being not more than 4,000 bales a year ... large plantations lie along the Magdalena river between Barranquilla and Calamar [NAC region] and produce on average of about 333 lbs. of lint per acre "²²⁸. In fact, United States Special Agent Graham-Clarke described the fibre in these areas as " a long-staple cotton 1 and 1/4 to 1 and 3/8 inches "²²⁹.

Such was the acceptability of the quality that in 1910 English entrepreneurs were attracted by the promising possibilities of the region's fibre. They were equally

interested in the experiments that had proved that the department of Bolivar could produce an exceptional grade of cotton quite similar to the South Sea Island cotton. They therefore planned to invest in the area. US Consul Haseltine reported that " about five years ago, a Liverpool group of cotton dealers obtained options in vast tracts of suitable cotton land in this department. Natural conditions seemed favourable to the project ... "230.

The quality of the region's cotton also attracted Germans. In 1913, for example, they reported that " a characteristic of Colombian cotton is its relatively long staple, which is similar to Egyptian cotton. Along the Coast, where most of the cotton will apparently be planted, this variety is generally known by the name of the 'Sabanilla' cotton; it is also frequently referred to as 'Semilla negra'. It is very usual along the Coast to bend over the stock some 1 to 2 feet above the soil about a fortnight to a month before the harvest, so that the plant leans over and yet draws sufficient sap ... "231.

Therefore, in general, it seems clear that quality of NAC region raw cotton was of reasonably acceptable standards. This, of course, was not enough. Cleanliness standards were as equal basis of judgement as quality by international markets. As we saw earlier in the chapter, deficient cultivation techniques such as picking, resulted in unacceptable levels of cleanliness.

However, a more catastrophic blow to acceptability of the region's cotton internationally was the deficient cultivation criteria of mixing varieties to the extent of practically making the region's only asset (given low cleanliness standards) of very acceptable medium to long staples, largely irrelevant.

Cotton grown in most of the country was of the 'Pajarito' variety. It was the " only type of short fibre in Colombia [growing] spontaneously in all warm zones, producing abundant crops almost permanently since it flowers continuously [and] has great resistance "232. It withstood the " heat as well as diseases and insects. Its fibre [was] smooth and brilliant, of a white colour, and generally well accepted in the spinning factories "233. Thus, cotton output " varied greatly in the length of the fibre owing to the varying conditions under which it [was] grown "234.

Pearse complained he found " unfortunately, in every field in Colombia, along with 1 inch and 1 1/8 in. cotton fibres of 3/4 in. and consequently the value of the whole lot is less than what it would be if all the fibres were short, but of uniform length "²³⁵. It did not " matter what grade or what length of fibre ... nor whether it [was] ... mixed with other kinds or not "²³⁶. The cultivator who delivered an unmixed lot of cotton was paid the same price as that who delivered a mixed one²³⁷. As Graham-Clarke indicated, " besides the regular cotton the mill mixes in some wild-tree cotton of about the same staple "²³⁸. This defective quality of the staple resulted in a " lumpy and irregular "²³⁹ yarn.

Upon his return to Manchester, Pearse strongly believed that mixing had to be dealt with if better export possibilities were to be envisioned. He stated: " we have great pleasure in stating without flattery of any kind that we have been surprised to find ... some varieties of cotton very much superior to those produced generally in the United States, but unfortunately, those fine qualities are mixed with inferior ones "²⁴⁰.

Therefore the first need was to " select the fine kinds and to eliminate the inferior ones "²⁴¹. To prove what he said about the value of the superior qualities of Colombian cotton, Pearse suggested it was enough to mention that he had " estimated on the basis of American middling the following premium for the best cottons: ... Remolino [department of Atlantico in the NAC region] ... 5d. = 10 c. per/lb. on American middling "²⁴².

British Consul Garnett and Pearse's opinion was that " if the the inter-mixture of short and long staple cotton were prevented so that the majority of the crop, which is long staple, could be sold abroad at the price it should demand, namely 2d. or 3d. a lb. more than 'middling American 7/8 ' "²⁴³. Pearse went further contending that some staples gained even more premiums than this one²⁴⁴.

Therefore, despite the good quality of the cotton, intermixture was diminishing its value. The International Cotton Bulletin noted that " in the Atlantico Department the Mission has found some excellent cotton, unfortunately very mixed ... "²⁴⁵. The established mixing of cotton varieties led Pearse to declare for

example, that, after his mission to Colombia, he had " made it quite clear that if Colombia wishes to embark on the exportation of cotton, she must cease cultivating a cotton conglomeration and must confine herself to one variety for each zone "²⁴⁶.

Unmixed NAC region cotton such as that from Remolino had the potential to compete adequately. However, when subjected to deficient cultivation criteria and techniques as well as lack of fixation of cotton varieties, quality suffered. As United States Consular Agent Granger indicated, the mixed cotton produced was therefore " not of the best quality ... it is not thoroughly cleaned and consequently secures a lower price in the European market "²⁴⁷. Furthermore, Pearse indicated that " probably the cotton mills of Colombia, which are the only buyers of these cottons, are paying more for them [intermixed varieties] than they would do for similar qualities in the world's markets "²⁴⁸.

Cotton varieties were directly linked to the type of seed planted. This leads us to a major consideration of the wisdom of government subsidy for imported seed. Initially, in 1907 it was reported that large quantities of seed were imported from Peru and being distributed free throughout the country to " whomsoever will plant them "²⁴⁹. By 1909 seeds were being furnished " gratis to agriculturists, the latter having been urged to engage to a greater or lesser extent in the raising of cotton for consumption in the home market "²⁵⁰.

Cultivators were mistaken regarding the question of seed. Pearse commented that " [when] every cultivator began cotton growing desired to obtain the longest fibre. He dreams of Sea Island, Egyptian or Peruvian cotton "²⁵¹. This was a " serious error, because the plants which produce such long fibres generally require one or two months' more time before they mature the bolls than the somewhat shorter cottons, and therefore they are exposed for a longer period to the vicissitudes of the weather and to insect pests "²⁵². Nevertheless, government supported vast imports of American seed (probably upgraded American Upland) from the " Mississippi .. the fibre of this cotton [resembling] that of the Sea-Island, often measuring from 1 1/2 to 1 3/8 inches in length "²⁵³.

This produced two important paradoxical results. First, high quality seed yielding superior fibre was being imported which, whilst at the same time being " too fine for local mills "²⁵⁴, was diminished internationally in use value due to mixing. Therefore, the export potential was seriously affected. Second, as low domestic purchasing power in domestic markets demanded coarse drills, the NAC region's cotton cultivation based on imported American seed was the wrong input (high quality seed yielding superior type cotton) for the type of product (coarse drills) demanded. Demand was for low, not high quality cloth. As United States Commissioner Bell put it, the region's cotton was " very fine and of long staple and for this reason is not well liked by native spinners, since they manufacture only rough and cheap grades of cloth "²⁵⁵.

Pearse emphasised that it had to be considered that domestically, there was an " easy market for 28 mm. [1.10 in.] cotton, which is more or less predominant in your country, whilst there are only very few mills in the world which can use the long cotton of the Sea Island type "²⁵⁶. Domestic cotton was " bread-and-butter cotton, which will always find a ready sale, provided it is grown without a mixture of the very short staples "²⁵⁷. As Wakefield claimed in 1922, domestic cotton was " easy to spin, produces a much stronger yarn than uplands American and if picked clean the waste in opening and carding is less than usual in spinning middling inch staple American "²⁵⁸.

Native seed would have been much more appropriate for domestic consumption of domestically produced textiles. Indeed, it was the opinion of experts that " planters would do much better to plant the native varieties which are of long staple, of high tensile strength and much less subject to damage by insects "²⁵⁹.

Finally, there was a concerted view that the cotton's quality was far too excessive for domestic spinning. Wakefield for one, was of the opinion that " the cotton is too good for the spinning of 12's to 24's yarn "²⁶⁰. Pearse also said the " cotton of the country is too good for spinning such low counts as 12's "²⁶¹. And, British Consul Garrett indicated that " Colombian long staple cotton is too good for spinning such low counts as 12's "²⁶².

Wakefield further informed that the country's " spinner is at present using American cotton and it would appear that in view of the shortage of long staple cotton, the Colombian government could export the native cotton realising a higher price, and the Colombian spinner could use in its place American cotton more suitable for his present requirements "²⁶³.

According to Pearse it would " certainly pay the cotton mills of Colombia, that are importing now almost one-half of their requirements in raw cotton from United States to import the whole, once the country has settled down to the production of the better class cottons without intermixture of the short and coarse fibres "²⁶⁴. Then, as British Consul Garnett-Lomax confirmed later it would " pay the country as a whole to export almost the entire crop "²⁶⁵.

In don Pedro Obregon's view, in the NAC region " each cultivator planted whatever seed he fancied, precisely of different types "²⁶⁶. He added that although the " perennial type grew far too much affecting the picking of the fibre and its production decreased after five years, it released a very long (1 1/4 inch) and much better fibre "²⁶⁷ . However, don Pedro argued that " despite being perhaps wrong for export purposes, perennial gave the Fabrica de Textiles Obregon more efficiency "²⁶⁸. So, in the end, perennial cotton was wrong for export but right for domestic consumption of cloth.

The NAC region therefore showed that the results of an antiquated hacienda system, small-scale cotton cultivation and labour scarcity (which encouraged high wages) brought consequential deficiencies in cotton cultivation criteria. Despite limited acreage, cotton cultivation showed high yields. Albeit high production costs profits were high as well, due to upsurges in domestic consumption and consequent payment of import prices by the domestic, not the international market. Deficiencies in techniques and the lack of fixing types and varieties of cotton rendered a mixed fibre as a result. This turned out to be poor for export.

1.(i) *British Parliamentary Papers, Accounts and Papers*, Vol. LXXVI, (London, 1875), p. 1125; (ii) 1 Quintal = 220.46 lbs. as indicated in "Crop Prospects in Certain Countries", *The Board of Trade Journal*, Volume LXXXVI, September 10th, 1914, p.688.

2. Ibid.

3. St. John, A., "Report on the Trade of the United States of Colombia", British Foreign Office, *Diplomatic and Consular Reports on Trade and Finance*, Annual Series No. 53, (London, 1886), p.3; Wage rates in converted currencies at ruling average exchange rates for 1874 - 1914, e.g., US \$ 4.867 = 1. These were taken from Bidwell, R., C, *Currency Conversion Tables, A Hundred Years of Change*, (London, 1970), p.1.

4. MacGregor, E., "Report for the Year 1895 of the Trade of Colombia", British Foreign Office, *Diplomatic and Consular Reports*, Annual Series No. 1729, (London, 1896), p.9.

5. MacGregor, E., "Report for the Year 1897 for the Trade of Panama", British Foreign Office, *Diplomatic and Consular Reports*, Annual Series No. 2088, (London, 1898), p.18.

6. Gillies, J., British Vice-Consul, "Colombia. Report for the Year 1903 in the Trade, Commerce and Navigation of the Port of Barranquilla", British Foreign Office, *Diplomatic and Consular Reports*, Annual Series No. 3284, (London, 1904), p.4; *The Board of Trade Journal*, November 3, 1904, Volume XLVII, (London, 1904), p.224.

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CHAPTER IX

STAGNATION OF THE COTTON TEXTILE INDUSTRY

The second economic alternative (in relation to cotton) that the NAC region faced was spinning and weaving for domestic consumption. According to Levine, owing to its " influence on home and foreign commerce, the textile industry [was] probably the most important in all the manufacturing class "¹. Spinning and weaving were indeed " very ancient indigenous arts ... having been used by Indians long prior to the Spanish Conquest "².

As an alternative, spinning and weaving was central as the first step in the direction of industrialisation is textile production at factory level. Cotton cultivation in the NAC region was relevant only to show that raw material was available locally. Despite it being of a high quality, the economic linkage between cotton cultivation and the textile industry was a problem.

This was so because the wrong input was being utilised for the demanded final output. High quality cotton was being made part of domestic intermixed inputs for low quality cloth. Nevertheless, domestic demand for low quality (coarse) textile was such that what was a negative factor for the export of raw cotton became a positive one for domestic consumption of textile. That is, spinners and weavers did not need to discriminate intermixtures of counts, staples or varieties of cotton.

In the preceding chapter we mentioned the deficient technical aspects of production which hindered real prospects of cotton cultivation for export purposes. They also affected full supply of raw material to the domestic textile industry. Inability to meet domestic cotton demand by the domestic textile industry in the NAC region also originated in the aforementioned historical consequences of the hacienda system. Equally, the fall in international market cotton prices in the thirties³, further affected supply.

But, as no link between export of raw cotton and spinning and weaving for domestic consumption is needed (especially if the cotton is of the wrong variety), yarn could and was imported of the suitably short count for coarse cloth. However, domestic supply of the fibre lagged heavily. Henceforth, some evidence is presented which supports the case for the alternative of spinning and weaving for domestic demand of textile in the NAC region.

As argued in an earlier chapter, it suggests that, aside from alternative or complementary explanations such as (i) increased competition from the interior with the arising improvements in transportation connections; (ii) the relative dynamism of coffee when compared with bananas, its better stand to the depression; and (iii) the failure to introduce technological change, and the prevailing level of high wages as logical explanations for the decline of industries other than banana in the NAC region. Spinning and weaving had good prospects for expansion as an industry in the region, but suffered decline and then stagnated.

Imported cotton represented a higher relative cost of production (reflected by transport costs, protectionist measures, tariffs, devaluation, price sustainment and obligatory factory cotton quota policies) for the domestic cotton textile industry⁴. in general (interior and NAC). Compensation within the structure of production costs was low wages in the interior but not in the NAC region. Low wages probably explained lower domestic textile relative prices if compared with those of imports⁵, but only in the interior. In the NAC region, the opposite took place, which remains the plainest reason for the decline of its cotton textile industry.

As regional production of raw cotton proved insufficient for the demands of the domestic textile industry, our starting point in this section needs to be imports of the raw material. Although in the middle of the second decade an optimistic United States Consul Guyant stated that domestic production of cotton would " increasingly cut into the market for imported cotton and yarns " ⁶ (despite the fact that for example, cotton waste was being imported by the United States that

following year⁷) imports did become necessary.

Yarn for the Fabrica de Tejidos Obregon would be " produced later in Barranquilla "⁸ but it " was to be imported initially from England "⁹. Levine in fact indicated that in Barranquilla, in " the Obregon cotton mill imported British grey and coloured yarns are used and worked up into grey domestics and coarse coloured drills, about 10,000 yards being finished per day "¹⁰. Likewise, in Cartagena, although coarse yarns for grey drilling were spun from native cotton, a certain amount were imported¹¹. According to British Consul Bowles, by 1914, about " 1,200,000 lbs. of yarn [was] imported from the United Kingdom "¹².

Information published in 1922-23 in Colombia suggests that the Fabrica de Tejidos Obregon's yarn section produced " 100 % of the yarn, which has redeemed it completely from the importation of that article "¹³. This however seems debatable because also in 1922, Lieutenant-Colonel Rhys-Jenkins reported that the " Barranquilla mill imports about two-fifths of its yarn "¹⁴.

According to the United States Department of Commerce in 1923, the " market in Colombia for textiles was extremely dull owing to high prices and it is to be expected that this market will continue inactive for the greater part of 1924 "¹⁵. However, that latter year " large quantities [had] to be imported "¹⁶ because, as " Colombia does not export cotton and large quantities have to be imported, the entire production [was] being used by the factories and domestic industries "¹⁷. Local textile mills in Colombia supplied a large part of the demand for cheap, coarse cotton goods. Those mills however, looked to the United States for yarns. According to Duvac, United States exports " of cotton yarns to Colombia in 1924 were about 1,000,000 pounds "¹⁸. In 1925 \$ 332,116 worth of raw cotton was imported by the nation¹⁹.

In 1926 cotton imports were " occasionally considerable and the whole is utilised in the factories and domestic industries "²⁰. The rapid growth of the textile manufacturing industry was chiefly the reason for a " steady increase in imports

"²¹. Indeed, consistency in imports of cotton to meet domestic demand in Colombia were due to the fact that the country did not export cotton regularly²². According to Garnett, in 1926 imports increased considerably to 2,309,000 lbs. (1,049,545 kgrs.) while exports were declining vehemently and stagnating²³. If the cotton was to be used for domestic consumption, then of course, the government had the " means of increasing the import duties on raw cotton "²⁴.

The consequences of protection for domestic consumers would be that they would " pay dearer for their goods "²⁵. From the twenties on to the forties, according to Montenegro, consumption of raw cotton in Colombia grew significantly above production, with imports growing at an approximate annual average rate of over 20 per cent²⁶. Table 35 below shows some cotton lint import performance in the third decade of the century.

TABLE 35:
COLOMBIAN LINT IMPORTS: 1922 - 1930
(000's tonnes)

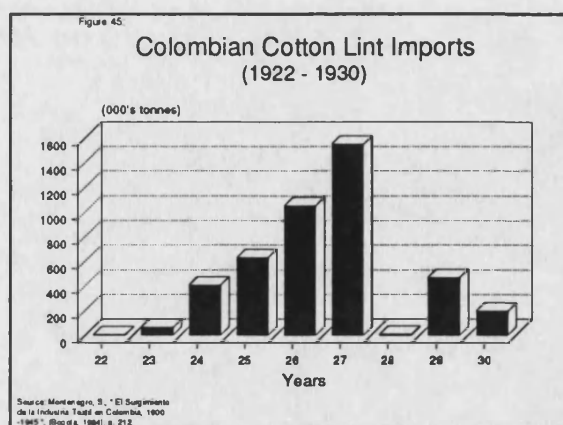
1922	1.6
1923	62.0
1924	405.0
1925	628.0
1926	1,049.0
1927	1,551.0
1928	6.0
1929	468.0
1930	196.0

Sources: (i) Montenegro, S., " El Surgimiento de la Industria Textil en Colombia, 1900-1945 " in Ocampo, J., A. y Montenegro, S., in *Crisis Mundial, Proteccion e Industrializacion* (Ensayos de Historia Economica Colombiana), (Bogota, 1984), p.212; and (ii) for 1922, figure is from Garnett-Lomax, J., *Economic Conditions of Colombia*, (London, 1929), p.47.

Figure 45 shows the bar graph which illustrates the data.

Raw cotton imports into the NAC region however, began to decline by 1931. This was reflected in the International Cotton Bulletin information that the cotton mill at

Barranquilla " which has been operating at a curtailed schedule for the last six



months, was reported to have imported some 200 tons during March ^{"27}. This low figure for cotton imports of course serves only as an isolated minor example to illustrate the final decline of the NAC region's textile industry. Spinning and weaving in the region however, need not have met this fate. Certainly, some researched qualitative data which follows suggest that prospects were reasonably good.

Originally, demand for textiles in Colombia had been met by foreign industry, particularly British, and artisan manufactures from the interior's department of Santander. Only small factories both in Samaca (in the interior's department of Boyaca) and in Cartagena (in the NAC region) serviced its exclusive local demand. Around 1875, textile output was insufficient to meet the larger western interior market²⁸.

The early potential for a direct economic linkage between the cultivation of cotton and cotton textile production in the NAC region emerged as a result of the processing of the fibre in the late 19th century. This was ascertained by MacGregor who in 1896, ascertained the earlier venture in cotton textiles in the NAC region, reporting that in Cartagena a " factory of cotton goods has been erected and is in operation at the present time ^{"29}. The goods were " manufactured entirely from native cotton ^{"30}. He added that the goods were produced in the " style of American cotton drills of various classes ^{"31}.

MacGregor said that the " owners of the manufactory expressed themselves as well pleased with the financial result and [were] making efforts to erect a similar factory in Barranquilla ^{"32}. He himself had earlier forwarded material to his government (who in turn forwarded it to the Manchester Chamber of Commerce). In his correspondence, he annexed " a sample of the heavier drills ^{"33}.

Despite little production, the good inherent quality of the raw material was not a major concern for the domestic market. The majority of the Colombian population had a low purchasing power. They were " poor, and it is probable that 90% of them have no reserve fund with which to provide for their wants ^{"34}. The rate of wages was " generally very low, and the people therefore live from hand to mouth; consequently the demand for cotton fabrics is almost

entirely for cheap goods "³⁵.

Coarse quality fabric was what the domestic market demanded. This reflected the low level of quality consumption in the patterns of demand for cloth of the mass of consumers in the nation. The Colombian manufacturers therefore " set themselves thoroughly to understand the conditions of the market and, by keeping their looms running on certain classes of goods ... succeeded in supplanting the trade in many of the staple lines which were formerly the principal export of the United Kingdom firms "³⁶.

The potential for a direct economic linkage was there. What would eventually not work as a sustainable raw material standard for export, would do so for the domestic textile industry. In 1904 the industry in the NAC region pushed forward. According to British Consul Gillies, in Barranquilla " two new establishments for ginning and packing cotton have recently been erected here "³⁷. Quality seems to have improved likewise during that year. As Gillies pointed out, new ginneries were " turning out much clearer cotton than the old gins "³⁸. The cotton was produced principally in the department of Bolivar (NAC region). The price paid by the factory was, as he reported, " 2 and a half to 4 cents per pound delivered, for the unginned cotton, which makes the cost about 12 cents American gold per pound for the ginned cotton "³⁹.

The NAC region's cotton mills had more significance than those of other regions. Dickson indicated in 1904, " that at Carthagena it is the most important "⁴⁰. And indeed, the initial stage of industrial spinning and weaving in the NAC region proper, probably began with the cotton goods factory mentioned earlier in this chapter, operating in Cartagena⁴¹ in 1892.

This seems to be confirmed by Ospina-Vasquez. He pointed out that " only very much later, already in the nineties, a modern type textile factory, that of Merlano, is installed in Cartagena, which achieved a long life despite adverse circumstances throughout several reorganisations "⁴². This was confirmed by Levine in 1914. He noted that in Cartagena " a large spinning and weaving steam driven mill is owned by the Banco Union, and has been run for about a quarter of a century ... the [cotton]seed being exported. There are 105 looms, attended by 160 women

and boys ^{"43}.

But this initial spurt of the cotton textile industry in the NAC region experienced difficulties. In fact, MacGregor's "Cartagena factory" could well have been the "Merlano" factory which Ospina-Vasquez mentions, and to which he assigns 1892 as its date of initiation of operations. This relationship emerges when he states that "in Cartagena, the textile enterprise established by Merlano and Co. in 1892, was handed over to the Banco Union in the first years of this century. It was not progressing. Its production was small ^{"44}.

Nevertheless, a contract was signed between the Ministry of Public Works and Senor H. de la Espriella, the owner of the textile factory in Cartagena in 1906, by which the latter agreed to set up new machinery predominantly "for the manufacture of lace ^{"45}. This was confirmed later by the Brussels 'Bulletin Commerciale' which reported that the Colombian government had "entered a contract for the establishment of a spinning and weaving factory in Colombia (with) the equipment purchased abroad ^{"46}.

The NAC region was by now attracting considerable domestic interest. As Petre-Lorraine pointed out, "cottons and other dry goods are but little imported, as it is found more advantageous to draw them from Barranquilla, with which the communications is for 23 miles by the railway, and for the remaining fifty by small steamer plying on the lagoon leading to Barranquilla ^{"47}. It would be even more advantageous seventeen years later. As Montenegro has indicated, "in 1931, the kilogram of cotton brought from Suaita, Santander [in the interior] cost the Fabrica de Hilados y Tejidos de Samaca [in the interior] more than that brought from the [North] Atlantic Coast ^{"48}.

In spite of the war, gross inflation and economic chaos, the cotton-textile industry of the NAC region pulled through at the turn of the century. As Ospina-Vasquez put it, in Cartagena "in those years, knitted fabric factories were set up (de la Espriella, 1907; Visbal, 1909) ^{"49}. Although the Compania Colombiana de Tejidos de Medellin (in the interior) was organised "in the year 1907 ^{"50}, it employed just under 60 % of what Fabrica de Tejidos Obregon in Barranquilla initiated its activities with⁵¹. (The former "employed 250 workers in the factory ^{"52}).

United States Consul Demers reported in 1907 that there were only " five gins in this city [Barranquilla], all American "⁵³. He added that there was only " one cotton mill, a small one, in this consular district (Barranquilla), the underwear factory of A., A., Aycardi and Company of this city "⁵⁴. Demers said the mill's total equipment consisted of " one spinning machine, fifteen looms and thirty sewing machines "⁵⁵. He also reported that production at the mill was " thirty six dozen undervests per day "⁵⁶.

The prospects of a market for the manufactures of gins seemed optimistic. According to Demers " more and more appliances will be needed as the industry assumes larger and larger proportions "⁵⁷. Pepper also seems to suggest that there was a good local market in the NAC region for a " small mill at Cartagena [which] turns out a rough article "⁵⁸. In fact, British Consul Gillies indicated that in Cartagena, in 1908, " besides the old established cotton-mills ... the manufacture of hoisery has been undertaken ... working with twenty knitting and other machines producing 30 dozen well-finished cotton hose daily "⁵⁹. He also informed that " cotton undershirts are already manufactured by a native who has started his mill with four knitting machines besides winders, etc., all imported from the United States and one collaring machine, of German make, which, it appears, does not give full satisfaction "⁶⁰. According to Gillies, the " average production is thirty dozens "⁶¹.

Gillies was probably making reference to the Fabrica de Hilados y Tejidos de Cartagena. Although no source other than Demers reported production in this area before January 1908, according to senor de la Espriella, " the Fabrica de Hilados y Tejidos Cartagena, that belongs to the Banco Union ... was founded in 1904, and it was from 1908 that its regular operation dated⁶². He indicated that its organisation was based on the principle of a chartered company, which is the one its owner has who, as I have already said, is the Banco Union, with which its national character is established "⁶³. De la Espriella further informed that the factory's " invested capital is of \$200,000, American gold "⁶⁴.

This is compatible with United States Consul Manning's reports. In fact, he suggested that, in Cartagena, in 1908, under the protective duty of 34 cents American gold per kilo (two and one fifth lbs.) on cotton goods of the type

manufactured by the Fabrica de Hilados y Tejidos de Cartagena, " the factory seems to be prospering "⁶⁵. The factory was of some importance to the NAC region. Manning estimated that the plant occupied " a ground space of 58,126 square feet, the factory being one story, and gives employment generally to 160 employees, all natives of this country, including the superintendent and chief engineer "⁶⁶.

De la Espriella was adamant that this should not be mistaken for foreign enterprise. He pointed to an early cause for restraint on the export effort: " as the cotton that is consumed is of national production, the development of the cotton industry follows, which favours itself with high prices competing with exports "⁶⁷. He added that " when -like the current year- the product's price is depressed in Europe, a premium price is paid for the factory's supply over what could be obtained by export "⁶⁸.

United States Consul Manning seems to confirm the idea that the factory's local-regional cotton input established economic linkage effects as consumption was only of domestic cotton, " its present output is 1,000 pieces (40 yards each) per month of cotton drill "⁶⁹. Although it was in conditions of " producing cloth of any kind, production at the Fabrica de Hilados y Tejidos Cartagena was especially coarse cloth, for it being what is most convenient at the moment "⁷⁰. According to Manning, the factory consumed " about 80,000 kilos of ginned cotton per annum "⁷¹.

Manning, however, maintained that no exports of cloth were to be expected as cloth was " sold entirely in Colombia. The drill selling for an average of 9 cents per yard, which means a total output of \$ 40,000 to \$ 45,000 per annum "⁷². He further reported that the factory was also prepared to turn out " shirtings, muslins (unbleached) and other cotton goods of this character, but it finds the drill the most profitable "⁷³.

De la Espriella informed that prices of the cloth were " of \$1 less below its similars overseas in each forty yard piece of five kilograms weight "⁷⁴. Furthermore, he reported that employment creation at the Fabrica was of " some two hundred people, all nationals, made up of men, women and children "⁷⁵.

The Fabrica's total daily capacity according to Manning, was of " 2,000 yards, although it never runs to its full capacity, closing down at night "⁷⁶. Manufacture of cloth throughout the country was therefore increased. This would " soon give employment to many more laborers and prevent the exportation of much gold, destined for the payment for imports of manufactured stuffs of this class "⁷⁷.

There was a reasonable amount of momentum gained by the alternative of spinning and weaving for domestic consumption of cloth. For example, by 1909 mills were using " native raw cotton, which is of excellent quality and an impetus has been given to the industry in all its branches enabling the mills to employ a considerable number of persons in the manufacture of cotton fabrics "⁷⁸.

Nevertheless, according to United States Special Agent Graham-Clarke cotton mills in Colombia were " small and scattered "⁷⁹. In Barranquilla, a German (Henry J. Helm) started an knitting factory that year. The factory produced " daily, with cotton yarn, sixty dozen undershirts , thirty of socks and stockings and ten of underpants of different classes that are sold in all commercial locations of the Republic at prices that due to their inexpensiveness have succeeded over foreign manufactured articles "⁸⁰. Helm's factory permanently employed " sixty women and eight men "⁸¹. Helm also underlined the non-foreign nature of his investment, claiming that the factory was begun with " capital acquired in the country "⁸².

Graham-Clarke equally pointed out in 1910 the significance of the NAC region's status in the national economy: " the Cartagena cotton mill with 6,200 spindles and 105 looms, claims to be the largest in the country. The mill spins 9s to 12s and makes narrow gray sheeting "⁸³. At this time half the undershirt mills in Colombia were in the NAC region. Graham-Clarke also reported that there were " four undershirt mills - one in Cartagena, another in Barranquilla and two in Medellin "⁸⁴. There was also a " hoisery machine in Cartagena "⁸⁵. The undershirt factory at Cartagena had a production " capacity of ... 30 dozen shirts a day, and as shirts that bring in \$ 1.90 in the United States sell in Cartagena for \$ 4, good money is made in this line "⁸⁶.

Spinning and weaving of course became the stalwart of the interior's

manufacturing industry. But despite having to bear with market imperfections and a prevailing high level of wages, most significant initial thrust to entrepreneurship in the textile industry emerged in Barranquilla, in the NAC region. United States Trade Commissioner Bell would eventually note that the " largest cotton mill is the *Fabrica de Tejidos Obregon* of Barranquilla, capitalised at 1,000,000 Colombian dollars (1 dollar = \$ 0.9733 United States currency) "⁸⁷. It certainly paved the way for a strong regional economic linkage between cotton cultivation and cotton textile production.

This dynamic was confirmed by United States Consul Burnell in 1910 who reported that " Obregon and Co. have about completed their textile plant in Barranquilla for the manufacture of cotton drills. An English family of skilled weavers will give instruction in the art of weaving to 100 Colombian women employees. Construction of the plant begun last January and the production of goods in September. Only 72 looms will be employed "⁸⁸. Although it was intended to " increase during the next two years to 300 looms "⁸⁹, by 1914 the Obregon cotton mill was reported to contain " over 200 electrically driven British looms "⁹⁰. Burnell added that " electric motive power is also owned and operated by E. Obregon and company "⁹¹.

Don Pedro Obregon confirmed this by commenting that his *Fabrica* caused " the foundation, in parallel way, of the *Compania de Electricidad de Barranquilla* in 1909 or 1910 which initiated activities with two Bellis and Morgan units (one of 60 and another of 90 kilowatts) and Bradcock and Wilcox boilers. A year later a 150 kilowatt unit of triple expansion was installed. Three years later we doubled again and placed a 300 kilowatt unit. But do not forget that we started off with a 90 kilowatt unit "⁹².

The *Fabrica de Tejidos Obregon of Evaristo Obregon y Compania* was indeed the most significant example of the textile industry in the NAC region - and of course one of the few in the nation. Colombian government sources noted in 1912 that the factory " currently mobilises in this enterprise alone a capital of \$ 300,000 dollars ... and daily producing 15,000 yards of drill as well as diagonals, coarse and coloured that are sold in all of the Republic's markets, selling 15 to 20 per cent cheaper than their foreign similars ... employing four hundred and twenty seven

people including employees, engineers, motorists, electricians, weavers, packers, etc. ^{"93}.

Don Pedro Obregon, further stated that the *Fabrica's* market was " all of the nation ^{"94}. He also said that " the reason for the creation of Fabrica de Tejidos Obregon was to substitute imported textiles from Manchester for Colombian produce ^{"95}. He added that " The *Fabrica* employed approximately 1,000 people ^{"96}.

Despite targeting the whole nation as its market the *Fabrica Obregon* certainly witnessed a strong regional potential market. In 1911 for example, US Consul Burnell stated that Barranquilla, with an " estimated population of 40,000, was the leading commercial city of Colombia ... [and] rapidly becoming an important centre for the production and distribution of manufactured products for the Colombian trade ^{"97}. He further added that a " knitting mill for the manufacture of underwear and stockings began operating ; ... a factory for the manufacture of cotton textiles was opened in 1910 employing 72 looms, the number to be increased to 168 looms later; ... [and] another such mill has been operating here for the past five years ^{"98}.

It must be borne in mind that during 1911, serious industrial expansion took place in the NAC region. It was informed that " several new factories have been opened at Barranquilla, among them being two match factories, a glass factory, a shoe factory ... and an ice factory. Many of the factories already established made additions and improvements, and the electric light company prepared to supply electric power to many of them ^{"99}. In the same year the cotton textile industry opened " a cotton-goods factory ... [and] ... a cotton-gin ^{"100}.

During this time the NAC region's cotton textile industry was expanding. Indeed, it was reported that " a new factory for the manufacture of cotton fabrics is to be installed in Barranquilla. The factory will be equipped with the latest improved machinery and will be up to date in every respect ^{"101}. Likewise, " a sawmill, a coffee roaster, a chocolate factory, two additional shoe factories and a factory to make jute bags and baggings, as well as " a third factory for the manufacture of gray cottons ^{"102} were under construction in Barranquilla that same year.

United States sources indicated that by mid 1912 " a new factory for manufacture of cotton fabrics is to be installed in Barranquilla. The factory will be equipped with the latest improved machinery and will be up to date in every respect "¹⁰³. United States Consul Manning equally reported that there was " under construction a third factory for the manufacture of gray cottons, etc."¹⁰⁴ due to be opened in 1912. Many other sorts of industrial factories were opened and many of the established factories made additions and improvements. Manning stated that " the greatest industrial development was at Barranquilla "¹⁰⁵.

The full impact of spinning and weaving on the NAC region was summed up by Bowles: " at Barranquilla there are two mills employing 500 hands and working 325 looms but no spindles. Three underwear factories, one recently established, are in operation and give employment to 430 workpeople. A spinning mill is shortly to be erected in the town, but the above mentioned, with the exception of the one at Cartagena are the only mills of importance in Colombia "¹⁰⁶.

According to Levine, at this time in Barranquilla and Cartagena, " textile factories for cotton and wool of considerable importance "¹⁰⁷ were run. United States Special Agent Wilson on the other hand, estimated that in Barranquilla, " one large mill with British machinery turns out 16,000 to 20,000 yards of cotton goods daily and exports to double this by an addition to its plant "¹⁰⁸. He also confirmed the existence of direct economic linkage between cotton cultivation and cotton textile production by stating that " some long fibre ... is used to a certain extent in the native mills and in weaving on hand looms. There are gins in Barranquilla and Cartagena fitted with American machinery "¹⁰⁹.

Although United States Vice-Consul Blake-Modica only reported " two cotton-mills in the district "¹¹⁰ for 1915, British Vice-Consul Bowles noted that " under the protection of a high tariff several cotton mills have come into existence during the past ten years, and are now firmly established in the local trade "¹¹¹. In fact, such was the potential of the NAC region's cotton textile industry, that industry abroad was forced to compete hard for the market. Complaints were " frequently made by American yarn manufacturers that they are not getting the trade of cotton - weaving mills of Barranquilla "¹¹².

There were several reasons for this problem. It appears to have been according to United States Consul Manning, a question of " credits, unwillingness of American manufacturers to put the yarn up as required and invariably a higher price in the United States than in Manchester, when the credit period and everything else is taken into consideration. Otherwise, business will continue to go to Manchester or Germany "¹¹³.

By 1917, construction in the NAC region was on the upsurge particularly in the textile industry. In Cartagena, another textile factory (other than de la Espriella's) was reported by United States Consul Lespinasse, which was endowed " with \$ 200,000 capital (was) producing bleached and unbleached cotton goods, drills, yarns, linens, etc. for domestic consumption "¹¹⁴. He noted that de la Espriella was doing well with " with \$ 60,000 capital, 100 employees and a daily output of 100 dozen cotton and woolen undershirts "¹¹⁵.

In Barranquilla, the *Fabrica de Tejidos Obregon* was investing in plant extension. United States Special Agent Ewing reported that " during the past year there have been constructed one three - story reinforced concrete building, 49 by 105 feet by 62 feet high containing approximately 322,000 cubic feet and costing \$ 44,000, an extension to the *Fabrica de Tejidos Obregon*, amounting to approximately \$ 300,000 and a number of less important improvements, all of which used certain amounts of foreign hardware, steel and cements products "¹¹⁶.

Ewing also reported that the business of *Fabrica de Tejidos Obregon* in Barranquilla was " sufficiently prosperous to warrant the construction of further extensions to the amount of \$ 1,000,000 to \$ 1,500,000 including equipment "¹¹⁷. He was convinced that " the owners would be willing to consider the engagement of the necessary capital to prosecute the extensions at an early date "¹¹⁸.

After 1917 a definite upward movement in population took place. The nation, as United States Trade Commissioner Macgowan explained, with " its population of 8,000,000 offers an excellent market "¹¹⁹. The NAC region was an important market by now. Amid all market districts Barranquilla was the " most important in Colombia if we measure by physical distribution of merchandise from the point of view of sales it is nearly as important as the Bogota District and it

probably has a population of about 2,000,000 ^{"120}. Amongst the most important secondary centers, with a population of 22,067 was the city of Santa Marta¹²¹ and Cartagena was a district with a " consumer population of about 1,000,000 ^{"122}.

As United States Consul Guyant reported, the growth of the industry was of course " helped by high prices of imported cloth ^{"123} which undoubtedly proved to be " a great stimulus to the cotton-growing industry during 1917 ^{"124}. Machinery was ordered from abroad in 1917 for the " equipment of a factory for the manufacture of cotton thread ... arrived at Barranquilla and will soon be installed. Another factory for the manufacture of woolen yarn is soon to be put into operation at Barranquilla ^{"125}. Guyant also noted that " the largest single item of manufacture however is textiles, principally cheap and medium-grade sheetings, drills, denims and cheap hard-woven cotton for suitings ^{"126}.

United States Consul Guyant identified 1918 as another important year for the textile industry in the NAC. He reported that cotton had been " steadily growing in importance for the last several years as the demands of domestic textile plants increased and facilities for spinning were added ^{"127}. Spinning and weaving (namely the Fabrica Obregon) had stimulated raw cotton production. As Guyant noted, the " growing interest in cotton locally was due to the establishment of a new spinning mill in Barranquilla at the cost of \$ 500,000 and the addition of a spinning department costing \$ 200,000 to the largest cotton mill already established ^{"128}. The International High Commission later confirmed this in their study on the country¹²⁹.

United States Trade Commissioner Bell noted that " many of the larger mills are installing dyeing plants, and two or three yarn-spinning mills are being erected or planned for the near future to use the native cotton ^{"130}. But protected textile industry produced high domestic prices which was reflected in profitable business for factories. According to Bell, these high prices and " large profits obtained in 1919 have had the effect of attracting additional native capital to the cotton industry and new mills are either being planned or actually under way ^{"131}.

There were however, deficits in production. Despite " domestic industry having

made considerable progress during those last 15 years, domestic production did not supply more than one-tenth of the demand "¹³². The consequent imports of raw cotton showed spinning and weaving in the NAC region had encouraging prospects. Bell confirms this: " of the four [Colombian] knitting mills making cheap cotton undershirts for men's wear, the largest of these being the *Fabrica Nacional de Tejidos* of Barranquilla and the plant of *Espriella Hermanos* of Cartagena -the latter factory also making cotton socks and stockings "¹³³.

United States Consul Guyant additionally reported that "there were established in Barranquilla two spinning plants of 2,500 spindles each"¹³⁴. NAC region prospects for the alternative of spinning and weaving showed a momentum which seems to have definitively set the export alternative back. Guyant to surmise that there would be "no cotton for export from Colombia for many years "¹³⁵.

The NAC spinning and weaving industry showed signs of regional economic linkage by absorbing local output of raw cotton. As United States Trade Commissioner Bell pointed out, the *Fabrica de Tejidos Obregon* had " recently installed a spinning mill and a dyeing plant and is beginning to use native raw cotton which is also ginned at the plant and dyed there "¹³⁶.

The alternative of spinning and weaving with both domestic raw cotton and imported yarn for domestic consumption certainly established itself. There were however, deficiencies in quality and productivity. But this seems to have taken place in what Clark would describe as the " earlier processes of opening the cotton, carding it, and drawing it into loose ropes "¹³⁷, not to the manufacturing level proper. After all, carding was just a preparatory process¹³⁸. Some deficiencies in quality were due for example, to management's cutting out in 1910 of the " intermediate fly frames ... to save expense "¹³⁹.

This is hardly surprising. If one considers low labour productivity emerging from expensive labour time, spent on fly frames in the textile industry years later. Clark's evidence of 1948 British mill operatives operating 1915 machinery who " spent from 2.1 percent of their time repairing breakages in carding to 6.7 percent of their time on the fly frames "¹⁴⁰ illustrates this. This emphasizes our point made earlier on matters of inefficiency in the NAC region textile industry.

Spindle and loom efficiency was defined as the " percentage of a machine's theoretical production, determined by the speed the machine was run at, which was actually achieved "¹⁴¹. Clark has illustrated how in 1910 " low-waged countries were not getting greater utilisation of their capital except through running longer hours "¹⁴². But data such as machines speeds, output per machine and its technical description in weight and dimensions of counts of yarn per hour , spinning hours, and control of fineness of yarns is not available for the NAC cotton textile industry.

It is not possible therefore to point out spindle and loom percentage efficiencies. But they must have been low. Clark notes that in 1910 " low-waged countries were generally getting lower output per machine than countries with high wages "¹⁴³. Despite the high wages in the NAC region, due to inefficiency, output must have been low as well. In fact, according to Graham-Clarke, it was the " inefficiency of the weavers which accounted for low loom speeds "¹⁴⁴.

As far as spinning and weaving's creation of urban employment was concerned, it boded well. It was apparently " plentiful in Barranquilla ... with about 3,000 factory employees, mostly women and girls ... who work in the cotton mills "¹⁴⁵. This was at the expense of the rural areas. According to United States Trade Commissioner Bell, plentiful it was not " in the cotton district in the interior of Atlantico [department in the NAC region of which Barranquilla is the capital] "¹⁴⁶.

Spinning and weaving proved to be a strong, significant and profitable industry. The making of cotton yarn and of cotton cloth became the " chief manufacturing industries of Barranquilla "¹⁴⁷. They promised to " become increasingly important in the near future "¹⁴⁸. Additionally, Trade Commissioner Bell noted that the textile mills " earned large profits during the war and this prosperity has resulted in an increase in the capitalisation of some of the companies in new equipment and in the establishment of one large new yarn mill "¹⁴⁹.

British Lieutenant-Colonel Rhys-Jenkins reported that of the " three well-equipped cotton mills in the country, the larger Barranquilla mill is a modern and well-equipped establishment owned by a family of Colombians who have had

much experience in the Lancashire trade "¹⁵⁰. Furthermore, he noted that there were in addition to the " three weaving establishments, three mills in the country making cotton hoisery [and] a small plant in Barranquilla for the spinning of yarns for hoisery purposes "¹⁵¹.

Direct economic linkage between cotton cultivation and the cotton textile industry still showed good potential. This was emphasised by Rhys-Jenkins' observation that " the lower Magdalena valley provides the cotton used by the spinning mills and none is imported. On the contrary, during heavy crops, a small quantity of cotton has been exported to Spain and the United States "¹⁵². Equally, change of technology contributed to a better product. According to Wakefield, a cotton mill manager, deficiently ginned cloth had " greatly improved since 1918-1919 and if roller gins were introduced to take the place of saw gins the improvement would be more pronounced, in a more even staple and a cleaner production "¹⁵³.

It was the development in the number of cotton spindles which indicated in the first place the (inter-nation) geographical shift of the cotton industry from Lancashire to the United States¹⁵⁴. At first instance, such a detailed development in Colombia and in the NAC region in particular does not seem warranted given the the very small numbers involved. With the entire nation having anywhere between fifty two¹⁵⁵ and 58.9 thousand¹⁵⁶ spindles in 1926, according to Pearse, that was " hardly as much as one single average mill in Lancashire "¹⁵⁷. Additionally, however optimistic the interior's textile ambitions could escalate, this would only bring Pearse to comment that " Medellin [interior region] is called at times the Manchester of Colombia, but this is an exaggeration, seeing that not more than 22,000 spindles are located there "¹⁵⁸.

Nevertheless, it is interesting to note the development of the number of spindles simply to further expand comprehension on the decline of the NAC region's cotton textile industry. Anyway, it was extraordinarily difficult to obtain statistics as to the capacity of cotton mills¹⁵⁹. During the first decade, despite the fact that in 1902 the Empresa de Tejidos de Bello [in the interior region] had 5,328 spindles¹⁶⁰, British Consul Gillies in 1908 for example, indicated that in Cartagena [NAC region], the cotton-mills had " 105 looms and 8,000 spindles

Furthermore, according to United States Consul Manning, just the Fabrica de Hilados y Tejidos Cartagena factory had " 6,116 spindles and 104 looms "¹⁶². And Wakefield pointed out in 1922 that there was a projection for erecting later " a further 7,468 spindles "¹⁶³ in Colombia. Table 36 below shows this was not the case.

The major peak in the cotton textile industry was in 1926. There were 38 cotton mills¹⁶⁴ in the country, 8 of which¹⁶⁵ were in the NAC region. These were: a- Barranquilla: (i) Compania Industrial de Tejidos; (ii) Empresa de Hilados y Cultivo de Algodon; (iii) Empresa de Tejidos La "Nacional"; (iv) Fabrica de Tejidos Echevarria; (v) Fabrica de Tejidos 'Obregon'; (vi) Genaro Salazar and (vii) Manufacturera de Barranquilla; and b- Cartagena: (viii) Fabrica de Tejidos de la Espriella y Cia.¹⁶⁶.

Two years later the national number of mills was at 16 (cut by just over 42 % as of 1926), the number of spindles was at 39,640 (cut by just over 76 % as of 52,000 spindles)¹⁶⁷. However, by 1942 it was to 210,000 that the number of spindles had risen¹⁶⁸. Although British Consul Garnett-Lomax stated that there were " 60,000 spindles existing in the country "¹⁶⁹ by 1929, according to the Colombian Trade Review the NAC region seems to have had just under 41% of the total spindles in the nation by that year (see Table 36 below). By 1949, according to Wythe, the nation was still a " fairly large market for coarse cotton cloth -the chief necessity for clothing a large proportion of population "¹⁷⁰.

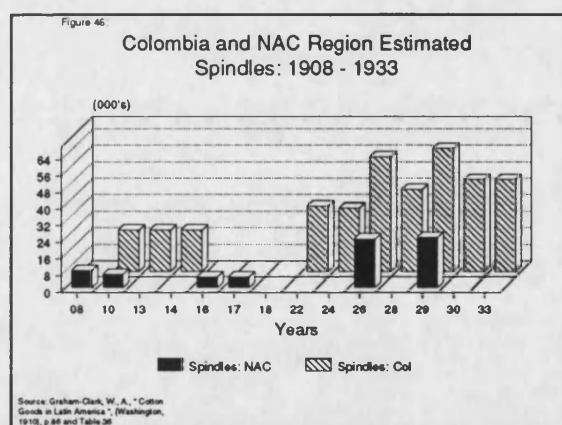
TABLE 36:
COLOMBIA AND NAC ESTIMATED SPINDLES AND LOOMS
(000's)

year	Colombia		NAC	
	spindles	looms	spindles	looms
1908			8.0 _j	0.1 _j
1910 _a	20.0	0.2 _a	6.2 _{ak}	0.3 _{ac}
1913 _b	20.0			
1914 _c	20.0			
1916				0.3 _c
1917			5.0 _d	
1918			5.0 _d	
1922 _f	31.5			
1924 _g	30.5	1.94 _g		
1926 _g	52.0	1.98 _g		
1926 _i	58.9	1.77 _i	23.3 _i	0.575 _i
1928 _g	39.6	1.93 _g		
1929 _h	58.9		24.1 _h	
1929 _i	60.0			
1930 _b	44.4			
1933 _b	44.4			
1942 _e	210.0			

Sources: a) Graham-Clark, W., A., "Cotton Goods in Latin America, Part II, Brazil, Colombia and Venezuela", Special Agents Series, No. 36, (Washington, 1910), p.86; b) International Cotton Bulletin, Volume XI, No. 43, April, 1933, p.401; c) Montenegro, S., "La Industria Textil en Colombia: 1900-1945", Cuadro No. 1, Principales Empresas Textiles, Desarrollo y Sociedad, No. 8, May, (Bogota, 1982), p.125; d) Guyant, C., E., United States Consul at Barranquilla, Supplement to Commerce Reports, Daily Consular and Trade Reports, Annual Series No. 45a, May 27, 1920 (Washington, 1920), p.7; e) Wythe, G., Industry in Latin America, (New York, 1949), p.256; f) Wakefield, S., "Cotton in Colombia", International Cotton Bulletin, No. 1, September, (Manchester, 1922), p.104; g) Yearbook of the National Association of Cotton Manufacturers, Yearbook Manual 1924, (Boston, 1924), p.158; Idem., Yearbook Manual 1926, (Boston, 1926), p.158; Idem., Yearbook Manual 1926, Op. Cit., p.168; Idem., Yearbook Manual 1927, (Boston, 1927), p.168; Idem., Yearbook Manual 1928, (Boston, 1928), p.264; Idem., Yearbook Manual 1929, (Boston, 1929), p.264; h) The Colombian Trade Review, Vol. VIII, No. 12, January issue, (1929), p.244; i) Pearse, A., Colombia, With Special Reference to Cotton, (London, 1926), p.100-102; j) Gillies, J., British Consul at Cartagena, "Report on the Year 1908 on the Trade and Commerce of Cartagena" Diplomatic and Consular Reports, Annual Series No. 4400, (London, 1910), p.3; k) Manning, L., A., United States Consul of Cartagena, Monthly Consular and Trade Reports, February 1908, Serial 5330, No. 329, (Washington, 1908), p.180 and Monthly Bulletin of the International Bureau of the American Republics, Volume 26, No. 1, January, 1908, Whole No. 172, (Washington, 1908), p.62; l) Garnett-Lomax, J., Economic Conditions of Colombia, (London, 1929), p.47; Notes: Some figures will only reflect the number of spindles in one or several mills but not necessarily reflect all.

Figure 46 shows the bar graph which illustrates the data on spindles.

The same situation that was observed by the development of the number of spindles can be seen in the development of looms.



The national estimate in 1924 of the number of looms in operation was "approximately 1,600 with an average production of about 36,000 yards daily

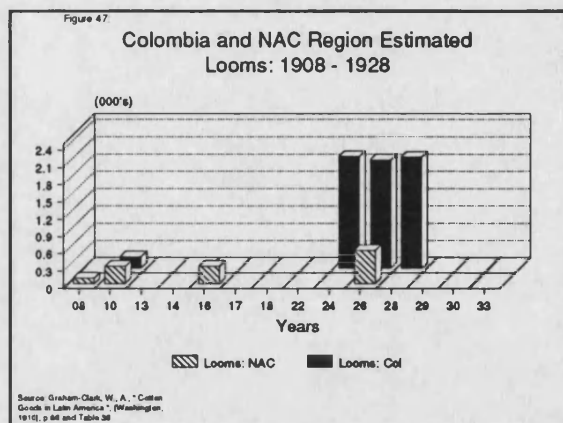
"171.

In 1926 the number of looms reached 1,980 and 5,000 hands were employed¹⁷². From 1926 to 1928 employment of hands by the industry fell by just over 34 % (5 to 3.285 thousand)¹⁷³. Figure 47 illustrates the data on looms.

Nevertheless, consumption of raw cotton showed marked increases of 300 % (3 to 12 thousand bales) from 1924 to 1926 and from 1926 to 1928, of 442 % (12 to 65 thousand bales)¹⁷⁴.

Calculating the cotton requirements for that number of spindles Wakefield thought that " on an average of 4lbs.

per spindle per 60 hours producing 12's we obtain a total yarn production of 6,305,600 lbs. per year of 50 weeks "¹⁷⁵. However, he commented that with a " working loss of 82 1/2 per cent demand for lint cotton amount[ed] to 7,193,800 lbs. ... of seed cotton requiring roughly 100,000 hectares (250,000 acres) at the present rate of production "¹⁷⁶.



By the thirties' decade the NAC region's (with *Fabrica Obregon* as its forebearer) spinning and weaving for domestic consumption went into decline and stagnation if contrasted with the interior. Although as mentioned earlier, *Fabrica Obregon* was a modern and well-equipped establishment in the second decade, one aspect of this decline was the failure (as opposed to the interior textile industry) to introduce (necessary but not sufficient) technological change in the early twenties¹⁷⁷. But, the pricing-out effect of wages was an important economic cause of the *Fabrica's* fading away¹⁷⁸. The interior (particularly the department of Antioquia) was the " heart of the coffee economy of the western part of the country, therefore, the place where the best rewards from the processes and dynamics that coffee expansion guaranteed "¹⁷⁹. Bar the exceptions mentioned before, it was also where low wages ruled.

A complete discourse on the details of government subsidy for cotton cultivation is unwarranted here. It simply did not show priority over that for the cotton textile industry because there was lack of knowledge of international textile quality standards. As remarked earlier, demand was domestic -not international- and for coarse cloth. It is only when it was seen that raw cotton for export was a viable economic alternative that some government subsidy -especially in quality

seed- materialised. The essence of this subsidy has been covered earlier in this chapter.

The government's interest in providing better quality seed was mainly to find a different source of foreign exchange earnings other than coffee. This is why the end of the first decade of the present century witnessed " energetic propaganda made by the government concerning the planting and cultivation of cotton "¹⁸⁰.

The main consequence of government subsidy in quality seeds for production of raw cotton that could qualify for international standards was that in promoting the alternative of cotton cultivation for export, government subsidy changed the variety of cotton grown. The change in variety was not decided to make it suitable for domestic textile production but for export. In the process, it made it unsuitable for domestic textile production.

The other consequence of government subsidy was that it made it a compulsory (subject to legal penalization) input for the textile industry. In doing so a superior variety of cotton became the wrong input for a final output which was inferior quality textile or coarse cloth. This increased textile production costs. It especially became instrumental in installing apparent business complacency amongst cotton cultivators' production targets. As they seemingly reaped adequate profits with low acreage and production they therefore saw no need in meeting the textile industry's rising demand of the fibre.

The crux of government 'subsidy' was really for the cotton textile industry. But throughout the process of government assistance to the cotton textile industry, its change of variety determined an paradoxical and irreversible cycle. This was that an appropriate variety was perhaps right for export (only to be deteriorated by technical deficiencies unacceptable in the international market) but wrong as an input for the textile industry.

The more the government subsidised variety, the less it would be exported, the more it would be used as an input for textile production and the more production costs would rise. If to this, higher wages were added, the NAC region textile industry could have no hope of surviving. The interior of course did survive

because of the low wages it could pay, absorbing the high production costs generated by compulsory use of the changed variety.

Support for the textile industry probably stemmed from the fact that President Rafael Nunez -the pioneer in government attention to the textile industry- not only was from the NAC region, but its more relevant political leader. Indeed, Nunez made it clear in 1883 that in order to " make possible the introduction in the state of Bolivar [in the NAC region] of industry for the production of cotton fabric, the assembly at this moment, has had to issue a law whereby it is declared that the said industry shall be a financial adjudication during 25 years "¹⁸¹.

He decreed the " concession of fiscal privilege, by means of certain conditions, to a chartered company of our entreprenuring city of Barranquilla; company already -may it be said- organised with a capital that shall not go below (as thus as the law decrees) \$ 250,000 "¹⁸².

There can be little doubt that the government subsidy to the textile industry in Barranquilla was a major stimulus designed to revive a presumably dying state of affairs. Nevertheless, despite protectionism, both quantity and quality suffered. Witness Wheeler's view in 1888 that it was a " small quantity of woolen and cotton fabrics of a very coarse quality with hand looms of an antiquated fashion, but the industry is insignificant ... and amply protected by the import duties "¹⁸³.

One would have expected the industry to have been hit harder by the outbreak of the War of a Thousand Days. Nonetheless, a government subsidy was decreed in 1899. In order that the cotton textile industry could take root in the department of Bolivar, the Colombian Chancellor of the Exchequer put forward a proposal that called for " the establishment of ten textile factories, subsidising each one with 300,000 pesos "¹⁸⁴.

Policies in 1909, according to Jalhay, called for " l'établissements de fabriques de tissus de coton, pres de la capitale et dans les departments de Barranquilla et de Santa Marta, le gouvernement, garantit, pendant 10 ans, un interet de 7 % sur le capital, la franchise des droits sur les machines et les matieres premieres, l'exemption de tout impot national departamental ou municipal "¹⁸⁵.

He further noted that the government " s'engage, pendant la duree du contrat, a ne pas reduire les droits d'entree sur les tissus de coton et autres fibres textiles a plus de 50 % des droits actuels. Par contre, les articles fabriques devront etre vendus avec une reduction de 8 a 12 % sur les articles du meme genre importees de l'etrangere "¹⁸⁶.

This led British cotton expert Pearse state in 1926 that " the manufacture of cotton and other goods succeeds solely on account of high protective duties "¹⁸⁷. United States Trade Commissioner Bell noted this fact on more than one occasion. He said for example, that the " industry is protected by a high tariff on imported goods and prices are determined by the high cost of the imported articles "¹⁸⁸. Later he mentioned that " the native industry is protected by a high tariff on textiles and the prices obtained for the local output are based upon textile prices in foreign markets plus the import duties and inland freights "¹⁸⁹.

Beneficial effects of the role of government therefore, were particularly for the cotton textile industry, not for cotton cultivation. They were mainly those of protection. Financial support, fiscal privilege and protective tariffs were significant for all regions. Tariffs undoubtedly benefited cotton mills which " made large profits in spite of the the fact that all yarns and a considerable amount of raw cloth have to be imported "¹⁹⁰.

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177. Montenegro, *La Industria Textil en ...*, Op. Cit., pp.160-163.
178. Fabrica de Tejidos Obregon was wrapped up in 1938 as accounted by Don Pedro Obregon.
179. Montenegro, *La Industria Textil en ...*, Op. Cit., p. 160.
180. Bulletin of the International Bureau of the American Republics, *Volume XXVIII*, No. 51-3, Op. Cit., p.99.
181. Nunez, R., " Fomentando la Industria ", article of 25th November, 1883, quoted in Ospina-Vasquez, Op. Cit., p.320.
182. Ibid.
183. Wheeler, *Report No. 456*, Op. Cit., p.11.
184. Ospina-Vasquez, Op. Cit., p.330.
185. Jalhay, H. *Colombie*, (Bruxelles, 1909), p.266.
186. Ibid.

187. *Pearse, Colombia, With Special Reference to ...*, Op. Cit., p.102.

188. *Bell, Colombia, A Commercial ...*, Op. Cit., p. 362.

189. *Bell, Colombia - A Commercial ...*, Op. Cit., p.222.

190. *Ibid.*

CONCLUSIONS

In this thesis we have tried to report --not prove-- on some salient economic facts during a particular period, of the some of the major events in the economy of a particular area in Colombia: the NAC region. In doing so, we hope we have contributed --in a very minor scale-- to the understanding of economic development.

The period between nineteen hundred and nineteen hundred and thirty in the economic history of Colombia revealed a strong 'regional' characteristic: a successful coffee economy in the interior. This has invited much of the testing of economic and historical thought. Although work was certainly accomplished, we argue here that no one attributed the factor of regional diversity the importance it merited.

This is why this thesis had to propose a theoretical framework that emphasized the 'regional' element in Colombian economic development. A series of imperfections in its factor markets characterized this element in the NAC region.

This theoretical framework of imperfections intertwined the idea of structural rigidity with the notions of 'growth pole' and 'staple growth'. Its essence resulted in a particular approach to economic development and history. It was built upon the antithesis of the notion of 'linkage' (e.g. the notion of 'leakage'). It was accompanied by the structural element included in the analysis of the nature of the labour market. We suggest this paved the way for an approximation of an explanation of economic stagnation. That is, the reduction of labour mobility by factor market imperfections.

It seems the nature of the NAC region's labour force was such, that at its best (from the employers' point of view) was only a small semi-proletariat population. At its worse, the region's labour market comprised a major imperfection: the reluctance of its labour force, to fully integrate into the monetary economy. This

imperfection in the factor market seems to have resulted in labour shortage, pushing regional wage levels upwards.

Because of these reasons, this thesis suggests the size of the banana labour force was not an example of unlimited supply of labour. Due to this factor, its organization was equally prone to manipulation from intermediaries, as well as the UFC's efforts to disregard payment of legal benefits and thus reduce its wage costs.

The thesis reveals that the UFC was the local monopsonist. This comprised another major imperfection. Indeed, Kepner pointed out that "near United's banana centres ... there is no other large-scale employer" ¹. It seems to us, therefore, that the UFC's position as a monopsony, provided it with the muscle it needed, to pay the low wages it could optimally pay.

The UFC was equally a world monopoly in the producer market. For this reason, we suggest wages paid, were higher than what a competitive wage would have been in the NAC region. We equally suggest this power meant the UFC met the resulting wage levels generated by labour shortage in the region. We also suggest this meant that it set a regional price for wages which other employers had no recourse, but to accept.

A supplementary imperfection in the NAC region's labour market was the strategy of the UFC to internally segment its labour force. This appears to have been done in a way in which it could produce several noncompetitive (segmented) labour markets within the company; and suggests it lowered its wage costs this way.

This seems to have induced internal labour market segmentation within the NAC region. And apparently influenced the economic development process in it, by setting a higher wage level, than what competition for scarce labour could afford to offer.

The UFC --therefore-- seems to have generated an attractive alternative labour market in the region. It appears to have been sufficiently important, to further differentiate rural and (already differentiated) urban wages. This seems to have operated by exercising rising price pressure on the market. The result seems to have been distortion and destabilization of labour price levels. And we insinuate it contributed to the overall general result of the operation of these forces: regional economic stagnation.

With the banana export sector's UFC setting the high level of wages (in about 1906), it seems likely that expensive labour --at least by Colombian standards-- exercised a negative influence on the NAC region's economy.

This was despite (i) the fact that both the NAC and the interior regions were dominated by low-wage economies by the end of the 19th and the beginning of the 20th century; (ii) the sporadic and dramatic upsurge in wages (due to Civil War) at the turn of the century, which the interior coffee sector experienced, and; (iii) a brief period of low wages due to a).- inflation created in the national economy by the surplus monies originating in the United States indemnity payment (and private credit that came along with it) to the nation for the loss of the Colombian province of Panama and b).- the effects of the Depression on foreign investments in the region.

Generally speaking, wages in real terms in the NAC region were higher than in the interior. In a general sense, NAC region banana sector real wages were higher than the interior manufacturing real wages. In a particular sense (excluding non-monetary components), they were higher than interior coffee wages including non-pecuniary elements.

It materialised that higher wages in the banana export sector were set not only as a result of labour shortage but of good market reasons as well. The nature of the product (banana) was of a highly perishable and seasonal foodstuff which demanded immediate, albeit seasonal, labour for its shipping.

The thesis' findings suggest intra and interregional wage differentiation existed within the NAC region, i.e. between it and the interior of the country. The heavily wage differentiated labour market in the NAC region, for example, had much higher price limits than its interior counterpart. And it would appear, consequently, that --alongside natural protection-- the low-wage female labour force, became a major factor for the interior's economic growth and development (namely the textile industry) over and at the demise of that of the NAC region.

Except for the banana sector in the region, it seems unlikely that the rest of the regional export sectors could afford the payment of high levels of wages. The sector's large-scale corporate unit (the UFC) grew, but was --apparently-- instrumental, in the economic stagnation of the region.

This revealed an extraordinary paradox whereby economic stagnation took place with a prevailing high level of wages. That is, the hindrances to economic development and the effects of the slugging down of economic growth in the NAC region, were taking place despite the ruling of a high wage economy. In fact, the effect of stagnation " was felt more than elsewhere in Santa Marta, Barranquilla and Cartagena [major cities of NAC region]"².

The most significant example of this was that of the NAC region's cotton cultivation destined for export. It was costed in the international market. Exposed to some similar predicaments, serious backwash effects swept the regional cotton textile industry for domestic consumption.

However, there were other alternate or complementary reasons for this: one was competition from and protection for, the industry of the interior of Colombia, as transportation improved. Another was the relative dynamism of the coffee economy of the interior, and its better resistance to the Depression, compared with bananas in the NAC region.

We suggest this was even more indicative, because of the linkage potential that

cotton had for the regional economy. Although not touching on the subject of wages, Helmsing³ has recently, eloquently shown that this potential was undoubtedly, historically true. He said that cotton, although constituting " only a small fraction of domestic demand ... in the early 1950s [sic] ... by the late 1960s and early 1970s [it] became one of Colombia's most important nontraditional export products."⁴

Indeed, he discussed some of the main impacts within the NAC region of cotton production, showing that it " triggered a number of developments including the creation of a new departmental government [Cesár], government, commerce, personal services and industry"⁵ He finally argued that " these indirect effects, rather than the more regressively distributed direct effects, provide the key to understanding this case of regional change."⁶

High wages nevertheless, were also masks for bad contractual conditions –from which private contractors and the UFC benefited. The former as intermediaries earning commission. The latter, by not paying fringe benefits ruled by law –major *leakages* by any measure.

Thus, the banana export sector generated another significant paradox. Parallel to the prevailing level of wages it set, the UFC strongly influenced collective bargaining. It also solidified workers' legal labour rights and prompted striking action to achieve them. It also generated internecine political violence. Despite dire contractual conditions and the other aforementioned factors, wage levels were still much higher in the NAC than in the interior.

The thesis suggests that structural constraint of labour market imperfections which created labour shortage and resulted in high wages, contribute to the explanation of economic stagnation in the NAC region. The nature of the product complements the explanation of the region's stagnation. The scales of raw cotton exploitation and the technical quality of the fibre for international competition, were two elements within the nature of the product that played relevant roles.

The scale was small and revealed constraints --such as the historical ones of the '*hacienda*' system and labour shortage.

There were several consequences of these constraints. One was low output of raw material at high uncompetitive prices (although large-scale cultivation was dropped because of lack of appropriate fibre variety). A revealing one was deficiency in cultivation techniques that made the product inadequate for export. The crucial higher level of wages destabilized the potential position for more income distribution because high wages discouraged hiring of labour and quality control of picking.

Nevertheless, despite low acreage for example, high yields were accomplished. Although cultivation costs (other than wages) were high, the NAC region was the major source of cotton supply in the country. More surprisingly however, was that cotton proved even to be profitable (at least in the mid twenties). Profitability however, came from the fibre's 'variety' or quality of the product, paid at import price premiums.

It was a domestic sellers market. Even by supplying anywhere between 75 and 90 per cent of Colombian produced cotton, the NAC region could not meet the country's total demand for fibre. This was due to the upsurge in national consumption that took place between 1922 and 1927.

Raw cotton cultivation was relevant, for it showed that raw material was available locally. It revealed particular problems it posed as an export. It also revealed that what was wrong for export was acceptable for domestic economic linkage. Mixed fibre resulted suitable for the type of coarse cloth that the domestic market demanded. Except for the inability to withstand payment of high wages that the banana export sector was able to set, our evidence suggests spinning and weaving for domestic consumption were therefore likely to have been a definitive economic alternative for the economic development of the NAC region.

But failure of the NAC region textile industry to introduce technological changes after 1926, was also an important explanation for its decline. It may be argued that as the peak of the textile industry in the region was in 1926 and wages plummet everywhere from 1930 onwards, it seems inadequately proved, that high wages caused decline in the NAC textile industry.

This should be viewed from the wider context of the several peaks reached by the number of spindles in the Colombian textile industry. Equally, during the 1926 and 1929 peaks, the interior witnessed a high level of government labour wages, due to public works schemes. And thirdly, despite having the largest scale corporate unit in the nation (Obregón), the NAC region's textile region, only had between 31 and 42 per cent of the nation's spindles between 1910 and 1929.

Two major lessons may be drawn from the results of this thesis. The first is what not to do. There is no need to appeal to national explanations for regional economic development problems. Here we hope to have counterbalanced the excessive emphasis on coffee in the literature on economic development and economic history of Colombia. Most important, this thesis *disproves the usual assumption about the lack of information on wages*.

The second is an offshoot of the first: to persevere in research of economic data that usually seem to avoid us. This is especially so, because in this thesis we do confirm -within the context of economic development and history in general- that despite the painstaking and often rewardless search for primary economic data, once found, wage rates are definitely among the most cardinal economic statistics. By presenting real and nominal wages for labour in the NAC region of Colombia we expect to change the traditional pattern of thought about the region that little research and analysis of its economic history had managed to establish.

This is so because it is from these wage rates that we have can show and conclude for the first time in the analysis of the economic history of Colombia that there existed a high-wage economy in the NAC region. There was already a low-wage

interior existent at the turn of the century. Indeed, its coffee sector portion largely benefited from non-pecuniary income during the first three decades of the present century. But the NAC region urban government wage level was already relatively high; and railways in the region showed an initial isolated high level as well.

The region's wages initiated a pattern that upset the economic development process of the region, wage-earners abruptly enjoying high pay. It was the banana export sector that initiated the suddenness of payment of relatively higher wages and allowed the sector to be paramount in breaking wage patterns in the region and the nation.

Equally, with the help of wage evidence we can suggest *not only that labour market segmentation did exist, but that it was an important market imperfection. At the least, it helped understand and explain why the paradox of a high wage economy and economic stagnation persisted.* But, the higher the degree of corporativeness, the more high wages could be afforded and the greater the application of segmentation. Thus, it was in the NAC region, that the presence of the major foreign capital investment, the UFC, introduced a systematic segmentation strategy with vehement effects on the regional economy.

With its introduction of controlled segmentation by means of a new system of control in the regional labour process, the banana export sector consolidated its corresponding regional labour market structures in its economic area of influence. It also significantly contributed to the decline of economic growth and development in the NAC region.

The system allowed more control, differentiation between workers' tasks and greater fragmentation of informal work groups. It structured, but also destructured the regional labour market. Internal and external destructure of the labour market took place along with the effort to maintain a wage high enough to retain labour within each economic sector until it was not feasible to be competitive with the wage levels the UFC set.

This happened when the UFC cut its own wage rates from high to lower ones at the end of the third decade of this century. By means of segmentation a destructured labour force emerged, the banana sector therefore witnessing heavy unemployment. The process showed a dynamic effect with the presence of straightforward differentiation due to experience on the job and fragmented informal work segmentation.

Brown has pointed out that " formal staple theory can contribute little to the analysis of ... political and economic complexities,"⁷ such as " [sic] foreign capital investment's strength derived from immunity to domestic ... politics"⁸. But the nature of the production function --that is, the nature of how the staple is produced-- was one paramount to the understanding of the operational presence of segmentation as an imperfection.

The banana staple (produced by international monopoly capital and under monopsonic conditions), the cotton staple (produced under a myriad of deficiencies) and the economic historic reality of labour shortage and the particular character of the region's labour force that it enhanced, provide more than incidental weight to how a staple is produced.

The nature of the production function is in itself theoretically inherent to the useful ideas of 'growth pole' and 'staple growth'. This, we suggest, reconciles our initial query. It contributes to the weight of the utility of a theoretical framework of imperfection. Without it reconciliation would have been not only difficult but impossible.

As an imperfection, a good market reason such as the nature of the product, serves as an additional explanation for high wages. The seasonal and perishable nature of the banana as a foodstuff, made wages rise above average.

Cotton cultivation seems to have been severely affected by the high wages set by the banana sector. Rural labour wage rates in the cotton cultivating areas of the

NAC region were at the level at which immigrant labour was being enticed but never materialised as a solution. Although common sense may suggest deflation was a problem, according to our evidence, cotton cultivation massively increased its level of wages 431.6 % in five years (from 1905 to 1910). By 1924, levels had dropped just under 9 % .

One should be careful, however, to bear in mind that common sense equally suggests that interior real coffee wage levels --which included the non-monetary element and were demonstrably lower than real NAC cotton cultivation wage levels in 1905 and 1910-- were equally subject to the problem of deflation.

The price pressure set by the banana sector in the region also forced general agricultural labour to place higher wage demands, particularly coffee sector labour. The cotton textile industry however, held out not only paying relatively high wages, but *high wages in relation to low productivity*, until it was out-priced.

Neither cotton nor coffee (except in 1927) were likely to raise wages further in order to compete with those set by the fruit staple, once wage rates were cut down in the thirties by the banana sector. But another suggestion here is that, *informalisation* of the labour force in the region, may have been shaped.

Real wage range levels in the NAC cotton textile industry in 1908 were similar to some of the banana sector's urban wage range levels. The region's textile industry wages surprisingly reached a high level in 1911. We suggest it is likely that it strove at least until 1921, to maintain wage levels at relatively high levels. But it is also plausible that cotton cultivation and the cotton textile industry began to be priced out by banana wage range levels somewhere between 1911 and 1912.

The coffee sector (and to some extent, urban industry in general) tried to hold out in face of the rise in wages. Its wage level was still high -even higher than the urban cotton textile industry wage level. But, although low compared to banana

sector wage levels, those of the cotton textile industry showed relative consistency between the end of the first and the beginning of the third decade of this century.

After 1931, the banana sector's UFC, began to decrease wages by gradually lowering the reproduction cost of labour as the prospects for survival of the banana export sector-led high-wage economy began to waver. The NAC region's urban industry was critically attempting to match the high wages the banana export sector set, but failed to do so. It seems plausible that this forced the redundant labour force --positioned at the lower end of the segmented rural banana sector and priced-out export sectors into the urban area-- to become 'informalised'. Much of it was likely to be an already differentiated contingent. This was done

Therefore, the NAC region, with a high-wage economy pricing out other sectors, such as cotton cultivation and textile production (where more solid economic linkages could have prevailed), was ill-matched facing interior produced goods. Interior 'linkage-creating' textile industry wages were not low enough to compete with foreign produce. The NAC region's industry could scarcely do better to meet those competitive prices. So, the interior economy could survive at the expense of and stagnation of its internal competition, namely the other regions, of which one was the NAC.

1. Kepner, Op. Cit., p.129.
2. Bell, *Colombia, A Commercial ...*, Op. Cit., p.74.
3. Helmsing, A., H., J., *Firms, Farms, and the State in Colombia: A Study of Rural, Urban, and Regional Dimensions of Change*, (Boston: Allen & Unwin, Inc., 1986).
4. Helmsing, Op. Cit. p.15.
5. Helmsing, Op. Cit., pp. 15 and 267.
6. Ibid.
7. Brown, J., C., *A Socioeconomic History of Argentina, 1776 - 1860*, (Cambridge University Press, 1979), p.234.
8. Ibid.

APPENDIX 1:
NAC REGION AGRICULTURAL DAILY NOMINAL WAGE RATES AND RANGES*
1904-1933

	<i>Banana</i>	<i>Cotton</i>	<i>Coffee</i>	<i>General</i>
1904	2s (i)*	2s (i)*		
1905		US\$0.16 (8d.)(female)		
1906	US\$0.50			
1907	US\$0.50			
		US\$0.50 (ii)*[B/quilla]		
1908				CGP\$0.65 [general 'field' labour]
1909	CGP\$0.64 ['desmonte'] [Sta. Marta] CGP\$0.99 ['cutters'] [Sta. Marta]			
1910		CGP\$0.75 (iii)* ['pickers'/Atlantico (B/quilla)]		(4s - 5s)[agricultural labour] CGP\$1.20 [foreman] CGP\$1.10 [rural labourer]
1911			(3s 6d - 4s)[Sta. Marta]	CGP\$0.50 - 0.60 [general agricultural labour]
1912				
1913	CGP\$1.00		CGP\$0.78	
			CGP\$0.93	
1914	CGP\$(0.60 - 1.00) CGP\$1.00			
			CGP\$1.28	
1916	CGP\$0.60		CGP\$0.62	
1917	CGP\$0.80		CGP\$0.68	
1918	US\$0.78 [Sta. Marta] CGP\$2 CGP\$0.69			
1919				CGP\$0.35 [general labour]
1920	CGP\$0.90 CGP\$1.50			CGP\$(0.80 - 1.20) [agricultural labour] CGP\$0.60 [common]
1921				
labour]	CGP\$1.50			
			CGP\$0.99	
1922	CGP\$1.40		CGP\$0.95	
1923	CGP\$1.50			
1924	CGP\$1.30			
		CGP\$1.00		
1925	CGP\$2			
1926	CGP\$0.65 CGP\$0.85 CGP\$1.01 CGP\$1.26 CGP\$2			
1927	CGP\$1.17/CGP\$2 CGP\$(1.30 - 3.00) [male/female] CGP\$0.75 [child/labour]			
1928	CGP\$1.67			
1929	CGP\$1.07 CGP\$2 6s 6d			
1930	CGP\$(1.00 - 1.25) CGP\$2 CGP\$(1.00 - 1.65) CGP\$(1.00 - 1.50) CGP\$(1.20 - 2.00) CGP\$1.50			
1931	CGP\$(1.00 - 1.50)			
1932	CGP\$0.80			
1933	CGP\$0.60 CGP\$0.49			

Source: Chapter V; * : in Colombian United States and British currency; (i) \$1 = 20 shillings, thus, 2 s. = 2 / 20 = \$ 0.10 ; (ii) 0.4 + 0.6 = 1 / 2 = 0.50 ; (iii) 3 arrobas per day @ Colombian Peso 25 per arroba = Colombian Gold Peso 0.75 per day.

APPENDIX 2:
NAC REGION AGRICULTURAL DAILY REAL
WAGE RATES AND RANGES : 1904-1930
(CGP\$s)

General Agriculture

1904	0.66
1910	1.33 - 1.68
1912	0.56 - 0.69
1919	0.30
1920	0.62 - 0.92
1921	0.53

Cotton Cultivation

1905	0.19
1910	1.01
1924	0.92

Coffee

1911	1.23 - 1.41
1912	0.90
1913	0.88
1914	1.36
1916	0.85
1917	0.81
1918	0.72
1920	0.66
1921	0.88
1922	0.88
1927	1.20 - 2.78
1930	1.18 - 1.47

APPENDIX 3:
**NAC REGION AGRICULTURAL DAILY REAL
WAGE RATES AND RANGES : 1906-1933
(CGP\$s)**

Banana

1906	0.69
1907	0.84
1908	0.87
1909	0.78/1.21
1910	1.49/1.62
1912	1.15
1913	0.94
1914	0.64 - 1.06
1916	0.82
1917	0.95
1918	0.76 - 2.08
1919	0.78
1920	1.15
1921	1.33
1922	1.30
1923	1.32
1924	1.19
1925	1.79
1926	0.80
1927	1.08 - 1.85
1928	1.42
1929	1.03/1.57/1.92
1930	1.18-1.94/1.181-1.77/1.41-2.35

Source: Chapter V.

APPENDIX 4:
FRENCH IMPORTS OF 'NOIX DE COROZO': 1900 - 1927

	Quantity imported quintal (000's)	Values Francs (000's)
1900	11.2	370
1901	11.3	282
1902	7.9	197
1903	14.2	354
1904	21.5	753
1906	16.8	847
1907	20.0	1302
1908	11.1	665
1909	6.7	667
1910	18.2	1634
1911	19.1	1435
1912	20.5	1746
1913	39.6	2973
1915	8.7	741
1916	12.4	1177
1917	19.9	1989
1919	11.5	1442
1920	16.0	4792
1921	6.8	887
1922	3.0	324
1923	0.8	95
1924	5.6	1300
1925	4.3	1632
1926	2.7	1068
1927	0.5	131

Source: Tableau Generale du Commerce et de la Navigation, (Paris, France, years 1900 to 1930).

APPENDIX 5:
FRENCH DIVIDIVI IMPORTS: 1901 -1925
 (000's Francs)

	quintaux metriques	Value
1901	2245	45
1906	3631	91
1907	2680	67
1910	1865	301
1911	3422	474
1913	2122	102
1915	468	315
1917	229	1031
1918	32	134
1919	183	824
1925	737	118

Source: *Tableau Generale du Commerce et de la Navigation*, (Paris, France, years 1900 to 1930); Note: (*) = French imports of 'teintures preparees' and/or 'teintures et tannins' have been taken as proxy values for absence of 'dividivi' values for years 1910, 1911, 1913, 1915, 1917, 1918, 1919, and 1925.

APPENDIX 6:
GERMAN DIVIDIVI IMPORTS FROM NAC REGION: 1896 - 1930

	<i>Value</i>	<i>Volume</i>	<i>Total Value</i>
1896	179	9410	248.3
1898	386	20315	475.6
1899	473	24904	477.0
1900	211	8112	211.8
1901	283	12879	480.7
1902	496	20650	654.5
1903	266	12080	501.8
1904	110	4982	114.6
1905	274	12455	552.9
1906	271	10853	319.2
1907	501	22771	617.0
1908	551	28982	655.5
1909	903	41043	1054.81
1910	442	21007	634.84
1911	379	19885	540.77
1912	291	14550	544.08
1913	190	9507	199.07
1914	73	3643	144.20
1921	861	1625	1076.30
1922	2841	692	13308.00
1923	5	229	524.70
1924	5	251	573.90
1925	6	220	573.60
1926	40	1672	684.90
1927	221	8970	1687.30
1928	60	2151	1001.80
1929	78	3130	890.30
1930	142	6878	401.20

Sources: (i) years 1908-1912: Statistik des Deutschen Reichs, Band 261, XX, Der Auswärtiger Handel im Jahre 1912, Der Verkehr mit den einzelnen Ländern, (Berlin, 1913), p. 22, 23 (Columbien) and p. 149 (Venezuela); (ii) years 1913 and 1922-1924: Statistik des Deutschen Reichs, Band 319, II, Der Auswärtiger Handel in den Jahren 1923 und 1922 verglichen mit den Jahren 1913 und 1922, (Berlin, 1925), p. II.108 (Columbien) and p. Venezuela and Statistik des Deutschen Reichs, Band 317, Der Auswärtiger Handel in den Jahren 1923 und 1924 verglichen mit den Jahren 1913 und 1922; (iii) years 1925-1929: Statistik des Deutschen Reichs, Band 329, Der Auswärtiger Handel, im Jahre 1925 verglichen mit den Jahren 1913 und 1924; Statistik des Deutschen Reichs, Band 339, Der Auswärtiger Handel im Jahre 1926 verglichen mit den Jahren 1913 und 1925; Statistik des Deutschen Reichs, Band 351, I, Der Auswärtiger Handel im Jahre 1927 verglichen mit den Jahren 1925 und 1926, Statistik des Deutschen Reichs, Band 366, I, Der Auswärtiger Handel im Jahre 1928, verglichen mit den Jahren 1926 und 1927, Statistik des Deutschen Reichs, Band 383, Der Auswärtiger Handel im Jahre 1929; (iv) years 1896-1907, 1914, 1921 and 1930: Monatliche Nachweise über den Auswärtigen Handel Deutschlands (Berlin, 1896-1930); Notes: (i) volume represents quantity in dz (doppelpcentner) = 100 kgrs.; (ii) Value in 1000 Dollar US Gold; (iii) 1906 volume and value only represent March-December figures; 1907 volume and value only represent Jan. - September figures; 1921 volume and value only represent July -December figures; (vi) 1896-1907, 1914, 1921 and 1922 volume and value are 'SpecialHandel', not 'GesamteigenHandel'; (vii) 1921 values are only for South America. Thus, we assign 50 % to Venezuela and 50 % to Colombia. Price is taken from total German import volume and value; (viii) 1922 Colombian volume is from Statistik des Deutschen Reichs, Band 319, II (quoted below). Price and thus value is taken from total German import value divided by its volume. Venezuelan 25 % is taken from the 50 % of the total South America value. Both the German and Venezuelan figures come from Monatliche Nachweise über den Auswärtigen Handel Deutschlands (Berlin, 1922); (ix) years 1913 and 1922-1930 reflect Colombian and Venezuelan values for Algarobilla, Bablah, Dividivi, u.smst., an.g., and Gerbstoffe Kino, not for Dividivi alone; (x) years 1908-1913, corresponding values for Venezuela reflect Algarobilla, Bablah, Dividivi, u.smst., an.g., and Gerbstoffe Kino, not for Dividivi alone; (xi) exchange rates used come from Bidwell, R., L., Currency Conversion Tables (A Hundred Years of Change), (London, 1970), p. 22-23; (xii) figures for years 1915-1920 are not available ('Dieser Abschnitt ift im vorliegenden Jarbuch nicht behandelt') in Statistisches Jahrbuch für das Deutsche Reich (Berlin, 1915-1920).

APPENDIX 7:
NAC REGION URBAN DAILY NOMINAL WAGE
RATES AND RANGES * : 1901-1929
(CGP\$s)

year	job description	wage levels / ranges
1901	porter	0.66
	guard	1.00
	concierge	1.00
1902	railway labour	0.80 [B/q.]
1903	railway labour	0.55
	common labour	0.33
	dairy labour	0.44
	brickmaker	0.33
	streetcar labour	0.66
	steamboat engineers	1.09 [B/q.]
1906	brick industry labour	0.63 [B/q.]
1907	brick industry labour	(0.40 - 1.30) [C/ga]
1908	textile female labour	(0.40 - 0.50) [C/ga]
	shoe industry labour	(0.80 - 1.49) [C/ga]
	shoe industry apprentice	0.50
1909	banana industry:[all St.M]	
	mail clerk	0.10
	messenger	0.13
	cook	0.40
	servant	0.50
	stableman	0.57
	ship 'cargador'	0.60+
	ship 'arrumador'	0.90+
	foreman on shore	0.67
	checker	0.75
	telephone clerk	0.80
	agent	0.83
	porter	0.90
	office boy	1.00
1910	girl weavers	0.60 [C/ga]
	boy spinners	(0.35 - 0.40) [C/ga]
	railway labour	(0.99 - 1.24) [St.M]
1911	flour industry labour	(0.70 - 0.80) [B/q.]
	soap industry [I]	(0.50 - 3.00) [B/q.]
	soapindustry[II]	0.70 [B/q.]
	textile industry	(0.50 - 1.50) [B/q.]
1912	textile industry	0.40
	railway navvy	(0.70 - 0.80) [B/q.]
1913	general labour	0.50
1914	factory labour	(0.50 - 1.50)
1915	factory labour male	(0.50 - 1.00)
	factory labour female	(0.25 - 0.35)
1916	construction labour	(1.50 - 3.00)
1920	dock & railway labour	(1.00 - 3.00)
1921	cargoe labour	1.20
	cargoe labour	(0.80 - 1.20)
	railway labour	1.20
	cotton textile labour	(0.30 - 0.80)
1922	banana industry:[all St.M]	
	checkers	0.55
	rectificadores	0.64

	cargadores	0.66
	forklift operators	0.69
	machinerymen	0.70
	arrumadores	0.91
1924	common labour	1.20
	gardener	1.25
	manufacturing labour	(0.60 - 1.50)
	carpenter's helper	1.50[St.M]
	machinist	2.00[St.M]
	mechanic	2.00[St.M]
	carpenters	(2.00 - 2.25)[St.M]
1927	adult labourer	(0.50 - 1.00)
	child labourer	(0.55 - 0.90)
1929	railway labour	(1.88 - 2)
	banana industry:[all St.M]	
	checkers	3.00
	foreman	1.85
	labourer	1.70

Source: Chapter V; Note: [B/q.] = Barranquilla; [C/ga] = Cartagena; [St.M] = Sta. Marta

APPENDIX 8:
NAC REGION URBAN DAILY REAL WAGE
RATES AND RANGES : 1908-1924
(CGP\$)

Cotton Textile Industry

1908	(0.53 - 0.71)
1910	(0.81)/(0.47 - 0.54)
1911	(0.71 - 2.14)
1912	0.46
1921	(0.27 - 0.71)

Brick Industry

1903	0.33
1907	(0.64 - 1.89)

Shoe Industry

1908	(0.67)/(1.05 - 1.97)
------	----------------------

Flour Industry

1911	(1 - 1.14)
------	------------

Soap Industry

1911	(1)/(0.71 - 4.29)
------	-------------------

General Industry Labour

1924	(0.55 - 1.36)
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APPENDIX 9:
NAC REGION OTHER URBAN DAILY REAL
WAGE RATES AND RANGES : 1902-1922
(CGP\$s)

Dock/Railway

1902 3.1
 1903(0.80)/(0.96)/(1.58)
 1910(1.34 - 1.68)
 1912(1.81 - 0.92)
 1920(0.77 - 2.31)
 1921 1.06
 1929(1.31 - 1.41)

General/Common/Unskilled

1903(0.47)/(0.63)
 1913 0.47
 1914(0.53 - 1.60)
 1915(0.59 - 1.76)/(0.29 - 0.41)
 1924 1.09

Skilled

1916(2.05 - 4.11)
 1924(1.14)/(1.36)/(1.82)/(1.82 - 2.05)

Banana Industry

1909(0.12)/(0.16 - 0.24)/(0.49)/(0.61)
 (0.70)/(0.73)/(0.82)/(0.92)/(0.98)
 (1.01)/(1.10)/(1.22)
 1921(0.71 - 1.06)
 1922(0.51)/(0.59)/(0.61)/(0.64)/(0.65)/(0.84)

Source: Chapter V

APPENDIX 10:
INTERIOR REGION DAILY REAL WAGE LEVELS AND RANGES:
1900 - 1930
(CGP\$s)

<i>Rural Agriculture</i>		
<i>General:</i>	1900	0.10 - 0.15
	1907	0.31
	1911	0.21 - 0.50
	1913	0.35
	1924	0.91
	1926	0.32
	1927	(0.66)/(0.42)/(0.37)
<i>Coffee:</i>	1903	9.49 [war wages]
	1927	(0.19 - 0.37)/(0.19 - 0.28)/(0.09 - 0.19)
	1930	1.09
<i>Rural Mining:</i>	1909	0.33 - 0.62
<i>Urban Industry</i>		
<i>Cotton Textile:</i>	1911	0.57
	1921	(0.31 - 0.42)
	1927	(1.58)[male]/(0.69)[female]/(0.46)[child]
	1928	(1.48)[male]/(0.60)/(0.41)
<i>Railway:</i>	1912	0.63
<i>House servants</i>	1900	(0.001 - 0.15)

Source: Chapter VI

APPENDIX 11:
DAILY REAL WAGES IN INTERIOR
COFFEE HACIENDAS: 1900 - 1930
(CGP\$'s)

	<i>I</i>	<i>II</i>
1900	0.01	0.004
1901	0.01	0.004
1902	0.27	0.024
1903	0.24	0.017
1904	0.29	0.21
1905	0.22	0.18
1906	0.27	0.20
1907	0.29	0.21
1908	0.29	0.21
1909	0.24	0.20
1910	0.31	0.21
1911	0.33	0.22
1912	0.34	0.20
1913	0.24	0.17
1914	0.25	0.18
1915	0.26	0.20
1916	0.39	0.28
1917	0.38	0.25
1918		0.22
1919		0.43
1920		0.44
1921		0.30
1922		0.43
1923		0.82
1924		1.08
1925		1.20
1926		0.86
1927		0.99
1928		1.24
1929		0.86
1930		0.87

Source: (i) Data in Columns I (1900 - 1917) and II (1900 - 1918) was taken from ' Table 17. Hacienda Jonas. Employment, Wages and Trends in the family money income of the 'agregados', 1896 - 1918 (in paper pesos), p.107 while data in Column II (1919 - 1932) was taken from Appendix 2. Piece-rate wages in two coffee haciendas, 1879 - 1933, p. 260 both in Palacios, M., *Coffee in Colombia, 1875 - 1980*, (Cambridge, 1980), p. 107; Notes: (i) Column I denotes 'agregados' at Hacienda Jonas; and (ii) Column II denotes 'chapoleros' (coffee harvesters) daily wages at Hacienda Jonas; (iii) Pricers deflated by Bogota price index in Appendix 12.

APPENDIX 12:
INTERIOR MANUFACTURING INDUSTRY UNSKILLED LABOUR WAGES
DAILY AVERAGE REAL WAGE LEVELS: 1905 - 1930
(CGP\$'s)

1905	0.26
1906	0.34
1907	0.40
1908	0.35
1909	0.28
1910	0.39
1911	0.41
1912	0.33
1913	0.28
1914	0.38
1915	0.40
1916	0.47
1917	0.43
1918	0.39
1919	0.42
1920	0.45
1921	0.67
1922	0.72
1923	0.80
1924	0.81
1925	0.77
1926	0.58
1927	0.74
1928	0.88
1929	0.68
1930	0.88

Source: 'Cuadro No. 6, Salarios Sector Privado Industria Fenicia; Trabajadores No Calificados; Salario Diario Promedio de Cargos', in Urrutia-Montoya and Arrubla, M., Compendio de Estadísticas Historicas Colombianas, (Bogota, 1970), taken from the Anuario Estadístico del Municipio de Medellín, or from private records of the industries mentioned. Note: Prices deflated by Bogota price index in Appendix 24.

APPENDIX 13:
INTERIOR INDUSTRIAL FEMALE LABOUR DAILY
REAL WAGE AVERAGES: 1916 - 1930
(CGP\$s)

1916	0.40
1917	0.36
1918	0.31
1920	0.41
1921	0.38
1922	0.40
1924	0.46
1925	0.52
1926	0.40
1927	0.57
1928	0.67
1929	0.53
1930	0.63

Source: Ospina-Vasquez, L., *Industria y Proteccion en Colombia, 1810 - 1930*, (Medellin, 1979), p. 444; Notes: (i) Averages are for Medellin industry conglomerate; (ii) Prices deflated by Bogota food price indexes in Appendix 24.

APPENDIX 14:
INTERIOR MANUFACTURING INDUSTRY AVERAGE REAL WAGE LEVELS: 1922
(CGP\$'S)

Textile

<i>Males</i>	<i>Wages</i>	<i>Females</i>	<i>Wages</i>
60	1.48	240	0.53
15	1.39	30	0.56
70	0.93	180	0.42
20	<u>1.20</u>	110	<u>0.56</u>
	$\bar{x} = 1.20$		$\bar{x} = 0.50$

Cigars & Cigarettes

<i>Males</i>	<i>Wages</i>	<i>Females</i>	<i>Wages</i>
113	1.46	277	0.84
11	0.88	33	0.88
10	1.11	50	0.65
2	<u>0.46</u>	35	<u>0.46</u>
	$\bar{x} = 1.38$		$\bar{x} = 0.79$

Matches

<i>Males</i>	<i>Wages</i>	<i>Females</i>	<i>Wages</i>
11	0.65	43	0.56

Beer & Soft Drinks

<i>Males</i>	<i>Wages</i>	<i>Females</i>	<i>Wages</i>
90	0.88	21	0.88
25	0.83	11	0.37
112	<u>0.56</u>	106	<u>0.56</u>
	$\bar{x} = 0.71$		$\bar{x} = 0.59$

Coffee Grinders

<i>Males</i>	<i>Wages</i>	<i>Females</i>	<i>Wages</i>
5	0.83	80	0.46
6	1.02	250	0.46
14	0.83	200	0.32
8	1.02	104	0.37
6	0.46	160	0.37
6	1.02	71	0.65
10	0.93	300	0.32
10	0.93	100	0.46
4	<u>1.39</u>	160	<u>0.46</u>
	$\bar{x} = 0.92$		$\bar{x} = 0.41$

Source: Anuario Estadístico del Municipio de Medellín, Entrega VIII, 1922. Notes: Wages deflated by 1922 food price index in Appendix 24.

APPENDIX 15:
MALE, FEMALE AND CHILD LABOUR
REAL WAGE RATE AVERAGES
(CGP\$s)

Male Labour

<i>Year</i>	<i>No. Employed</i>	
1926	969	1.22
1927	945	1.46
1928	1,168	1.42
1929	986	1.66
1930	1,063	1.71
		$\bar{x} = \text{CGP\$ } 1.30$

Female Labour

<i>Year</i>	<i>No. Employed</i>	
1926	1,906	0.56
1927	2,072	0.63
1928	2,134	0.67
1929	1,943	0.69
1930	1,742	0.77
		$\bar{x} = \text{CGP\$ } 0.66$

Minors Labour

<i>Year</i>	<i>No. Employed</i>	
1926	179	0.39
1927	268	0.42
1928	279	0.40
1929	189	0.44
1930	201	0.60
		$\bar{x} = \text{CGP\$ } 0.45$

Source: Republic of Colombia, Resúmenes Generales Referentes a la Industria de Hilados y Tejidos de Algodón. Boletín del Ministerio de Industrias, No. 34 - 42, Abril - Diciembre, 1933), p. 352. Deflation by price indexes in Appendix 24.

APPENDIX 16:
AGRICULTURAL (BANANA) DAILY NOMINAL WAGES: 1909
(CGP\$s)

	Type of work	Quantity of work	Price paid per month	Total Price paid per month	
1.	Limpieza y Desmonte*	77 carr.*	@ 0.28	21.56	
2.	"	44 "	@ 0.22	9.68	
3.	"	33 "	@ 0.28	9.24	
4.	"	69 "	@ 0.24	16.56	
5.	"	41 "	@ 0.28	11.48	
6.	"	25 "	@ 0.25	6.25	
7.	Desmonte	309 "	@ 0.05	15.45	
8.	"	473 "	@ 0.05	23.65	
9.	"	73 "	@ 0.06	4.38	
10.	"	30 "	@ 0.07		2.10
11.	"	190 hrs.*	@ 0.08	15.20	
12.	Corte de Guineos	3123 racimos*	@ 0.02 c/u	62.46	
13.	Desmonte	215 carr.	@ 0.05	10.75	
14.	"	252 "	@ 0.05		12.60
15.	"	60 "	@ 0.05	3.00	
16.	[ill.]	180 braz.*	@ 0.05		9.00
17.	"	170 "	@ 0.05	8.50	
18.	"	130 "	@ 0.05	6.50	
19.	Corte de Guineos	781 racimos*	@ 0.02 c/u	15.62	
20.	Limpieza y Desmonte	160 carr.*	@ 0.20	32.10	
21.	"	210 "	@ 0.21	44.10	
22.	"	225 "	@ 0.22	49.50	
	Corte de Guineos	1978 racimos*	@ 0.02 c/u	39.56	

Source: United Fruit Company private document. Santa Marta Division. Planilla de Trabajadores por Contrato y Ajuste. Sheet No. and Register No. illegible. Semana que termina el 3 de Julio de 1909; Notes: A.- On the week ending 3rd July, 1909, the United Fruit Company was paying the wages mentioned above to individual persons -by contract and/or task presumably- on just two of its working districts -the Tablazo and Guamacho districts; B.- (*): (i) 'limpieza y desmonte' is translated as 'cleaning and clearing' [the hinterland]; (ii) 'carr.' is assumed to mean the abbreviation for either the word 'carreta' or 'carretea', that is, a loadful of hinterland (bush, grass and twigs) clearing; (iii) 190 hrs. @ \$0.08 is a relevant figure for hourly pay on piece task work basis for the year; (iv) corte de guineos, that is, cutting of bananas, is labour being paid by the 'racimo', i.e., by the bunch; (v) 'braz.' is assumed to mean 'brazos', i.e., 'arms', literally, but it really means one individual person labouring. Therefore, 180 braz. is assumed to be 180 'hands', i.e., 180 labourers; (vi) [ill.] = illegible handwriting on original document.

APPENDIX 17:
URBAN (BANANA SHIPLOADING) DAILY
NOMINAL WAGES: 1909
CGP\$s

	Type of work	Ship 'A'	Ship 'B'	Fine Fondo Union	Total Paid per month
1.	Arrumador	2.62	3.37	0.10	5.89
2.	Cargador	1.72	2.47	0.10	4.09
3.	"	1.72	2.47	0.10	4.09
4.	"	1.72	2.47	0.10	4.09
5.	"	1.82	2.47	0.10	4.19
6.	"	1.72	2.47	0.10	4.09
7.	"	1.72	2.47	0.10	4.09
8.	"	1.22	1.47	0.10	2.59
9.	"	1.72	1.47	0.10	4.09
10.	"	1.72	1.47	0.10	4.09
11.	"	1.72	1.47	0.10	4.09
12.	"	1.72	1.47	0.10	4.09
13.	"	1.72	1.47	0.10	4.09
14.	"	1.72	1.47	0.10	3.59
15.	Arrumador	2.62	3.37	0.10	5.89
16.	"	2.62	3.37	0.10	5.89
17.	Cargador	1.72	2.47	0.10	4.09
18.	"	1.72	2.47	0.10	4.09
19.	"	1.72	2.47	0.10	4.09
19.	"	1.72	2.47	0.10	4.09
20.	"	1.72	2.47	0.10	4.09
21.	"	1.72	2.47	0.10	4.09
22.	"	1.72	2.47	0.10	4.09
23.	"	1.72	2.47	0.10	4.09
24.	"	1.72	2.47	0.10	4.09
25.	"	1.72	2.47	0.10	4.09
26.	"	1.72	2.47	0.10	4.09
27.	"	1.72	2.47	0.10	4.09
28.	"	1.72	2.47	0.10	4.09
29.	"	1.82	2.47	0.10	4.19
30.	Cargador	1.72	2.47	0.10	4.09
31.	"	"	"	"	"
32.	"	"	"	"	"
33.	Arrumador	2.62	3.37	0.10	5.89
34.	"	"	"	"	"
35.	"	"	"	"	"
36.	Cargador	1.72	2.47	0.10	4.09
37.	"	"	"	"	"
38.	"	"	"	"	"
39.	"	"	"	"	"
40.	"	"	"	"	"
41.	"	"	"	"	"
42.	"	"	"	"	"
43.	"	0.50	1.00	0.10	4.09
44.	Arrumador	2.62	3.37	0.10	5.89
45.	"	"	"	"	"
46.	"	"	"	"	"
47.	Cargador	1.72	2.47	0.10	4.09
48.	"	"	"	"	"
49.	"	"	"	"	"
50.	Arrumador	2.62	3.37	0.10	5.89
51.	Cargador	1.72	2.47	0.10	4.09
52.	"	1.22	1.47	0.10	2.89
53.	Arrumador	2.62	3.37	0.10	5.89

Observaciones: (a) Tiempo trabajado por el peonaje en el embarque 659, vapor 'Alleghany'.

Septiembre 23. El día @..... \$ 0.60

De 5 p.m. - 12 a.m. = 7 hrs @ \$ 0.75 0.525

Pasan..... \$ 1.125

Vienen..... \$ 1.125

Septiembre 24. De 12 a.m. a 6 a.m.

seis (6) horas @ \$ 10..... \$ 0.60

\$ 1.725

Para Arrumadores 0.90

\$ 2.625

(b) Tiempo trabajado por el peonaje en el embarque:
vapor 'Chimilpo'.-
Septiembre 24. El dia @ \$ 0.60 \$ 0.60
De 5 p.m. a 12 m.; 7 hrs. @ \$ 0.075..... \$ 0.525
Septiembre 25.
De 12 m. a 6 a.m.; 6 hs. @ \$ 0.10 \$ 0.60
Septiembre 25. El dia @ \$ 0.60 0.60
Pasan..... \$ 2.325
Vienen..... \$ 2.325
Septiembre 25.
De 5 p.m. a 9 p.m.; 2 hrs. @ \$ 0.075..... \$ 0.15
Para los Arrumadores..... 0.90
\$ 3.375

Source: same as in Appendix 1; Notes: A.- On the week ending 26th September, 1909, the United Fruit Company was paying the wages mentioned above to 'Picking-up' gangs, on an individual person basis; B.- Ship 'A' was the Alleghany while Ship 'B' was the Chimilpo.

APPENDIX 18:
BANANA SECTOR SEGMENTATION: 1909
(CGP\$s)

<i>wage</i>	<i>occupation</i>
00.10	mail clerk
00.13	Sevilla messenger
00.20	RioFrio messenger
00.40	cook
00.50	servant
00.57	stableman
00.67	foreman on shore
00.75	checker on board
00.80	telephone clerk
00.83	Cienaga agent
00.90	porter
01.00	office boy
01.06	superintendent
01.13	assistant receiver
01.27	classifier
01.33	paymaster, dep. clerk, assistant chief receiver
01.39	salesman Santa Marta
01.67	foreman on board
02.00	assistant stevedor, wharf superintendent, assistant Sevilla superintendent, assistant Tablazo super-intendent, assistant Rio Frio superintendent
02.08	clerk & typist
02.33	assistant inspector
02.67	clerk
02.78	Bogota agent
02.81	receiver
02.92	book-keeper
03.06	assist. cashier
03.33	assist. chief receiver
04.00	Sevilla superintendent
04.16	inspector
04.17	physician
05.33	chief stevedor
05.83	RioFrio superintendent
06.00	chief receiver
07.50	auditor
08.67	cashier
13.87	manager

Source: United Fruit Company. Private Archives. Santa Marta Division. Planilla de Empleados y Mozos. General Office Account. Sheet 1-2, Register No. 47, September 30, 1909.

APPENDIX 19:
LARGE-SCALE CORPORATE BANANA SECTOR
DAILY WAGE RATES: 1926
(CGP\$s)

	<i>Wage Rate</i>	<i>Type of Job</i>	<i>Total</i>	<i>Sub-Total</i>		<i>Source</i>
1)	0.33	laundress	2	1	11	
		servant	3	1	28	
				1	11	15
				1		17
2)	0.40	cook	1	1	1	
3)	0.50	cook	4	1	1	
				1		11
				1		17
				1		28
		servant	15	2	1	
				6		11
				2		14
				3		15
				2		28
		laundress	3	1	3	
				1		11
		helper	1	4	7	
		clearing woman	3	3	27	
4)	0.67	cook	1	1	1	
		laundress	3	1	1	
				1		16
				1		21
		assistant operation				
		room attendant	1	1		14
		servant	2	1		14
				1		21
		seamstress	2	2		15
		maid	4	4		15
		clerk	1	1		22
5)	0.75	office boy	1	1		4
		helper	2	1		6
					1	
7		water boy	2	1		9
				1		10
		messenger	1	1		12
6)	0.83	cook	5	1		1
				1		3
				1		11
				1		21
				1		26
		servant	2	1		11
				1		21
		maid	1	1		15
		orderly	9	7		15
				2		16
		yardman	3	3		16
		cartman	1	1		16
		assistant gardener	1	1		16
		waiter	1	1		16
		pantry man	1	1		16
		office boy	1	1		16
		house girl	1	1		24
7)	1.00	servant	4	2		1
				2		26
		helper	3	1		1
				1		10
				1		13
		messenger	2	2		5
		labourer	1	1	9	
		porter	2	2		14
		assistant to operation room				

		attendant	2		2		14
		maid	1		1		15
		orderly	5		4		15
16						1	
		2nd Cook assist.	1		1		16
		dishwasher	1		1		16
		waiter	1		1		16
		chief gardner	1		1		16
		yardman	1		1		16
		watchman	1		1		16
		clerk	2		2		22
8)	1.17	porter	2	2		14	
		2nd assist.					
		to laboratory					
		attendant	1	1		14	
		maid	1		1		15
		orderly	1		1		15
		pantry man	1		1		16
		3rd cook	1	1		16	
		servant	2		2		21
		clerk	2		2		22
		In Charge Warehouse	1	1		22	
9)	1.20	waterman	1		1		1
10)	1.25	helper	4		1		1
					1		6
					2		7
		patio cleaner	3		3		1
11)	1.33	porter		2		1	
14							
					1		15
		2nd assist.			1		16
		to 1st cook	1		1		24
		clerk	1		1		24
		messenger	1		1		26
		laundress	1		1		26
		servant	1		1		26
12)	1.40	helper	1		1		6
13)	1.47	laundress	1		1		26
14)	1.50	watchman	3		1		1
					1		13
					1		26
		helper	12	1		1	
					2		6
					6		7
					2		8
					1		12
		golf link					
		caretaker	1		1		5
		labourers	55	3		7	
						12	
8							
					13		9
					4		10
					17		12
					6		25
		motorboy	5		5		8
		cartman	7		6		9
					1		10
		dispenser	1		1		14
		1st assist.					
		laboratory attendant	1		1		14
		police guard	2		2		16
		butler	1		1		21
		clerk	7		1		22
					1		23
					1		24
					2		24
					2		25
		porter	2		1		24
					1		25
		cashier	1	1		24	
		patio cleaner	1		1		26
		grass cultivator	1		1		26
		barn assistant	2		2		26

		milkman	2		2	26
		cook	2		2	26
		servant	1	1	26	
14)	1.50	office cleaner	1		1	26
15)	1.60	fence repairer	1		1	2
		helper	2		1	7
		motor boy	1		1	8
		cultivator	1		1	8
						26
16)	1.66	servant		2		2
25		laundress	1		1	25
		cook	1		1	25
17)	1.67	stableman	1		1	1
		cowhand	1		1	2
		orderly	3		3	15
		washer	1		1	21
		hospital chaplain	1		1	21
		house girl	1		1	21
22		clerk		4		2
					1	23
24						1
		In Charge Warehouse	1		1	23
		packer/utility man	1		1	24
		porter	1		1	27
18)	1.70	motorboy	1		1	7
19)	1.75	motorist	3		3	1
		motor boy	5		1	4
					1	7
					3	8
		watchman	1		1	4
		helper	10	8		4
					2	6
		painter	2		2	4
		janitor	1		1	5
		gardener	6		4	8
					2	26
		labourer	15	1		8
				10		9
					3	12
					1	13
		coalburner	1		1	9
		cartman checker	1		1	9
20)	1.80	motorboy	1		1	7
21)	1.83	laundry engineer	1	1		16
		watchman/cook	1		1	18
		foreman	1		1	25
		maestre estibador	1		1	28
22)	2.00	carpenter	2		2	1
		blacksmith	1		1	1
		motorist	1		1	1
22)	2.00	painter	1		1	4
		helper	4		4	4
		watchman	23	12		5
					8	6
					1	12
					2	26
		cabinet maker	1		1	6
		mechanic	1		1	6
		fireman	1	1		7
		plumber	2		2	7
		motor boy	4		2	7
					2	8
		chaffeur	2		1	8
					1	17
		electrician	1		1	8
		assist. foreman	2		1	8
					1	12
		gardener	2		1	8
					1	26
		labourer	2		2	9
		wagon driver	2		2	9

		stableman	2		2	9
		despatcher	2		2	12
		clerk	4		1	13
					1	21
					1	22
					1	25
		dispenser	1		1	14
		nurse	5		5	14
		orderly	2		2	15
		assist.fruit				
		estimator	2		2	17
		relator embarque	2		2	17
		assist. cashier	1		1	21
		servant	1		1	21
		In Charge Warehouse	5		4	22
					1	25
		motorist	2		2	26
23)	2.16	messenger	1		1	17
		radio engineer		2	2	27
24)	2.17	foreman	1		1	22
		assistant clerk	1		1	21
		motor boy	1		1	22
		In Charge Warehouse	4		2	22
					1	23
					1	24
25)	2.20	watchman	1		1	12
26)	2.25	toolkeeper	1		1	5
		clerk		2		1
5						
		watchman	7		1	25
		fireman	1		7	5
					1	7
26)	2.25	plumber	1		1	7
		chaffeur	4		3	7
					1	8
		despatcher	1		1	12
		motor boy	1		1	22
		foreman	1		1	26
27)	2.33	helper	2		1	18
					1	19
		In Charge Warehouse	5		3	22
					1	23
					1	24
		clerk checker	1		1	24
28)	2.50	motor boy	1		1	3
		painter	2		2	4
		clerk	4		2	5
					2	24
		timekeeper	1		1	5
		toolkeeper	1		1	5
		watchman	1		1	5
		cabinet maker	2		1	6
					1	8
		blacksmith	1		1	6
		mechanic	2		1	6
					1	8
		foreman	2		1	7
					1	12
		plumber	3		3	7
		harness repairer	1		1	9
		operations room				
		attendant	1		1	14
		dispenser	1		1	14
		helper	7		4	17
		- - -			1	18
		- - -			2	19
		clerk/messenger	1		1	21
		Assist.In Charge				
		Warehouse	1		1	25
		barber	1		1	26
29)	2.67	dispenser	1		1	14
		helper	8	5		17
					3	19
		In Charge Warehouse	2	1		22
					1	23

		foreman	1		1		28
		rectificador	1	1		28	
30)	2.75	carpenter	4	1		1	4
		clerk	1		3		5
		material checker	2		2		6
		cabinet maker	3		3		6
		motor boy	3		1		7
30)	2.75	chaffeur		1		2	8
7		mechanic	1			1	
		foreman	1	1		7	10
		despatcher	3		3		12
31)	2.80	assistant elevator chief	1		1		28
32)	2.83	pumpman	1	1		5	
		chaffeur	1		1		5
		dispenser	1		1		14
		clerk	1		1		17
		typist	1		1		21
		cargoe checker	1		1		21
		stock bookkeeper	1		1		25
		watchman/telephonist	1		1		28
33)	2.93	land foreman	1		1		28
34)	3.00	carpenter	3		3		4
		mason	2		2		4
		draftsman	1	1		5	
		cabinet maker	5		5		6
		blacksmith	3		3		6
		mechanic	4		3		6
		caretaker	1		1		7
		watchman	1		1		9
		1st cook	1		1		12
		clerk	3		1		16
					1		17
					1		19
					1		28
		recibidor	5		5		17
		In Charge Warehouse	1		1		22
		rectificador	3		3		28
35)	3.16	ship foreman	1		1		28
36)	3.17	clerk	1		1		17
37)	3.25	warehouse man	1		1		5
		mechanic	2		2		6
		cabinet maker	2		2		6
38)	3.33	assist.matron	1		1		14
		nurse	2		2		14
		laboratory attendant	1	1		14	
		recibidor	1		1		17
		clerk	2		1		21
					1		25
		foreman	1	1		28	
		rectificador	3		3		28
39)	3.50	foreman	3		2		4
					1		9
39)	3.50	timekeeper	1		1		5
		cabinet maker	1	1		6	
		head plumber	1		1		7
		recibidor	5		4		17
					1		18
		clerk	1		1		21
		assist.paymaster	1		1		21
		rectificador	1		1		28
40)	3.66	cashier's clerk	1		1		21
41)	3.67	garage foreman	1		1		5
		ship foreman	2		2		28

42)	3.75	timekeeper	1		1	4
		head electrician	1		1	8
		head motorist	1		1	8
43)	3.83	recibidor	11	7	17	25
		clerk	1		1	27
		operator	1		1	28
		rectificador	3		3	
44)	3.97	forklift truck chief	1		1	28
45)	4.00	furniture inspector	1		1	5
		mechanic	2		1	6
					1	7
		head blacksmith	1		1	6
		dispenser/clerk	1		1	21
		watchman	1		1	26
		clerk	1		1	28
46)	4.17	inspector embarques	2		2	17
		inspector	1		1	18
		clerk	3		2	24
					1	18
		In Charge Warehouse	1		1	25
47)	4.50	fruit estimator	1		1	17
		assist. commissary				
		inspector	1		1	22
48)	4.67	assist.chief				
		reception	1		1	17
		hospital clerk	1		1	14
		stenographer	1		1	24
49)	4.83	cashier's clerk	1		1	21
50)	5.00	cabinet maker	2		2	5
		d.m.o.Aracataca	1		1	14
		overseer El Tigre	1		1	21
		clerk	1		1	24
		inventory inspector	1		1	24
		general timekeeper	1		1	28
51)	5.33	cashier	1		1	21
		In Charge Warehouse	1		1	25
52)	5.50	foreman	1		1	4
		supply chief	1		1	18
53)	5.67	assist.chief operator	2		2	28
54)	5.83	chief clerk	1		1	3
		physician assist.	1		1	14
		assist.house physician	1		1	14
		d.m.o.Cienaga	1		1	14
		matron	2		2	14
55)	6.23	chief clerk	1		1	23
56)	6.25	supply chief	1		1	18
57)	6.67	entomologist	1		1	3
		assist.attorney	1		1	21
		supervisor	1		1	24
		assist.superintendent	1		1	28
58)	7.07	commissary inspector	1		1	22
59)	7.50	chief clerk	1		1	24
		utility and duties				
		special officer	1		1	24
		chief operator	1		1	27
60)	8.00	wharf chief	1		1	28
61)	8.33	house physician	1		1	14
62)	9.17	bacteriologist	1	1	14	
63)	10.00	special duty officer	1	1	20	

		assist.superintendent	1	1	3
		lawyer	1	1	21
64)	11.67	superintendent	1	1	
17		assist.superintendent	2	2	14
65)	12.50	port superintendent	1	1	20
66)	13.89	lawyer	1	1	29
		superintendent	1	1	23
67)	16.67	superintendent	1	1	3
		legal representative	1	1	20
		at Bogota	1	1	21
		attorney			
68)	18.06	division accountant	1	1	20
69)	18.83	superintendent	1	1	3
70)	20.83	manager	1	1	20
71)	41.67	special duty officer	1	1	20

Source: United Fruit Company Private Archives.

1.	Accountant's No.	;	Sheet No.	;	Payroll for Miscellaneous (Finca RioFrio).
2.	Accountant's No.	;	Sheet No.2	;	Payroll for
3.	Accountant's No. 108;		Sheet No.	;	Payroll for Agriculture Department.
4.	Accountant's No. 38;		Sheet No.1	;	Payroll for Construction.
5.	"	"	55;	"	"
7.	"	"	"	"	"
8.	"	"	"	"	"
9.	"	"	"	"	"
10.	"	"	"	"	"
11.	"	"	106;	"	"
12.	"	"	;	"	"
13.	Accountant's No. 47;		Sheet No.2	;	Payroll for Materials and Supply Department.
14.	Accountant's No. 117;		Sheet No.1	;	Payroll for Medical Dept.
15.	"	"	"	"	"
16.	"	"	"	"	"
17.	"	"	122;	"	"
18.	"	"	"	"	"
19.	"	"	"	"	"
20.	"	"	106;	"	"
21.	"	"	"	"	"
22.	"	"	119;	"	"
23.	"	"	"	"	"
24.	"	"	120;	"	"
25.	"	"	"	"	"
26.	"	"	39;	"	"
27.	"	"	125;	"	"
28.	"	"	127;	"	"

Notes: (i) all wage rates are from month of January, 1926; (ii) daily wage calculations are based on a 30 day basis; (iii) '?' represents no data on the original document.

APPENDIX 20:
LARGE-SCALE CORPORATE BANANA SECTOR SEGMENTATION
AND OCCUPATIONAL DISTRIBUTION: 1926
(CGP\$s)

Maid

<i>Of a total of 29 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
4	13.8	0.67
1	3.5	0.83
1	3.5	1.00
1	3.5	1.17
12	41.4	2.50
9	31.0	2.67
1	3.5	2.83

Laundress

<i>Of a total of 11 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
2	18.2	0.33
3	27.3	0.50
3	27.3	0.67
1	9.1	1.33
1	9.1	1.47
1	9.1	1.66

Clerk

<i>Of a total of 26 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
1	3.8	0.67
2	7.7	1.00
2	7.7	1.17
1	3.8	1.33
4	15.4	1.67
4	15.4	2.00
2	7.7	2.25
1	3.8	2.33
4	15.4	2.50
1	3.8	2.67
1	3.8	2.83
3	11.5	3.00

Servant

<i>Of a total of 33 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
3	9.1	0.33
15	45.5	0.50
2	6.1	0.67
2	6.1	0.83
4	12.1	1.00
2	6.1	1.17
1	3.0	1.33
1	3.0	1.50
2	6.1	1.66
1	3.0	2.50

Orderly

<i>Of a total of 20 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
9	45.0	0.83
5	25.0	1.00
1	5.0	1.17
3	15.0	1.67
2	10.0	2.00

Cook

(including a 2nd cook assistant a
3rd cook a 2nd assistant to the 1st cook and a 1st cook)

<i>Of a total of 18 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
1	5.6	0.40
4	22.2	0.50
1	5.6	0.67
5	27.8	0.83
1	5.6	1.00
1	5.6	1.17
1	5.6	1.33
1	5.6	1.50
2	11.1	1.66
1	5.6	2.50
1	5.6	3.00

Helper

<i>Of a total of 46 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
1	2.2	0.50
2	4.3	0.75
3	6.5	1.00
4	8.7	1.25
1	2.2	1.40
12	26.0	1.50
2	4.3	1.60
4	8.7	2.00
2	4.3	2.33
7	15.2	2.50
8	17.4	2.67

Labourer

<i>Of a total of 73 persons</i>	<i>%</i>	<i>earned a daily wage rate of</i>
1	1.4	1.00
55	75.3	1.50
15	20.5	1.75
2	2.7	2.00

Sources: Same as Appendix

APPENDIX 21:
COTTON PRODUCTION IN COLOMBIA: 1906 - 1930
(000's lbs.)

1906	302
1907	603
1909/10*	2628
1915	7598
1917	2200
1917	3000
1918	1847
1918	4310
1919	2200
1919	1478
1920	4400
1920	2957
1922/23**	2390
1923	16097
1923/24	1836
1923/24*	2000
1923/24**	2390
1924	16000
1924	6250
1924/25	3585
1924/25	3585
1924/25*	4000
1924/25**	3824
1925/26**	3824
1926	11250
1927/28**	4780
1928/29**	4780
1929/30**	4780
1930***	2625
1931***	1653

Sources: (i) Chapter IX; (ii) * = The International Institute of Agriculture, Rome, *The Cotton Growing Countries*, (London, 1926), p. 258; (iii) ** = Estimated Cotton Production of Minor Producing Areas, *Yearbook of the Cotton Association Manufacturers*, (Boston, 1932). For years 1922-25, 1926 yearbook, p. 30; 1925-26, 1927 yearbook, p. 31; 1926-27, 1928 yearbook, p. 32; 1927-28, 1929 yearbook, p. 20; 1928-29, 1930 yearbook, p. 9; 1929-30, 1931 yearbook, p. 9; (iv) *** = NAC region only.

APPENDIX 22:
COTTON PRODUCTION IN NAC REGION: 1906 - 1931
(Tons)

1906	100
1907	200
1909/10*	868
1915	2508
1917	858
1918	1016
1919	690
1920	1380
1923	2093
1924	2328
1926	3204
1927	1793
1928	1793
1929	1793
1930	1313
1931	827

Sources: Appendix IX; Notes: (i) 2000 lbs. = 1 ton; (ii) 1917 - 1926 figures are unweighted averages of the different figures from the different sources unearthed and showed in Chapter IX; (iii) figures for 1906 - 1918 are 66 % of the total Colombian production; figures for 1919 - 1925 are 75 % of same; figures for 1926 are 85 % (average of 90 % for 1925 and 80 % for 1926 of total Colombian production).

APPENDIX 23:
BOGOTA FOOD PRICES: 1900 - 1930

1900	1132.13
1901	3241.11
1902	13538.23
1903	36386.40
1904	41531.26
1905	48770.89
1906	38443.64
1907	33437.80
1908	39714.17
1909	431.96
1910	388.02
1911	368.61
1912	5.60
1913	6.80
1914	6.08
1915	447.96
1916	385.65
1917	440.73
1918	507.55
1919	615.82
1920	683.91
1921	594.80
1922	568.15
1923	526.74
1924	577.69
1925	538.87
1926	749.75
1927	635.72
1928	624.17
1929	752.64
1930	555.46

Sources: Pardo-Parra, A., *Geografía Económica y Humana de Colombia*, (Bogotá, 1979), pps. 191-197, based on primary evidence from the 'Beneficiencia de Cundinamarca' archives in Bogotá, Colombia. As pointed out in Chapter IV of this thesis, this appendix is consistent with Appendix 24 which follows, because price indexes for 1900 to 1930 appearing in the first column of Appendix 24, use the Colombian Departamento Administrativo Nacional de Estadística (DANE) base which is 1923 = 100, with a food price basket for the same year of \$526.74, appearing in this appendix, and taken from the Beneficiencia archives by Pardo-Parra. However, for years 1912 to 1914, by Pardo-Parra's own admission, food prices (taken from military food rations) and corresponding indexes are dubious, until new evidence on food prices is unearthed.

APPENDIX 24:
AVERAGE FOOD PRICE INDEXES: 1900 - 1930

	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>	<i>VI</i>	<i>VII</i>	<i>VIII</i>
1900	215	na	na	na	na	na	na	na
1901	616	na	na	na	na	na	na	na
1902	2570	na	na	na	na	na	na	na
1903	6907	na	na	na	na	na	na	na
1904	7884	na	na	na	na	na	na	na
1905	9259	na	na	na	na	na	na	na
1906	7298	na	na	na	na	na	na	na
1907	6348	na	na	na	na	na	na	na
1908	7539	na	na	na	na	na	na	na
1909	82	na	na	na	na	na	na	na
1910	74	na	na	na	na	na	na	na
1911	70	na	na	na	na	na	na	na
1912	87	na	na	na	na	na	na	na
1913	106	na	na	na	na	na	na	na
1914	94	na	na	na	na	na	na	na
1915	85	na	na	na	na	na	na	na
1916	73	na	na	na	na	na	na	na
1917	84	na	na	na	na	na	na	na
1918	96	na	na	na	na	na	na	na
1919	117	na	na	na	na	na	na	na
1920	130	na	na	na	na	na	na	na
1921	113	na	na	na	na	na	na	na
1922	108	na	na	na	na	na	na	na
1923	100	100	99	114	96	126	95	121
1924	110	100	100	109	103	120	90	116
1925	102	105	105	112	97	122	102	112
1926	142	120	109	127	114	136	115	129
1927	121	116	108	108	100	116	98	111
1928	118	121	114	118	106	129	91	133
1929	143	113	114	104	93	119	79	115
1930	105	87	78	85	70	93	67	95

Sources: (i) Column I, Pardo-Parra, A., *Geografía Económica y Humana de Colombia*, (Bogotá, 1979), pps. 191-197, based on primary evidence from the 'Beneficiencia de Cundinamarca' archives in Bogotá, Colombia; (ii) Columns II, III and V, "Índice del Promedio del Costo de la Vida en el País de Algunos Artículos Alimenticios", *Revista del Banco de la República*, Bogotá, Colombia, Vol. IV, No. 40, (Bogotá,), p. 72; and Columns IV, VI, VII and VIII, *Boletín Mensual de Estadística del Departamento Administrativo Nacional de Estadística*, (DANE), No. 300, (Bogotá, 1976), pps. 202-204; Notes: Column nomenclature is as follows: I = Bogotá; II = Nation (average of nation's cities' indexes); III=Interior (average of Interior's cities' indexes); IV = NAC (average of NAC region's cities' indexes); V=Medellín; VI=Barranquilla; VII=Cartagena; VIII=Santa Marta.

APPENDIX 25:
EXCHANGE RATES: 1900 - 1930

1870s - 1890s

Ruling average exchange rates of the Colombian Peso (CP\$) : (i) 1870 - 1879 , CP\$ 5.23 = 1 ; (ii) 1880 - 1889 , CP\$ 7.30 = 1 ; (iii) 1890 - 1899 , CP\$ 13.84 = 1 ; Averages are taken from " Appendix 4. - Foreign Exchange Rates in Colombia, 1870 - 1970 ", in Palacios, M., Coffee in Colombia, 1850 - 1977, (Cambridge, 1982), p. 262. The Bogota and the Medellin exchange rates are averaged as one exchange rate. Thereafter, averages per decades of these figures are taken; d) 1874 - 1914 , US\$ 4.867 = 1. Figures from Bidwell, R., C, Currency Conversion Tables, A Hundred Years of Change, (London, 1970), p. 1. This means CP\$ 1.00 equalled US\$ 0.93, US\$ 0.67 and US\$ 0.35 respectively for the 1870s, 1880s and 1890s respectively; e) for 1900, CP\$1 equalled US\$ 0.10 as quoted in Beaupre¹.

1902 - 1913

For practical purposes, we assume (i) 1 Colombian Gold Peso (CGP\$) = 100 Colombian Paper Pesos (CPP\$'s) despite future legislation ruling this exchange rate in 1903; and the US Gold Dollar at par with the Colombian Gold Peso.

	Colombian Paper Pesos \$	Sterling
1902	417.500	1
1903	531.250	1
1904	5.185	1
1905	5.210	1
1906	5.125	1
1907	4.815	1
1908	4.805	1
1909	4.860	1
1910	4.945	1
1911	4.930	1
1912	4.930	1
1913	4.990	1

Source: 'Appendix 4, Foreign Exchange Rates in Colombia, 1870-1970', in Palacios, M., Coffee in Colombia, 1870- 1970, (Bogota, 1980), p. 262-263. Figures are averages of the Bogota and the Medellin Exchange rates and divided by two, except in years 1911, 1912 and 1913, where only the Medellin Exchange Rates are available. Palacios notes that figures from 1904 onwards are Gold Pesos.

¹ Beaupre

1903 - 1930

1 Colombian Gold Peso (CGP\$) = 100 Colombian Paper Pesos (CPP\$'s) according to McQueen who noted that " ... since 1903 ... the rate of 100 paper pesos to one gold peso, the latter equivalent to 1/5 of a Sterling ... "; and confirmed by the Monthly Bulletin of the International Bureau of American Republics who reported that " ... a paper peso which consists of 100 centavos, the present rate of exchange between this currency and United States gold is 10,000 %, so that 1 peso is equivalent to 1 cent in United States money ".

Ley 33 of 1903 and Ley 18 of 1904 were the laws which established " the right of individuals to stipulate any type of currency in their contracts; but the state currency retained its character of forced acceptance of paper money, redeemable at the exchange rate ruling on the day of payment ". This was confirmed by Ley 59 de 1905 which " declared the monetary unit and accounting currency of the Republic would be the gold peso, divided into 100 centavos. This in turn was re-confirmed by Ley 69 de 1909 which indicated that the " exchange of notes, at the official rate of one hundred pesos (\$ 100) in paper for one (\$ 1) in gold " would have to be honoured.

Sources: McQueen , C., Colombian Public Finance, (Washington, 1926), p. 20; the Monthly Bulletin of the International Bureau of American Republics, whole 123, Volume XV, Number 6, (Washington, 1903), p. 1549; and Banco de la Republica, Informe al Senado por la Comision de Hacienda y Tesoro sobre el Proyecto de Ley Organica del mismo Banco, (Bogota, 1923), pps. 11 and 12.

1902 - 1914

US Dollar \$ 4.867 = Sterling 1.00

Source: Bildwell, R., C., Currency Conversion Tables: A Hundred Years of Change, (London, 1970), p. 1 and 2.

1915 - 1930

	US Dollar \$	Sterling
1915	4.86	1.00
1916	4.77	1.00
1918	4.76	1.00
1919	4.425	1.00
1921	3.80	1.00
1926	4.85	1.00
1927	4.85	1.00
1928	4.87	1.00
1929	4.85	1.00
1930	4.87	1.00

Source: Bildwell, R., C., Currency Conversion Tables: A Hundred Years of Change, (London, 1970), p. 1 and 2.

1914 - 1930

	Colombian Gold Peso \$	US Dol.\$
1914	1.0400	1.00
1915	1.0800	1.00
1916	1.0400	1.00
1918	0.9369	1.00
1919	0.9287	1.00
1921	1.1696	1.00
1926	1.0170	1.00
1927	1.0242	1.00
1928	1.0218	1.00
1929	1.0334	1.00
1930	1.0350	1.00

Source: Banco de la Republica, 'Cotizaciones (Venta) del Dolar Oficial y el Certificado de Cambio en el Pais. Promedios Anuales de Pesos por US \$. Cuadro 82', Informe Anual del Gerente a la Junta Directiva, 1960 -1962, Volumen II, Numeros XXXVIII y XXXIX, (Bogota, 1962), p .143.

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