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INDUSTRIAL DEVELOPMENT AND THE LABOUR MARKET: A COMPARISON OF THE DUAL LABOUR MARKET AND INFORMAL SECTOR PARADIGMS

BY

LENORA MAUREEN CAMPBELL

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ABSTRACT

This thesis reviews the literature on the Dual Labour Market and the Informal Sector and demonstrates their interrelatedness. Utilizing Averitt's description of the periphery and center firm structure of industries we explore the relationship between firm-specific capital and firm-specific human capital.

In chapters 2 and 3 we review the literature on both the Informal Sector and the Dual Labour Market and demonstrate their theoretical development as paradigms and outline the unique economic features of each sector as outlined in the literature. In chapter 4 we critically compare the two paradigms in an attempt to illuminate their basic similarity — a duality of firms' input and output markets in both developed and less developed countries. Averitt's description of a <u>Dual Economy</u> which is reviewed in chapter 5 provides us with the description of duality of firm structure needed to coherently link together the Informal and Dual Labour Market paradigms.

Using the technique of production as an element of economic analysis, Averitt outlined the process by which the North American economy evolved into two forms of industrial organization of enterprises — the center and periphery. The technique of production predominant in center firms is paralleled by a dramatic change in the manner in which both capital and human capital is utilized in the production process. Firm-specific capital is created and it in turn is complemented by the creation of firm-specific human capital. The labour force in center firms is likely to be organized in a vertical

internal labour market fashion which reflects career ladders created by the accumulation of firm-specific human capital.

The Dual Labour Market is then created because of the generation of firm-specific capital and firm-specific human capital in center firms.

Chapter 7 reviews the various empirical findings related to the Dual Labour Market and Informal Sector paradigms and finds them not to be inconsistent with our thesis concerning the relationship between firm structure and the organization of the labour market. We then devise a "test" of our hypothesis using data on labour force turnover obtained from the Economic Council of Canada. The findings are again not inconsistent with our hypothesis. The last chapter, chapter 8, summarizes the thesis and discusses the various conclusions that can be drawn from its findings. We also discuss possible avenues for further theoretical research and areas which should be explored in greater depth.

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CHAPTER 1

INTRODUCTION

"....the early developmental stages of most sciences have been characterized by continual competition between a number of distinct views of nature, each partially derived from, and all roughly compatible with, the dictates of scientific observation and method. What differentiated these various schools was not one or another failure of method — they were all "scientific" — but what we shall come to call their incommensurable ways of seeing the world and of practicing science in it."

When Thomas Kuhn articulated and formally introduced his theory of paradigms in 1962, the concept was rapidly adopted and utilized in several of the social science disciplines. However, the concept has been slowly accepted in economics and many still question its relevance to the discipline. Research on questions in the area of income distribution has been a notable exception. In fact, debate and research on poverty and underemployment have followed a framework where an author deliberately works within the parameters of one of the competing paradigms.

The labelling of these differing approaches in manpower economics as paradigms was popularized by David Gordon in his book Theories of

Poverty and Underemployment. This compartementalization was later followed and expanded by Arthur P. Soloman and Thomas C. Woodruff in their article "Manpower Planning: Orthodox and Alternative Approaches".

Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1962), p. 4.

The authors contend that three alternative paradigms can be identified which attempt to explain or analyze the problems associated with poverty and underemployment. The distinguishing feature of these three paradigms is not their differing viewpoints on minor theoretical or policy questions but on the whole nature of the sources and development of manpower problems.

What Gordon terms the Orthodox approach, consists of applying "....the basic structure of marginal productivity theory..."

to the problems of income distribution and poverty. When anomolies or problems arise in this area, the orthodox model of marginal productivity is refined and remoulded to a form appropriate for analyzing the new problem or policy area.

The second paradigm approach Gordon labels the 'radical' approach. "Radicals have regained energy and impact in the economics profession, and they have began reformulating a radical paradigm which derives from but does not depend exclusively on the work of Karl Marx." Basically, these radical authors concentrate their attention on examining labour force segmentation and its effects on the politicization and class consciousness of the work force. However, some authors such as Braverman, have also examined changes and trends in the occupational composition of the labour force resulting from the development and maturing of the industrial structure.

³Ibid., p. 15.

David M. Gordon, Theories of Poverty and Underemployment (Toronto: D.C. Heath and Company, 1972), p. 15.

The last paradigm is that of the Dual Labour Market. The first writings on the Dual Labour Market appeared in the late 1960's and research on various aspects of the paradigm has continued since that date. However, there has been a very discernable maturing of the theory and with this maturing, the theory's implications have taken on a significance far greater than what was originally envisaged. The theory has grown from one which attempts to explain labour market irregularities or anomolies by citing the role of institutional barriers, to one which now emphasizes the role of industrial development as a causal factor.

Meanwhile, as the theory of the Dual Labour Market developed, many development economists began to write on what they termed the Informal Sector or Informal economy in less developed countries (L.D.C.'s). Up to the early 1970's many development economists worked within the parameters of the dual development models which followed the work of Lewis. However, as open urban unemployment rose, and many economies failed to modernize, many writers began to question whether the accepted paradigm work was appropriate.

The first writings on the Informal sector amended the original paradigm by citing data that demonstrated that the traditional or Informal economy was productive and could perhaps aid or encourage the development of the formal sector or even the economy in general. Other writings then began to amend or question this initial approach and began to assign a role to the Informal sector which diverged in varying ways from the parameters of the original dual development models.

This thesis will review the literature on both the Dual Labour Market and the Informal sector with a view to demonstrating how these theories matured and developed as paradigms. Both paradigms began as theories of simple anomolies which were unique and diverged from the expected. From there the research began to stress institutional or short-run factors as being the source of these anomolies but the basic hypothesis of the augmented paradigms was not questioned. The research then took a different path. Increasingly authors began to suggest that the nature of the development process might differ from that which was normally assumed to occur. Utilizing Averitt's Dual Economy framework, we explore this theme in the remaining portion of the thesis.

Averitt's <u>Dual Economy</u> describes a process whereby American industry has evolved from its early atomistic firm structure to a center-periphery dual firm industrial structure. Averitt made a radical departure in his analysis of this change in enterprise and industrial organization by introducing the "...firm's technical system of production as a factor in economic analysis."

The early atomistic firms had a production technique Averitt labelled "Small batch". "As Adam Smith observed almost two hundred years ago, small batch production prevails where the market is severely limited." Also, "...unit and small batch production is predominantly craft-oriented." Averitt hypothesized that "as the market expands,

Robert Averitt, The Dual Economy (New York: W.W. Norton and Company Incorporated, 1968), p. 2.

⁵Ibid., p. 23.

⁶ Ibid., p. 24.

production rises into a new category -- large batch and mass production."⁷ With this change in production technique, the former craft-orientation of production also changes. "When market expansion allows an industry to move up the technical heirarchy from unit and small batch to large batch and mass production, the skilled craftsman is typically replaced by large numbers of unskilled workers."⁸

This thesis expands upon Averitt's description of the relationship between firms' input and output markets by exploring the factors behind the relationship between firms' techniques of production and the internal organization of these firms' labour forces. Specifically, we demonstrate that along with the growth of mass-production center economy firms is the growth of firm-specific capital-intensive production processes. The question over whether the capital-intensive technology creates the mass market or vice versa is not explored. Instead, the complementarity between the two as outlined by Averitt is accepted as datum. Our thesis hypothesizes that a further very important complementarity also exists.

Firms employing a mass-production capital-intensive production technique will have an organization of the labour force that complements this production technique. Thus the generation of firm-specific capital is also complemented by the generation of firm-specific jobs. This leads to the generation of firm-specific human capital and an organization of the labour force that reflects the existence of firm-specific jobs and

⁷Ibid., p. 25.

⁸Ibid., p. 26.

human capital. This thesis further hypothesizes that the complementarity between firm-specific capital and firm-specific human capital is universal to all firms oriented by the profit motive of a capitalist economy — whether the economy is that of a less-developed country or a developed country or a country that calls itself socialist but has a capitalist economy.

It is this complementarity of firm-specific capital and firmspecific human capital that then leads to the generation of what is now called the Dual Labour Market. Firms in LDC's or DC's that have a degree of firm-specific capital (center or formal enterprises) will organize their labour force in a skill hierarchy commonly called the Internal labour market. Various employees will then have the ability to accumulate firm-specific human capital on the job. This will cumulatively raise their human capital and result in an upward-sloping lifetime earning profile. Those firms in LDC's or DC's that have limited amounts of firm-specific capital (periphery or informal enterprises) will generally have a homogenous and more horizontal organization of their labour force. There will be little or no opportunity for employees to accumulate firm-specific human capital on the job and as a result these employees will have flatter life-time earnings profiles. Thus the phenomenon of the Dual Labour market arises in response to the existence of firm-specific capital and firm-specific human capital.

Throughout this thesis the term duality will be used numerous times in various contexts. Many of the theories we will be dealing with have postulated a duality of a particular nature which often differs in substance and form from that of other dual theories. For this reason it is important to clearly label these differing theories or paradigms so that confusion can be kept to a minimum. The hypothesis of labour market duality will be called the Dual Labour Market theory. The dual development models for L.D.C.'s which follow Arthur Lewis's basic framework will be called Dual Development theories. The latter hypothesis of the Informal and Formal Sectors will be called the theory of the Informal Sector. Averitt's dual industry theory will be identified as Averitt's Dual Economy theory.

CHAPTER 2

THE INFORMAL SECTOR

"Because it demands large-scale paradigm destruction and major shifts in the problems and techniques of normal science, the emergence of new theories is generally preceded by a period of pronounced professional insecurity. As one might expect, that insecurity is generated by the persistent failure of the puzzles of normal science to come out as they should. Failure of existing rules is the prelude to a search for new ones."

In the 1950's Arthur Lewis formulated a dual development model for less developed countries which hypothesized that they would modernize in the following manner. These primarily agricultural countries would face a shortage or a limitation on the available productive agricultural land. As population growth continued, these countries would become increasingly beset by conditions of widespread disguised unemployment of the agricultural labour force. As the returns to labour fell in the rural areas, the relative wage rate in the urban areas would exceed the rural wage rate — pulling these people to seek employment in the urban industrial labour force. This abundant supply of cheap labour would then provide a constant and large labour supply with which the country could quickly and cheaply industrialize. Lewis emphasized that the key to this process was the use of the capitalist surplus.

Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago: The University of Chicago Press, 1969), pp. 67-68.

"The key to the process is the use which is made of the capitalist surplus. Insofar as this is reinvested in creating new capital, the capitalist sector expands, taking more people into capitalist employment out of the subsistence sector. The surplus is then larger still, capital formation is still greater, and so the process continues until the labour surplus disappears."2

This process of migratory adjustment was to cease when the rural and urban wage rates were equal.

During the decade of the 1960 s most less developed countries accepted and followed this model of development. However, unexpected results and conditions which the model did not predict were becoming widespread. It became evident that many countries had what soon came to be called an "urban employment problem". The volume of rural-urban migration was high and constant, while the rate of job creation through industrialization was not enough to absorb the influx of migrants. This created not only labour supply problems but it also strained the existing short-term supply of fixed urban services such as roads, housing, etc.

In the rural areas the expected decline of population that would reduce the level of underemployment did not materialize. Instead, the high fertility rates produced a large influx of young labourers onto the labour market and the number of labour force participants kept rural wages at a low level. Thus there was also a rural development and employment problem.

W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labour,"
The Economics of Underdevelopment, eds. A.N. Agarwala and S.P. Singh
New York: Oxford University Press, 1961), p. 412.

Meanwhile, the rate of rural-urban migration was constant or even increasing. With little or no employment creation in the modern industrialized sector, these people were forced to find a livelihood in other activities. These surplus migrants were then conceptualized as being marginal to the economy. The occupations or activities providing their income (e.g. rickshaw driving, small retail trade, etc.) were thought to be unproductive and the barrios or communities they lived in were generally regarded as being eclectic in nature. Eventually, these activities were "typed" as being in a sector separate from the Modern or industrially advanced sector, and it was called the Traditional sector. The Traditional sector was then seen as serving the role of an absorptive sector — or it absorbed the surplus labour supply which premature industrialization had created. It was assumed that the people employed in the Traditional sector would eventually be employed in the Modern sector as jobs became available.

Although no concensus existed on what the differentiating characteristics of the two sectors were, the following description by Wery is fairly close to the description or distinction that was generally cited by most writers. The Modern sector was thought to be characterized by relatively higher wage levels (which resulted from a higher capital intensity), contained relatively fewer self-employed workers, and production was primarily centered in large industrial establishments. On the other hand, the Traditional sector was thought to have easy entry, low income levels, labour-intensive production processes, and a high level of self-employed workers.

Most of the early articles analyzing the Traditional sector followed the above general description. Therefore most of the early analytical research was focused upon such factors as the rate of underemployment in the Traditional sector, the proportion of migrants in each sector's labour force, and the proportion of unproductive workers in the Traditional sector.

For example, one author utilizing this framework of analysis, Dasgupta, analyzed the Traditional sector in Calcutta in 1973. He found that it accounted for at least 40 percent of the city's work force but that most workers were engaged in unskilled or obsolete occupations which made little contribution to the national economy. He concluded that "....there would be very little loss to the economy as a whole if the hawkers, domestic servants, peons, and rickshaw-pullers are taken off from their occupations."

'Similarily, the activity and absorption of migrants in the Traditional sector has been examined in detail for quite some time. In fact, one study of an anonymous village in north-central India in 1953 found that 60 percent of the migrants who found employment were in the Traditional sector in such occupations as "Coolie", "Servant", "Driver", etc. 4 Similarily, for Peru, Chaplin found that the "...rapidly increasing number of rural migrants in Lima and Arequipa today are found,

³B. Dasgupta, "Calcutta's Informal Sector", <u>Bulletin</u>, Institute of Development Studies, 5 (October, 1973), p. 72.

E. Eames, "Some Aspects of Urban Migration from a Village in North Central India", The Fastern Anthropologist, 8 (September-November, 1954, pp. 13-26.

as expected largely in non-industrial entry occupations, i.e. construction work, domestic service, and the armed forces." Thus some studies did confirm that surplus rural migrants were being absorbed by the Traditional sector.

Lastly, the types of activities in the Traditional sector were usually described in relation to their ease of entry, stability, income and work organization. It was generally regarded that Traditional selfemployment activities were easy to enter and therefore served to absorb the various "fringe" groups of the labour force (i.e. migrants, the unskilled, the young and old, and women). If the skill level and capital requirements of the occupation were low then there was usually a high possibility that the activity would be small-scale or in the Traditional sector. Thus people who accepted this view of the Traditional sector analyzed its activities in terms of their "marginality" or "unproductiveness". They firstly defined the sector in terms of productive characteristics (i.e. low skill and capital requirements) which, given their theoretical approach, predetermined the conclusion that the activities of the Traditional sector were unproductive. Thus, the typical author defined the sector in terms of ease of entry or low skill and capital requirements. For example, Sethuraman concluded that:

"It may be more appropriate to call this a residual sector since it has virtually no barriers to entry, such as skills or capital or license from government."6

David Chaplin, "Industrialization and Labour in Peru", City and Country in the Third World, ed. A.J. Field (Cambridge: Mass., Achenkman Publishing Co. Ltd., 1970), p. 170.

⁶S.V. Sethuraman, <u>Urbanization and Employment in Jakarta</u>, <u>Urbanization and Employment Research Programme</u>, <u>Working Paper No. 6</u>, <u>International Labour Office</u>, (October, 1974), p. 7.22.

This approach then lead to a description of the sector in terms of occupational categories such as street vending, street hawkers, betjak driver, etc. The authors then predictably reached the conclusion that the sector was characterized by "low and unstable incomes"

and an occupational structure which varies with "...the exceptional ability of the city's unemployed labour force to create new "jobs" for themselves".

That these activities are viewed as unproductive is then a foregone conclusion.

Therefore the early writers on the Traditional sector were investigating areas and variables which were predetermined by the framework of their approach. However, observations which were not predicted by the model were being observed. Firstly, although some of the people in the Traditional sector were unskilled or undereducated, it was found that many did not fit the low human capital framework. This finding was not damaging in itself, for if there was a mobility of labour between the two sectors then these people could expect to obtain Modern sector jobs if and when they became available. But some researchers were finding that a substantial number of people employed in the sector had formal wage-labour experience and some had voluntarily left this form of employment for the "precarious" and "unstable" work environment of the Traditional sector.

⁷ International Labour Office, Improvement of the Conditions of Life and Work of Peasants, Agricultural Workers and other Comparable Groups, Report II of the Tenth Conference of American States Members of the I.L.O., (Mexico City: November-December, 1974), p. 9.

8 Dasgupta, op. cit., p. 65.

"....it seems worth stressing that the independence and possibility of upward mobility in "informal sector" entrepreneurship may appear very attractive -- especially if not counterbalanced by relatively high wages, and mobility potential in the larger enterprises."9

These findings were simply not explainable within the parameters of the existing paradigm framework.

One other fatal flaw to the model was the observation that wages in many less developed countries were becoming increasingly skewed. The model predicted that the influx of migrants to the urban areas would provide a cheap reserve labour pool for development. Therefore Modern sector wages should be constant or falling given the conditions of surplus labour. This was not occurring, and in fact, many countries saw Modern sector wages rising rapidly while the returns to labour in the Traditional sector rose less rapidly, stayed constant, or fell.

Meanwhile, there was increasing evidence that the Traditional sector acted as a primary source of employment for women, and that the income derived from employment was vitally needed for survival. Many researchers also found that women tended to be clustered in a narrow range of Traditional sector occupations. For Calcutta, Dasgupta found that women's labour force activity was extremely small (5.9% of the total labour force). Upon further investigation he found that only highly educated or economically desperate females joined the labour market:

"it is not surprising, therefore, that half of the working women are widows, and that more than a third of the women-earners work as domestic servants."

But what was even more surprising was the limited range of

Peatti, Lisa, "The Informal Sector: A Few Facts from Bogota, Some Comments and a List of Issues", (June, 1974), p. 55. (Mimeographed).
 Dasgupta, op. cit., p. 55.

these occupations. "Prostitution ranks as the second most important full-time occupation among women; according to the second survey, it accounted for 10.4% of women earners". He concluded that the explanation for this lies "... in the limited job opportunities for women, and the abnormally low ratio of single-member immigrant households". 12

Similarily, in a literature survey of migration in L.D.C.'s,
Findley found that generally working "... women in urban areas tend
to be overrepresented in bazaar and service sector employment but tend
to have few Modern sector jobs". 13 The only noticeable exception to
this was Latin America where women made up approximately thirty percent
of the Modern sector labour force. 14 As Modern sector jobs became
scarcer there seemed to be a flood of government legislation (e.g.,
regulating the hours of work, weights to be lifted, etc.) which severely
limited the labour force participation of females. These women were
slowly being pushed out of Modern sector jobs and increasingly resorted
to occupations such as prostitution and domestic service.

Lastly, Joshi found that some branches of the Informal sector in Abidjan, were composed of activities of a precarious and intermittent

¹¹ Ibid, p. 65.

^{12&}lt;sub>Tbid</sub>.

¹³U.S., Department of Commerce, <u>Internal Migration</u>, <u>Population</u>, and <u>Development</u>, [by S.E. Findley] ([Washington]: n.n., August, 1974), p. 46.

Latin America is the only continent where the majority of ruralurban migrants are women. This is primarily due to the continent's system of agriculture which generally does not permit the participation of women. However, Chaplin has noted that this situation is changing rapidly due to the excess supply of urban labour.

nature which often played "... only a secondary role among the economic activities of the individuals involved." She then concluded that:

"the incomes earned in the informal sector -in particular in retail trade -- are often a secondary
source of income for the family unit, but they play an
important role in the distribution of income by permitting
families to achieve a consumption level that would be
unattainable with only the principal earner's income".16

Therefore, some evidence indicated that Traditional sector activities did not serve to hold 'surplus' migrants but instead employed women and other groups of people who are not permitted Modern sector wage employment for varying reasons. To supplement the family income it was necessary for these people to work. Therefore, they were engaged in various activities outside of the Modern sector.

Thus, various authors began to report anomalies which did not fit within the Dual Development paradigm. Amid this confusion, in 1972, an I.L.O. report was published on the employment prospects of Kenya. The authors made a radical departure by renaming and redefining the development roles of the Modern and Traditional sectors. The Modern sector was renamed the Formal sector and the Traditional sector was renamed the Informal sector. However, the most important departure of this report was its position that the Informal sector was not "marginal" but was a viable productive sector of economic activity.

¹⁵ Joshi, op. cit., p. 7-11.

^{16&}lt;sub>Ibid</sub>.

"The popular view of informal-sector activities is that they are primarily those of petty trader, street hawkers, shoeshine boys and other groups 'underemployed' on the streets of the big towns. The evidence presented in Chapter 13 of the report suggests that the bulk of employment in the informal sector, far from being only marginally productive, is economically efficient and profit-making, though small in scale and limited by simple technologies, little capital and lack of links with the other ("formal") sector."17

The report then went on to list the characteristics of the two sectors: 18

Informal Sector

- a) ease of entry;
- b) reliance on indigenous resources;
- c) family ownership of enterprises;
- d) small-scale of operation;
- e) labour-intensive and adapted technology;
- f) skills acquired outside the formal school system; and
- g) unregulated and competitive markets.

Formal Sector

- a) difficult entry;
- b) frequent reliance on overseas resources;
- c) corporate ownership;
- d) large-scale of operation;
- e) capital intensive and often imported technology;
- f) formally acquired skills, often expatriate; and
- g) protected markets (through tariffs, quotas and trade licenses).

This new view of a productive Informal sector and a listing of the two sectors differing "modus operandi" opened a Pandora's Box from

¹⁷ International Labour Office, Employment, Incomes, and Equality: A Strategy for Increasing Productive Employment in Kenya (Geneva: International Labour Office, 1972), p. 5.

¹⁸Ibid., p. 6.

which flowed forth a host of new investigations into the two sectors and their interrelationships.

No longer was the simple absorptive role of the Traditional sector accepted, and many authors began to hypothesize, investigate, and report on new and varied avenues of research which had previously been unexplored. However, because the original paradigm framework had been partially destroyed, the research often took place within parameters which were only partially or inappropriately defined. Thus it became possible that two researchers could reach contradicting conclusions from an examination undertaken in essentially the same conditions of analysis. Indeed this happened when both Bose and Dasgupta examined what they called Calcutta's Informal sector.

Bose maintained that the two sectors operated in basically different input and output markets and the fact that they had access to different capital and commodity markets was the feature that basically differentiated the two sectors. The small-scale nature of the Informal enterprises was thought to arise because of a lack of access to capital facilities which were deemed to be vital for expansion. Therefore the firms were forced to be inefficient in operation for they could not expand or develop. The author then went on to maintain that the relationship between the two sectors was one where the Formal sector utilized

[&]quot;.... the backward labour-intensive informal sector including the rural, agricultural sector as a whole, for generating excessive profits for the metropolitan oligopolies -- which are mainly commercial rather than industrial in character."19

A.N. Bose, The Informal Sector in the Calcutta Metropolitan Economy, World Employment Program, Working Paper No. 5, International Labour Office, (1974), p. 1.5.

Bose formulated his hypothesis on the basis of his studies of the Calcutta economy in the early 1970's. However, his findings differ substantially from those of Dasgupta. From his study of Calcutta's Informal sector at approximately the same time he concluded:

"The low proportion of skilled workers, artisans and craftsmen in the informal sector of Calcutta puts the latter in a different category from its counterparts in Nairobi and Mombasa, the two cities of Kenya where the informal sector was found by the I.L.O. mission of 1972 to be performing useful economic functions. While the I.L.O. mission to Kenya recommended a greater use of the skill and technology of the informal sector for solving the country's problems of poverty and unemployment, such a recommendation would be of doubtful value in solving Calcutta's problems, given the structure of its informal structure."20

This major difference in findings seemed to arise from the authors differing interpretations of what comprises an 'Informal activity'.

Dasgupta analyzed informality from a labour force approach and Bose from an industrial structural approach. However, if the paradigm parameters had been adequately defined, the authors could not have reached differing conclusions. Other authors were also hypothesizing varying new relationships between the two sectors. We will now examine some of these writings to demonstrate the degree of confusion which prevailed in the discipline at the time. As well, this exercise can also serve another purpose. It will give us an opportunity to review some of the various qualitative findings.

²⁰Dasgupta, op. cit., p. 73.

Gerry in a study of the urban economy of Dakar in 1974, analyzed its sectoral structure in the following manner:

"The first priority is the understanding of how the ensemble of productive and distributive activities in the urban context relate to one another, from this point the characteristics governing the relations between the parts of the whole will be derived in a more concrete manner, and the concept of "informality" may be judged valid or otherwise."21

He found that the two sectors were linked in many varied relationships. Firstly, in the sale of the finished product or service it was found that some informal activities depended heavily upon trading relations with the Formal sector commercial and industrial establishments. In general, the Informal sector seemed to be lacking in a wholesale base. Contrary to Bose's findings for Calcutta, Gerry found that:

"The degree to which articles produced in a "petty" fashion (small-scale both with regard to output, technique, and the possibility of cumulative expansion) were purchased for resale or for transformation by industrial enterprises or commercial concerns was very limited indeed."22

Instead he found that the relationship was one where the Formal sector enterprises supplied small and/or individual enterprises "... with the means of producing certain products and the means of supplying certain services, rather than the provision of sales outlets."²³

Lisa Peatti also found evidence that the Informal sector lacked an adequate wholesaling base because of its input relationship with the

Chris Gerry, Petty Producers and the Urban Economy: A Case Study of Dakar, World Employment Program, Working Paper No. 8, International Labour Office, (September, 1974), p. 6.

²²Ibid, p. 11.

^{23&}lt;sub>Ibid</sub>.

Informal sector. Her observations of the economy of Bogota, Columbia, found that the Informal and Formal sectors operated in different input and output markets. Because the Informal sector operations were small-scale they were forced to buy their resource inputs in small quantities at high cost. Similarily, they sold the finished product in small local markets. Thus the Formal and Informal sectors were determined to be differently structured enterprises serving distinct and differing classes of people. However, she did find some evidence that commercial Informal sector enterprises may sell their goods locally but they really acquire the goods they sell from the Formal sector. One example of this was the five dry-cleaning establishments in the barrio surveyed actually being only "...collection and distribution points for central-city dry cleaners."²⁴

Boserup is one author who had a differing view of the role of the Informal sector in development. She saw it acting in an intermediate way in the development process.

"... in the first step, subsistence activities for family use are replaced by commercial production for sale and small scale market trade and services. In the second step, this type of activity is replaced by employment in modern factories, offices, modern shop and modern service industries."25

Thus the Informal sector was seen not as a residual sector of surplus labour but as a vital and necessary part of the development process.

²⁴Peatti, op. cit., p. 5.

²⁵E. Boserup, <u>Women's Role in Economic Development</u> (London: George Allen & Unwin Ltd., 1970), p. 178.

However, although various new theories of the Informal sector began to emerge no one theory gained prominance. Instead, an increasing number of authors began to cite institutional barriers as the source for the dualism. This approach, unlike the theories of Bose or Boserup, did not question or oppose the old dual development paradigm. Instead, the authors accepted the underlying philosophy and logic of the dual development approach and cited varying institutional barriers which prevented development from occurring in this manner. The main proponents of this type of approach were Mazumdar, Webb, Weeks, and Rempel.

All of the above authors saw the Informal sector as being productive to varying degrees. Mazumdar cited the findings of a World Bank household survey in Malaysia in which lifetime earnings profiles were calculated for males and females. For males there was little difference in the shape of the profile for wage employees and the self-employed. For females, the profiles were flatter for both categories but the degree of flatness was stronger for the self-employed. He then concluded that:

"the popular preconception that the lifetime performance of workers would be lower for the selfemployed (or traditional sector) category because of a weaker relationship between age and earnings seems to hold true for the females only".26

He further found that there was a wide diversity of earnings in the Informal sector and "...that a substantial proportion of this group perform

Dipak Mazumdar, The Urban Informal Sector, World Bank Staff Working Paper No. 211, World Bank, (July 1975), p. 30.

better than the wage-earners". 27

Webb in his study of Peru also found that vertical mobility was possible in the Informal sector and that it was not primarily composed of migrants and the less educated. Many male heads of households earned at least as much as manual workers in the Formal sector, and Informal sector incomes were widely dispersed. Lastly, there was a great deal of mobility both within the Informal sector and between it and the Formal sector. Webb then went on to define a dual economy as one that is "...characterized by a highly skewed distribution of productivity levels." Both 'value added per worker' and investment per worker were rising more rapidly in the Formal sector. Modern sector growth was therefore not taking a horizontal labour-absorbing path, but was growing in a vertical fashion — contrary to the labour-surplus models of development. He then went on to describe why labour incomes are becoming increasingly skewed.

"Within the TS (traditional sector), wages are constrained principally by low absolute levels of productivity. Even if a worker should receive his total average product, his income would remain very low. In the MS (modern sector), however, the value added "ceilings" is not a significant constraint on the earnings of labour. Instead, wage levels are more sensitive to the institutional rules that decide the functional distribution of income, that is, production."29

²⁷Ibid, p. 32.

²⁹ Ibid, p. 10.

Richard Webb, The Urban Traditional Sector in Peru, International Bank for Reconstruction and Development, (1975), p. 6. (Mimeographed).

Lastly, Webb suggested that the rapid rise in Modern sector wages could be due to either unionization or the higher requirements of skill by Modern sector technology and the supposed consequent upgrading of skill requirements.

Mazumdar also cited the role of institutional factors in the determination of returns to labour.

"There is no doubt that the almost exclusive nature of employment in the organized sector of urban labour markets in many L.D.C. has been encouraged in recent years by trade unions and government labour policies."30

Similarily, Weeks also cited institutional factors as affecting the path of development. He maintained that industrial dualism (formal vs. informal) was the product of state 'protection' of the Formal sector. He then described the various ways the government intervenes in the market to protect the Modern sector and make it non-competitive.

"The range of concessions granted international firms cover virtually every sphere of operation. On the demand side, tariffs and quotas reduce competition from imports, with the side effect that the consumer has less product choice (and is also charged a higher price) than before. Potential competition from domestically-based producers is restricted by state limitations upon entry into the market. Competition from domestic entrepreneurs is limited by licensing, building and factory codes, and other regulations, as well as by factors to be discussed below. Thus competition from all sources is limited administratively, and those within the system can continually lobby and pressure to have restrictions

Dipak Mazumdar, The Theory of Urban Underdevelopment in Less Developed Countries, World Bank Staff Working Paper No. 198, World Bank, (February 1975), p. 3.

increased. On the supply side, the formalization of the relationship between international firms and the state takes several forms: a) import levy-free capital and intermediate goods; b) administratively depressed interest rates which make local borrowing cheap; and c) fiscal favours such as accelerated depreciation and tax holidays. The choice of product and the set state-provided favours enable capital-intensive techniques to be used profitably. Further, as foreign exchange and domestic savings are scarce resources, the dispensing of state favours means in practice that these resources are rationed to the formal sector. In summary, the formal sector develops in a non-competitive environment with privileged access to strategic resources."31

Conversely, the Informal sector was thought to be characterized by a complete lack of government intervention both in the restriction of competition or in the privileged access to resources.

"As a consequence, this sector is basically competitive, with enterprises operating on a small scale. Operators here must borrow at high interest rates and have limited access to the regulated foreign exchange markets Technology is simple, both because operators lack the financial capital and foreign exchange to purchase industrial technology from abroad, and because they are unable to associate themselves with the multinational corporations through which foreign technology is transferred."32

The last person to cite institutional factors as affecting the two sectors development was Rempel. He cited factors similar to those mentioned by Weeks such as government concessions to foreign modern

John Weeks, "Uneven Sector Development and The Role of the State,"

<u>Bulletin</u>, Institute of Development Studies, 5 (October, 1973), p. 79.

32 Ibid.

sector firms and also the innate need of the Modern sector for a stable, low turnover labour force, as leading to the differing operational conditions of the two sectors. The non-competitive Modern sector conditions then

"...enable a firm to distribute the benefits from the superior technology in the form of high dividends and profit to the owners and high wages for the skilled employees rather than sharing them with a larger number of Kenyans in the form of lower prices."33

The author then divided the Informal sector into two different groups of people with the distinction arising from attitudes and motivation. The first group was the 'community of the poor'. These were the people who desire wage-labour positions in the Formal sector and view their participation in the Informal sector as only temporary. However, few do gain Formal sector jobs and soon feelings of defeat and helplessness set in breeding undesirable social conditions and a 'culture of poverty'. This group of people and their lifestyle have been studied at length by Oscar Lewis and other writers such as Gutkind.

The other group of people in the Informal sector were those "...who have consciously decided on a particular craft, skill or line of business with the intent of making that a means for an ongoing livelihood." This group he designated the intermediate sector and it was thought to be

³³H. Rempel, "The Informal Sector", Institute for Development Studies, University of Nairobi, (March, 1974), p. 4. (Mimeographed).
34Ibid., p. 4.

characterized by small-scale enterpeneurial activity. It was this group which was deemed productive and was thought to have the potential for growth and development.

Peatti also identified a sizeable amount of enterpeneurial attitude and behavior in the Informal sector in her study of Bogota. She found that many of the small businessmen she interviewed lacked 'labour discipline' as illustrated by the following comments of a barber and drycleaning collector:

"When the business goes well, it is good to make yourself independent -- you can work your own hours; get up when you want to." and of a metal worker: -- Well, yea this is better than a regular job; at least you don't have to rush over there in the morning."35

The lack of labour discipline can also be viewed as these people still having an income-leisure trade-off and they simply opted for more leisure. However, this lack of labour discipline easily passed into feelings of hostility toward wage-labour as illustrated by the following comments of a furniture maker:

"I prefer an independent business. The salaries in industry are too low. Terrible to live on. (Describes at length a job in a plastics factory where he was required to work 18 hours a day at 35% overtime). "Not worth it. If you work a long day in your own place, you know you're getting the results of it. And (in a job) if you complain, they just tell you to leave — lots more to take your place." 36

³⁶Ibid. p. 53-4.

³⁵ Peatti. op. cit., p. 53.

Thus for many of these people the option was between work as a wage-labourer or enterpeneurial activity in the Informal sector. For many reasons, the primary one being a lack of government legislative protection, the job of a wage-labourer may be so unattractive that the possibility of advancement and mobility through enterpeneurial activity, however risky it may be, is a viable option. A wage-labouring job, unless it is tied to a career ladder in a Formal sector enterprise, will probably offer little chance for advancement and pay the same low wages and have the same poor working conditions for the rest of the workers' life. However, the possibility of enterpeneurial mobility with the remote chance of becoming wealthy (and a few do), may be deemed to be more attractive to many people.

Gerry also saw the labour supply of lower paid wage-labourers and enterpeneurial activity in the Informal sector being tied. Many petty producers and artisans were found to have spent a considerable part of their working lives as wage-labourers, suggesting that they had freely chosen to be employed in the Informal sector. He then suggested that the concept of informality be extended so that not only production and distribution are included, but also such factors as consumption, social organization, cultural background, ethnic affiliations, social behaviour and preferences, etc. When this is done,

"...then the casual workers appear as highly mobile surplus working (or potentially working) population, over and above the absorptive capacities of both capitalist industry and commerce and petty production and distribution activities."37

³⁷ Gerry, op. cit., p. 88.

The person who was denied a regular and stable form of employment or income would then simply be forced by the unavailability of state welfare, to apply their skills and ingenuity to a day-to-day process of finding activities which would enable them to feed and clothe themselves and their family. Gerry further saw these workers as being unable to organize to improve their lot collectively so they were forced to remain in a perpetually exploited position.

Gerry also gave a very vivid picture of how these casual workers are utilized in the production process by the modern sector firms. results of a sample survey of casual labourers found that 36 percent were being paid by "bureaucratic means" or through the administrative wage channels of the company, while 51 percent of the sample was being paid through intermediaries such as foremen, work-team leaders, senior craftsmen, etc. A deeper probing of this situation uncovered some interesting results. Although over half of the casual labourers were being paid through intermediaries, "...a sizeable proportion of the casual workers were integrated as such into the administrative system of the enterprises in question."38 It was found that some factories deliberately hired casual workers for short periods of time (two or three days) but paid them regularly on a specific day of the week. Thus they were in the position of being full-time part-time employees but they received none of the fringe benefits that accrued to the regular full-time employee. Interestingly, Gerry also found that these workers were prone to change jobs frequently or they had very high rates of turnover. He concluded his study of the role of the casual worker and the artisan in the economy of Dakar by saying:

³⁸ Gerry, op. cit., p. 102.

"He is <u>not</u> "informal" nor "marginal" in any spatial or relational senses of the words: he is clearly integrated, though on a very temporary and intermittent and, indeed, <u>exploited</u> basis, into the urban and national system of capitalist production and commerce, and incidentally, in certain sectors of petty production and distribution."39

Thus Gerry concluded his study by suggesting that the Informal sector's labour force was utilized and indeed vitally needed by the Formal sector's enterprises. However, this conclusion conflicted with an earlier hypothesis (see p. 21) that the Informal worker belonged to a highly mobile surplus working population. Indeed, it seemed as if Gerry changed his initial hypothesis as his research expanded and progressed. Interestingly, Gerry was not alone in his thoughts that the two sectors might be linked in a fashion previously unmentioned. Other authors were also beginning to suggest that perhaps the previous role assigned to institutional barriers was not fully articulated. Although Mazumdar had stated that institutional barriers had encouraged the growth of a protected labour force in the Formal sector, (p. 17), he noted that the forces which seemed to have encouraged the development of the institutional barriers were extremely important in themselves.

"But there is considerable evidence to the effect that even in the period when trade unions were weak, and state intervention in labour matters was minimal, employers of labour in the organized sector were interested in the development of a stable labour force, firmly attached to the employing unit."40

³⁹ Gerry, op. cit., p. 106.

Dipak Mazumdar, The Theory of Underdevelopment in Less Developed Countries, World Bank Staff Working Paper No. 198, World Bank, (February, 1975), p. 3.

Rempel and Lobdell attributed this need for a low-turnover labour force to the use of an externally imposed technology in the Formal sector.

"The most efficient utilization of this externally imposed technology requires a stable labour force that develops, with only limited supervision, an appreciation for the maintenance and care of expensive machinery.

The first step to accomplishing this efficient utilization of the externally imposed technology is to purchase low labour turnover. Assuming a firm desires to maximize the present value of a stream of profits over time and given that labour turnover greatly increases the risk of being able to maintain profits levels in the future, a firm may choose to invest some current profits in higher wages. Provided such an initial wage increase generates a "reserve army" of visibly unemployed at the factory gates, the firm provides the current employees with a powerful incentive to remain at their jobs. Once stability has been accomplished, the firm will continue to pay above the prevailing market rates because of the increased labour efficiency made possible by the low labour turnover."41

However, the authors also noted that the economic effects of this externally imposed technology were not limited exclusively to the labour force. Indeed, the whole pattern of development seemed to be affected.

"As already noted above, the formal sector tends to define the total extent of a particular urban market. Beyond this general limit imposed by the formal sector, informal sector activity tends to be uncertain because of an inability by its firms to protect themselves from changes in the formal sector. On the demand side, if the size of the market for the output of a particular informal sector activity becomes large enough to make mass production feasible, then the numerous informal sector craftsmen can be overwhelmed by the superior efficiency of the formal sector."42

Henry Rempel and W.J. House, The Kenya Employment Problem: The Impact of Growth in the Labour Supply in the Modern Sector Wage Structure, World Employment Program, International Labour Office, (1975), p. 66.

⁴²H. Rempel and R.A. Lobdell, The Rural Impact of Rural-Urban Migration, World Employment Program, International Labour Office, (April, 1976), p. 106.

Along with other authors' contentions that the two sectors did not directly compete in the same product market, the possibility that more general and pervasive development processes were at work became highly probable. If Informal handicraft-oriented industries could be destroyed by the growth of their product market, then how could Informal industries be a residual sector of the economy, which was prevented from fully developing by institutional forces? Writers on the Informal sector have not really examined this question but various writers on the Dual Labour Market have given us an insight in this direction. We will now go on to take a closer look at these writings.

Summary: Chapter 2

This chapter has outlined the historical development of the theory of the Informal Sector. We began by outlining the parameters of the early Dual Development models. We then demonstrated how the anomaly of a high rate of urban unemployment led to a revision of the models. The urban economy was split into two sectors, the Modern and Traditional, where the Traditional sector was thought to serve a labour absorptive role.

Given this pre-assigned passive role in development, research into the Traditional sector followed a predetermined path. Most avenues of research focused on factors such as the rate of underemployment in

the Traditional sector, the proportion of migrants in each sector's labour force, and the proportion of unproductive workers in the Traditional sector. However, some important anomalies were emerging. Wage and income levels in many countries were becoming increasingly skewed and there was evidence that the Traditional sector employed many secondary income earners such as women.

Amid this confusion, the I.L.O. Kenya Report was published. It differed from previous work by stating that the Traditional sector was productive and could possibly play an active role in the development process. Within this new framework, some authors began to cite the existence of institutional barriers as the causal factor behind the existence of the Informal sector. The various kinds and levels of institutional barriers were then explored in depth. However, authors such as Mazumdar have only recently begun to examine the factors behind, and the reasons for the rise of the institutional barriers.

CHAPTER 3

THE DUAL LABOUR MARKET

"Sometimes a normal problem, one that ought to be solvable by known rules and procedures, resists the reiterated onslaught of the ablest members of the group within whose competence it falls. On other occasions a piece of equipment designed and constructed for the purpose of normal research fails to perform in the anticipated manner, revealing an anomaly that cannot, despite repeated effort, be aligned with professional expectation. In these and other ways besides, normal science repeatedly goes astray. And when it does — when, that is, the profession can no longer evade anomalies that subvert the existing tradition of scientific practice — then begin the extraordinary investigations that lead the profession at last to a new set of commitments, a new basis for the practice of science."1

In this chapter we will examine the findings, hypothesis and analytical framework of the various writings on the Dual Labour Market. Most of the initial studies examined labour income distribution by analyzing and then formulating hypotheses on the basis of studies of ghetto economies. In some studies the writers refer to the ghetto economy as one similar to that of an underdeveloped country. Thus in many cases their analysis follows a development economics approach. They begin by analyzing the nature and form of industrial development and from there go on to analyze this development process's effect on job creation and income distribution. Thus these studies focus their main attention on the demand side of the labour market.

Other studies concentrate soley on the supply side of the labour market and on the nature of disadvantaged labour's employment and unemployment.

Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago: The University of Chicago Press, 1969), pp. 5-6.

Thus these studies focus attention on such issues as turnover, lifetime earnings profiles and human capital. Still other studies examine the nature of industrial development and its influence on the aggregate industrial employment of labour. These studies then focus attention on such issues as the change in occupational and industrial employment over time, the increasingly skewed distribution of income, etc. These three categories of analysis in these studies are not always distinct and many times a study will analyze labour income distribution using all three approaches. The reason that it is important to recognize these compartmentalizations is because of the prior bias of orientation of some authors. Before going on to review the various studies on the Dual Labour Market we will briefly review the orthodox labour economics paradigm.

Traditional neoclassical labour theory is characterized by the two basic assumptions of perfect competition and market equilibrium. Within this competitive framework, the entire supply of labour is assumed to be a large queue from which workers are hired according to their potential productivity. Thus, the most productive workers will be positioned first in the queue and will be the first hired, and the least productive workers will be last in the queue and will be the last hired or will be unemployed. Thus, disadvantaged workers, or the working poor, are by definition those who are paid low wages because they are positioned at the end of the queue. Although there are deficiencies in this analysis, many orthodox economists still rely on this paradigm to explain the distribution of earned income. Thus, if an individual's income is low,

it is because his or her human capital is low.

Therefore to raise a person's wage rate involves raising their productivity through investment in human capital. Similarily, if a person is unemployed, it is thought to be a problem of insufficient aggregate demand. To lower the level of unemployment then involves policies to raise aggregate demand and expand employment along the queue which results in the employment of the previously unemployed and reduces the number of low-paying jobs. However, the theory implies that in order to employ significant numbers of the disadvantaged and unemployed, aggregate demand might have to be raised substantially which could result in inflation. In fact, if a high level of unemployment were observed, and it resulted from structural imbalances in the labour market, then an expansion of aggregate demand could result in a small or insignificant fall in unemployment but a large increase in inflation.

The 1960's was a period of rapid economic growth in North

America. However, sizeable levels of unemployment prevailed through

much of this period and a debate developed over what can be called the

'structuralist hypothesis'. The proponents of this view believed the

high levels of unemployment to be caused by either rapid technological

change and its requisite new labour requirements or by the changing

geographical and age characteristics of the labour force. The importance

of this view of unemployment lay in its policy implications which emphasized

the importance of understanding the sources of an observed form of

unemployment. In order to allieviate unemployment, the appropriate

policy solutions for a given type of unemployment would have to be

implemented.

The high unemployment rates of the 1960's were assigned priority by policy makers and various job creation programs, labour market information services, and retaining and mobility grants were created by governments. In 1966, the Canadian government created the Department of Manpower and Immigration and there was a resulting expansion of the parameters and comprehensiveness of manpower policy in Canada. Manpower policy was to be tied more closely to the general economic goals of growth, stabilization, and equity of economic development. In the United States, literally dozens of manpower programs were designed and implemented. One such program was the 'Concentrated Employment Program' in Boston. In 1967, the Labour Department commissioned a study of this program and the report of the five member research team came to the conclusion:

"...that the analytic assumptions concerning the behaviour of the Ghetto labour market on which C.E.P. was based were both inadequate and misleading. Before we could usefully evaluate this single program, we had to attempt to construct a more useful set of assumptions and theories about the ghetto labour market by which C.E.P. could be appraised."2

The set of assumptions and theories they constructed is now regarded as one of the first studies of the Dual Labour Market. Instead of there being a single market for labour the authors proposed that there were really two separate distinct labour markets with mobility of labour between the two markets being limited. Workers in the primary sector were

²U.S., Department of Labour, <u>Low-Income Labour Markets and Urban Manpower Programs: A Critical Assessment</u>, [by Peter B. Doeringer and others] ([Washington]: n.n., 1967), p. 1.

thought to work at jobs that had "...high wages, good working conditions, employment stability, chances of advancement, equity, and due process in the administration of work rules ..." while jobs in the secondary sector had "...low wages and fringe benefits, poor working conditions, high labour turnover, little chance of advancement, and often arbitrary and capricious supervision."

This study, along with others, went on to examine in greater detail the sources and characteristics of this dualism. Their findings seriously questioned traditional thinking on unemployment and income distribution.

Various analyses of the labour markets in four separate cities were conducted in the late 1960's with the authors having no substantial knowledge of the operations or findings of the other authors or research groups. As previously mentioned, Peter Doeringer, Penny Feldman, David Gordon, Michael Piore, and Michael Reich, examined the Concentrated Employment Program (C.E.P.) in Boston in 1967. Based upon their study of the ghettos of Chicago in 1968, Baron and Hymer formulated a similar theory with the duality existing between a white (primary) and a black (secondary) market. Detroit had two initial studies of its dual labour market.

³P.B. Doeringer and M.J. Piore, <u>Internal Labour Markets and Manpower Analysis</u> (Lexington: D.C. Heath and Company, 1971), pp. 165-66.

In 1968, Fusfeld described an isolated underdeveloped urban ghetto economy in Detroit. Many of its problems were thought to arise from the interaction of a heavy influx of black southern rural migrants and a population explosion caused by high fertility rates. In 1970 Bluestone formulated a tripartite model of Detroit's economy which tied differing industrial structures to differing labour forces which resulted in severe splits in labour occupations and incomes. Thus, poverty and inadequate incomes were thought to be caused by inappropriate industrial structures and not by inadequate human capital. Lastly, in 1970, Vietorisz and Harrison's study of Harlem's economy was published. They, like Fusfeld, concluded that the essential feature of Harlem was its underdeveloped economy and its lack of vital linkages with the highly developed economy in the rest of New York. This underdeveloped economy meant a shortage of relatively high paying upwardly mobile jobs. In fact, there was even a shortage of menial low paying jobs.

We will now examine these studies and their findings and conclusions in more detail. After doing this we will go on to review the rest of the literature so that we may see how the Dual Labour Market paradigm has developed from these initial economy studies.

Doeringer's first study of Boston hypothesized a Dual Labour Market on the basis of a person's access or lack thereof, to an upwardly mobile job. Those in the primary labour market had access to career and promotions ladders and had upward sloping lifetime earnings

profiles. Although many people were restricted from employment in the primary market because of a lack of the requisite skills, it was found that inadequate human capital could by no means account for all of the wage discrepancy. Instead, there had to be another factor or factors which prevented some individuals from obtaining primary jobs. On the basis of their examination of Action for Boston Community Development (A.B.C.D.) applicants' work histories, they found that many ghetto workers had an employment pattern of rapid job turnover.

"Among those in the sample, the median tenure on their last job was only 21 weeks, or about 5 months; a third of the applicants had spent 3 months or less on their last job. Only 23 percent had remained on their job 18 months or more. For the same group of applicants, the median time spent between each of their last four jobs was 15 weeks, and many applicants indicated that they were not actively seeking employment during much of this time."4

Further examinations indicated that most of the turnover was voluntary and low wages, poor working conditions, and lack of advancement opportunities were often cited as being the reasons for quitting. As well, this pattern of rapid turnover applied equally to people with a relatively adequate education or skills training. Thus, the authors

U.S. Department of Labour, op. cit., p. 4.

concluded that the "...pattern of high turnover in the ghetto is largely determined by the quality of employment available to the disadvantaged labour force." Jobs of higher quality and/or higher wages had a higher retention rate of A.B.C.D. referrels. In fact, "the retention rate on jobs was directly proportional to the wages of those jobs." Thus, the pivotal characteristic of the secondary labour market was thought to be its instability.

The authors then went on to outline the ways or reasons this instability might be tolerated or even benefitial to the employer. If turnover was fast enough, then the accumulated earnings of an individual in a single establishment "...may not exceed the payroll tax ceiling for employer contributions to various social insurance programs. Thus average and marginal tax rates are identical for each employee and are independent of job tenure." An unstable workforce can also hamper union organization. Lastly, if product demand is unstable or production is seasonal then a stable workforce may be impractical or inefficient.

⁵ Ibid.

⁶Ibid., p. 28.

⁷Ibid., p. 5.

The author's last main point was what they referred to as the link between the ghetto labour market and the ghetto culture. They maintained that a thorough understanding of the dynamics of the secondary labour market required an understanding of the social system of the ghetto. Because secondary jobs were unstable and of low quality the work was inherently unsatisfying. This loss of satisfaction from work was then replaced by the street life of the ghetto, and the institution of the workplace was replaced by or competed with, the institution of street life. 8 Thus the "live-fortoday" episodic lifestyle of the ghetto easily fitted low-wage high turnover employment, hustling, and a life of on and off welfare. So a concept of employment in the ghetto would also have to include hustling, and welfare since to many they were viable alternatives to low paying secondary market jobs. Once the concept of employment was expanded so it more suitably reflected "employment" in terms of the ghetto social system, then "...the incentives for rapid turnover in legitimate employment are more fully apparent."9

Thus, conventional labour market definitions of employment and unemployment only apply to a primary labour market and are inappropriate for an analysis of the ghetto or secondary labour market.

Ibid., p. 9.

⁸Ibid., p. 8. A prestigious job is often not the way to "make it" in the ghetto. Instead, high esteem can often be gained by engaging in various "escapades" with the street-corner social group.

Baron and Hymer in their analysis of the ghettos of Chicago also concluded that dualism existed in the urban labour market. However, this dualism was on a white-black, racial split based upon, and supported by, differing institutions and mechanisms for the recruitment, training, and allocation of jobs and workers. The Negro labour force was found to be employed in traditional Negro jobs which were low-paying and marginal and required little or no skill training. Very frequently, blacks were concentrated in seasonally or cyclically tied jobs and employed in industries which were stagnant or declining. Baron and Hymer also saw the black labour force acting as a surplus labour pool that was utilized "...for jobs that whites have recently vacated, or for jobs where there are shortages of white labour, or for jobs that have become traditionally Negro jobs."10 Using this generalization, the Negro labour force was broken down into three distinct categories based upon the nature of industrial employment.

The first was labelled the Negro "service sector" and it sold goods and services to the Negro community. This sector of the labour force was broken down into all those Negros self-employed

Harold M. Baron and Bennett Hymer, "The Dynamics of the Dual Labour Market," Problems in Political Economy: An Urban Perspective, ed. D.M. Gordon (Lexington, Mass.: D.C. Heath and Co., 1971), p. 98.



or employed in enterprises servicing the Negro community. The range of incomes in this sector were hypothesized to be large. They could range from the income of the low profit corner grocer to the income of the well paid professionals such as doctors and lawyers. Lastly, the size of the service sector was thought to depend "...upon the amount of money that Negroes have available for consumption expenditures."

The standard sector of the Negro labour force was defined to refer to workers "...regularly employed in firms and institutions that supply goods and services to the total economy." The jobs in this sector were with major corporations or with firms that were competitive with the major corporations. When Negroes were employed in this sector they were frequently segregated from whites by job classifications or production units. Black wages in this sector were thought to be high, and, in some cases, comparable to the wages paid whites. The size of this sector was to be largely determined "...by the extent to which past or present labour shortages have allowed the entry of Negro workers into areas where previously just whites were hired." 13

The surplus sector of the black labour force was thought to be of those workers who had jobs at the very bottom of the occupational ladder or who were unemployed. "The jobs are low paying, involve dirty

ll_{Ibid}.

^{12&}lt;sub>Ibid</sub>.

^{13&}lt;sub>Tbid</sub>.

and unsafe work, are often of short duration and have little advancement potential." Thus it was this surplus sector of Baron and Hymer's that roughly corresponded to the secondary sector identified by Doeringer. Also like Doeringer, Baron and Hymer did not see this sector and its activities purely in terms of the traditional concepts of employment and unemployment. Instead they saw the establishment of a minimum income being determined outside the labour market by the political determination of the level of welfare payments. In Chicago, a full one-fourth of all blacks received some form of assistance payment to supplement their income.

Baron and Hymer saw their concept of the surplus sector acting in a dynamic fashion. When the economy was in an expansionary phase, black workers would gradually be drawn into employment in the traditional sector. Once traditional sector employment was obtained, social custom and institutions secured continued employment in times of contraction. The authors' lastly compared the similarity of their view of the operation of the Chicago urban labour market to the operation of dual economies in less developed countries.

The white labour force was thought to use a modern technology and to contain a large percentage of skilled and highly skilled workers. On the other hand, the black labour force was thought to be largely unskilled and to be employed in jobs either located in declining

¹⁴Ibid., p. 99.

industries or providing only marginal types of employment.

"In fact, the surplus sector of the Negro labour force forms a type of urban peasantry comparable in certain aspects to the subsistence sector in underdeveloped economies. Since this supply of labour is outside the general economy and workers in it live at a subsistence income, they can easily be attracted into regular employment in large numbers without forcing wages to rise."15

Vietorisz and Harrison, in their study of Harlem, also concluded that Harlem's industry and labour force could be pictured in terms of an underdevelopment-development dichotomy. The ghetto's economy was found to be dominated by small firms and its manufacturing sector was extremely small and fragmented. However, the authors concluded that it was impossible for Harlem to develop in the surplus labour-absorbing path depicted in dual development models.

Instead, as the city developed, Harlem increased in relative proportion of underdevelopment to the rest of New York. Changing industrial technology seemed to favour extended horizontal space requirements. With high inner city land values, new industry had located on lower priced suburban land.

Harlem was also found to be lacking in an adequate wholesaling base which was found to be "...less than one third of the relative size of this activity in similar areas throughout the city." 16

¹⁵Ibid., p. 100.

¹⁶ Ibid., p. 34.

This finding was especially significant given that Harlem had a disportionately large retail sector. Data for 1967-68 indicated that 47.2% of industrial employment in Central Harlem was in retail trade. For New York City for 1966, the comparable figure for retail trade was 13.9%. (See Table 1.1, page 47). Harlem was also found to be lacking the infrastructure and financial resources of the city as a whole. Both sectors were approximately only one-tenth the size of these sectors for the city as a whole. At first glance, this lack of industrial development might be explained by regarding the area as a residential neighbourhood. However, Harlem had a historic past as an active productive area. It simply did not develop in the same fashion as the rest of New York City. The authors attributed this lack of productive economic development to the following barriers:

"Harlem's economic development has been a process whereby a mixed industrial-residential neighbourhood has deterioriated through the inability of its residents to command the resources necessary to implement a balanced type of growth. Businessmen have established themselves in the retail market because they have been excluded from entry into more capital intensive wholesale and other infrastructure support activities."17

However, Vietorisz and Harrison only presented current data to support the above assertion, and did not attempt to demonstrate the nature or process of the area's lack of development. However, their findings are interesting and do point up avenues for further

¹⁷Ibid., p. 3.

Percentages of Employment by Industry

Sectors, Harlem and New York City

Sector	Central Harlem ^a (1967-68)	New York City ^b (1966)
Construction	4.1	3.4
Manufacturing	27.2	27.7
Infrastructure	1.0	10.2
Wholesale trade	3.0	9.9
Retail trade	47.2	13.9
Finance	1.7	12.7
Services	15.8	22.2
· ·	(100.0)	(100.0)

^aCenter for Economic Planning, Harlem Business Inventory.

b New York State Department of Labour, Employment Review (August, 1967), pp. 17-22.

Source: Thomas Vietorisz and Bennett Harrison, The Economic Development of Harlem (New York: Praeger, 1970), Table 12, p. 35.

investigation which we will explore in more depth in Chapter 5.

Interviews concerning operating difficulties with local businessmen uncovered many important features of business activity in Harlem. Firstly, only 3.9 percent of the firms reported operating difficulties resulting from an inability to compete with larger firms. Instead the greatest difficulty was a lack of adequate police protection (33.3%), followed by difficulty in obtaining commercial insurance (22.4%), and in securing credit (15.7%). Difficulty in obtaining skilled help was cited by only 7.7% of the businesses. Thus, difficulties in the operation of business activity in Harlem seemed to be different from what one would expect. Security and credit problems were of major importance and production bottlenecks or highly competitive product market competition were very minor. The authors also cited further reports that demonstrated that large corporations had difficulty operating in the ghetto labour market.

"The Aerojet-General plant in Watts had been losing money despite very heavy labour training subsidies and the IBM plant in Bedford-Stuyvesant has higher production costs than other comparable company facilities. In a recent symposium, "Business in the Ghetto" sponsored in Chicago by the American Bar Association, Eugene L. Conroy, Senior Vice President and General Counsel of the Predential Insurance Company, said that investments undertaken by life insurance companies in housing and business in the slums had been found to be, "almost without exception, high risk and low yield."18

^{18&}lt;sub>Ibid., p. 56-7.</sub>

Thus, it seemed that the business and economic environment of the ghetto was qualitatively different from the rest of the economy and that in this environment, different productive enterprises operated and survived while other activities simply could not operate profitably. The authors recommended that "greenhouse" industries be promoted and emphasized that these industries be judged successful not on a profitability criteria but on their effectiveness in encouraging development.

Since Harlem had a very heavy retailing sector, it was not surprising that most of the job opportunities were in low-paying clerical and blue-collar occupations (87%). Even workers in the relatively few well paying occupations found themselves in the lowest-level positions in the employment heirarchy:

"Of Harlem's reporting professionals (doctors, teachers, managers, proprietors, and so forth), 97 percent earned a weekly salary under \$100. Furthermore, none of the craftsmen (carpenters, plumbers, and so forth) earned even this much."19

So even if a person could find work, it was often of a low employment stature at a wage which was inadequate to support an average family. As well, the unemployment rate for Harlem residents was close to three times that of the national average. Like Baron and Hymer, the author's found that inadequate training or a lack of higher education was unable to explain most of the earnings differential. Thus obtaining a higher

^{19&}lt;sub>Ibid., p. 24.</sub>

education or further skill training would not help one to obtain a better job if those jobs were simply not available.

Thus Vietorisz and Harrison analyzed the problem of poverty and inadequate wage income in a development economics framework. The Dual Labour Market was the result of dual industrial structure, which was the result of industrial growth following a pattern which necessitated the underdevelopment of Harlem alongside of the development of New York City.

Fusfeld, in his study of Detroit in 1968, also identified the nature of economic development as the source of the employment problems in Detroits' slums. He typified the ghetto as an economy with permanent signs of depression so severe that the economic development of the community was retarded.

Fusfeld began by outlining the history of the ghetto's development by tracing the history of its inhabitants. Most inhabitants were southern rural migrants or were themselves born in the ghetto. The first wave of southern labour migration, until post World War II, was identified as being the result of the pull of industrialization. However, the migration since the 1950's was thought to be a migration which occured as a result of the mechanization of southern agriculture. Once these migrants arrived in the ghetto, job openings were scarce. Few unskilled jobs were left in industry because of industrial mechanization and many job openings were available only in the suburbs where most of the new industries were locating.

Faced with this bleak situation, many workers began to earn their livelihood in what the author termed the irregular economy. Outside of working in the high-wage progressive or the low-wage "backward" sectors of the economy, a person had two possible alternative sources of income. They could receive income from various transfer payments or they could work at legal or illegal activities in the irregular economy. Fusfeld termed the irregular economy as a form of service economy which arose to support the various unique demands of a ghetto economy.

"The need for it arises from the inability of residents to pay for the usual organized and commercially provided services used by higher income areas, and by the lack of the business enterprises which normally provide them."20

This unique service economy was then viewed as generating rather unique occupations, of which Louis Ferman outlined the following:

"The artist. Entertainers, humorists, painters and craftsmen.

The hustler. The super-salesman who often operates on both sides of the law. For example, the "casket salesman" who retrieves coffins from the local cemetery, refurbishes them, and offers them for sale.

The fixer. The expert who can repair cars, appliances, plumbing or electrical wiring.

The information broker. The individual who receives cash income in exchange for information. Sometimes the information concerns the availability of stolen merchandise, sometimes job opportunities, sometimes the details of the welfare system.

Daniel R. Fusfeld, "The Basic Economics of the Urban and Racial Crisis,"
The Conference Papers of the Union for Radical Political Economics,
(December, 1968), p. 66.

The product developer. Products such as rum-raisin ice cream, sweet potato pie and barbecued spareribs enjoy a large sale in some ghettos. They are also produced there by ghetto residents."21

Lastly, there was the illegal portion of the irregular economy, which consisted of occupations such as bookies, thieves, pushers, prostitutes and pimps, and fences.

The irregular economy was really seen as an economy which provided enterpreneurial activity to workers who could not or did not want to gain employment in the regular economy. A leisure-income tradeoff was available to the individual and in many cases capital investment was low so the money lost from unsuccessful enterpreneurship was also low.

However, there was one major disadvantage to employment in the irregular economy. It accustomed the worker to patterns of behaviour and attitudes toward work which were incompatible with employment in the regular economy. In the irregular economy, the job was fitted to the individual and he controlled his work environment. In the regular economy, the individual was fitted to the job and received a regular paycheck for performing a specified task. In return he or she had to begin and quit work at a specified time, work certain days, and if he or she were to rise in the job heirarchy, be a stable employee.

²¹Ibid., p. 67.

The ready availability of transfer payments was also thought to compete with employment in the regular economy. Welfare payments might be below that needed for an adequate standard of living but in many instances, they were competitive with income levels derived from work in the regular or irregular economy. Thus Fusfeld, like Doeringer, viewed the traditional concepts of employment and unemployment as being inappropriate for the ghetto. The alternative to income from welfare or self-employment might seem totally unfeasible to a \$20,000 a year executive, but to an unskilled worker with little chance of working at any job but the lowest in the occupational heirarchy, welfare and self-employment were viable alternatives. Since most workers in the ghetto worked in low-paying occupations concentrated in small unprogressive industries, this three-fold nature of possible employment applied to total employment in the ghetto, and replaced the usual definition of employment.

Fusfeld then drew a very clear picture of the economic environment in which the typical low-wage industries survive and compete. They were typically small, and the technology was labour-intensive with low capital investment requirements.

"Both labour productivity and profits are low. Oligopolistic market control generally is absent, which means that employers are unprotected from the rigors of competition. Unions are largely absent, so that workers are subject to the wage-squeeze characteristic of labour intensive, highly competitive industries. Sales in these industries are generally quite sensitive to prices, which means that even if competition were reduced firms would have little chance of improving their revenues through price increases. Since profits are low, little is done in research or product development, which

reinforces the technological backwardness of the industry."22

Labour turnover in these industries was very high and so were the unemployment rates for its labour force. Most of the jobs were dead-end, and on-the-job training was practically non-existent for few job ladders existed. Lastly, the workers who worked in low wage industries tended to stay there, rather than move into similar jobs in the high wage sector.

Bluestone's study of Detroit, like Fusfeld's, also focused attention on the nature of industrial structure to explain occupational splits and the persistence of poverty. He developed a model of segmentation of the labour market from his belief that segmentation existed on both sides of the market:

"...labour is not fully mobile between sectors of the economy and industries vary greatly in terms of their ability to pay high wages. The imperfections in labour mobility and the lack of competitiveness among industries and firms in the economy may be precisely what is responsible for the low income of many of the working poor."23

His model saw labour immobility arising from individual, industrial, or social barriers, and from there went on to demonstrate that an assumption of labour mobility was inappropriate given the economic environment. He then outlined a more aggregated analysis of market

²²Ibid., p. 66.

Barry Bluestone, "The Tripartite Economy: Labour Markets and the Working Poor," Poverty and Human Resources, (July-August, 1970), p. 21.

fragmentation where the economy was divided into three industrial structures; Averitt's core and periphery, and Ferman's irregular economy. Each industrial structure was then distinguished by a unique set of industry characteristics which made its demand for labour unique to that industry segment.

The core industries were typically in durable manufacturing, construction trades, and extraction industries and were high profit, high productivity, usually oligopolistic, highly unionized, and highly capital intensive. They paid better than average wages and fringe benefits, and job ladders existed. On the other hand, the periphery industries were concentrated in agriculture, retail trade, and nondurable manufacturing, and were low profit, low productivity, highly product market price competitive, non unionized and paid low wages. They were typically very small in size and were unable to expand production to realize economies of scale or to spend large amounts on extensive research and development. The jobs in these industries typically paid a lot less than those in the primary industries. irregular economy was largely concentrated in ghetto areas, was informal in nature, and often invisible to outsiders. The incomes of its participants varied and could be quite high (eg., drug pushers) or low (eg., corner-store grocers).

Mobility between these three sectors of the economy was hypothesized to be minimal. Bluestone believed that only a part of this immobility was due to a lack of human capital or proper work

attitudes. Instead the bulk of immobility was thought to be due to barriers erected by unions, employers, or government. Thus, increases in aggregate demand might temporarily allieviate the position of the poor but it would not permanently lower the barriers to mobility. Similarily, "...manpower programs, at the very best, might alter the composition of the working poor, but the number of jobs at poverty wages will not be reduced." Instead, to effectively and permanently allieviate or eliminate poverty, the entire economy would have to be restructured so that new industrial labour would arise. Tax policies which favoured center firms and their development would have to be replaced by balanced policies which promoted peripheral development. As well, the awarding of government contracts, which were heavily biased toward large corporations, would have to be revised. In fact, Bluestone proposed a total revamping of all of the traditional assumptions and policies toward industrial and labour force development.

Most of the initial Dual Labour Market studies emphasized the role of a dual industrial structure influencing the development of a dual or segmented labour force. Bluestone and Fusfeld simply expanded upon Averitt's original theme of the development of a center and periphery industrial structure, Baron and Hymer developed a push migration framework, and Viertorisz and Harrison emphasized the suburbanization of modern industry and the differing economic environment of the ghetto. The bulk of the other studies simply focused attention on the Dual Labour Market and its characteristics and do not attempt to examine the source

²⁴Ibid., p. 26.

of this dualism.

Further research on the role of migration in promoting the underdevelopment of the slum economy has been scanty. Fusfeld also saw migration as serving to depress the ghetto economy further but he did not see rural migration playing a depressing role in itself. Instead the slum or ghetto was thought to play the role of a "stopping point" for migrants and immigrants who eventually moved upward in the economy and out of the ghetto.

Vietorisz and Harrison in their study of Harlem emphasized the devastating effect on core cities of the movement of industry to the suburbs. Thus, a changed production technology was thought to have so transformed the spatial nature of industrial production, that for most firms it was no longer possible to produce in the high land cost core areas.

However, the problems associated with industry establishing itself in core areas goes much deeper. Crime rates are high and vandalism of property is more probable, thus insurance rates are higher. Plus, many of the supporting infrastructure facilities are lacking. Thus, many firms find that the business environment in which they operate differs from the "conventional". However, the question then arises as to the direction of causation. Is the differing economic environment a result of the fact that business growth and development has not favoured this area, or has an inhospitable business environment driven high paying profitable firms from the ghetto. Vietorisz and Harrison seem to favour the latter direction of causation by emphasizing changing

spatial requirements of industry as technology progresses.

Thus, the modern industries that utilize a land-intensive production layout, found land costs in the core areas to be too high. Therefore, many new industries have relocated in the suburbs. They went on to explain how the variable and fluctuating nature of consumer demand in Harlem has left it with an industrial structure composed of only those industries which could survive in this environment. All other industries had relocated. Thus Harlem was an underdeveloped economy because of the role of technology in the growth of industry. Thus, to try to correct this underdevelopment using conventional methods would meet with failure. Therefore, they proposed their greenhouse industries concept.

No additional research on this theory of the source of the dualism has been undertaken. Instead the bulk of the research has followed Bluestone and Fusfeld's approach of using Averitt's Dual Economy description to examine the rise of industrial and labour force dualism. The research has now swung away from examining the problems of the ghetto's economy toward a more expansive examination of the effect of dual industrial development on the labour force. Thus, the initial studies hypothesized a Dual Labour Market on the basis of an examination of the problems of the ghetto, but with the addition of Averitt's and Galbraith's New Industrial State, the Dual Labour Market paradigm has become more expansive and its ramifications more significant.

Averitt's description of the Dual Economy began by examining and defining what he believed to be the two dominant forms of business systems in North America. The center was composed of those business enterprises which were large and influential.

"Its organizations are corporate and bureaucratic, its production processes are vertically integrated through ownership and control of critical raw material suppliers and product distributors; its activities are diversified into many industries, regions, and national. Financial support is readily available from both internal and external sources. Firms in the large economy secure national and international markets, using technologically progressive systems of production and distribution."25

On the other hand, the periphery was thought to be populated by relatively small firms.

"These enterprises are the ones usually dominated by a single individual or family. The firms sales are realized in restricted market. Profits and retained earnings are commonly below those in the center; longterm borrowing is difficult. Economic crises often result in bankruptcy or severe financial entrenchment. Techniques of production and marketing are rarely as up to date as those in the center."26

Averitt, Robert T. The Dual Economy: The Dynamics of Industry

Structure. New York, W.W. Norton and Company Inc., 1968, p. 66.

Ibid., p. 7.

Averitt saw this dualism arising as a result of technological progress:

"Our central idea is that the organization and behaviour of manufacturing enterprise, center and periphery, are significantly conditioned by the technical production type characterizing the firm's operations."27

As technology progressed, some industries were able to switch production into what he called large batch and mass production. As a result, scale of operations increased, the organization of production changed, and lastly, the resulting labour requirements changed.

Labour now became attuned to what was called firm specific training. The knowledge of how to operate a given machine or how to deal with a firm's accounting system or computer, etc., was often learned on the job and only through experience. Thus, a person may have a basic knowledge of the simple operations of a given technique but the intricacies of the actual job performed were specifically fitted to the particular work environment. Once this process had taken place, the transfer of human capital between firms was not a totally costless process. The worker now embodied a knowledge of a particular work process which could only be transfered to another person through training or in the form of lost production while the new worker learned the job. Thus, a particular worker may have firm specific capital investment in his person in the form of a unique knowledge of the work process. To lose that worker and his knowledge costs money and so it becomes very important

²⁷Ibid., p. 23.

to large technologically advanced center firms to have a stable, low turnover, low absentee-rate labour force. These firms then develop internal labour markets which offer promotion possibilities based upon the accumulation of a knowledge of that company's operation.

"Experience with the specific technology in a plant is then firm-specific as the idiosyncrasies of each plant generate training that has value only within the plant. Well-developed promotion ladders often reflect the gradual accumulation of this type of human capital."28

Small periphery firms frequently do not have such sophisticated production units and so do not invest such large amounts of capital into labour force training. Also, they often are highly competitive in the product market and have profit margins which are low. Thus, they cannot afford to pay as large a wage bill as the center firm.

Averitt's theory has many implications for the study of labour economics, the most important of which lie in its dynamic predictions.

"During the postwar period investment has been both capital saving and labour saving, necessitating an increasingly rapid rate of G.N.P. growth to provide full employment. The spread of the center into new areas has helped furnish growth-inducing investment, but the long-run effect on the labour-output ratio are troublesome. The center tends to substitute capital for labour, and the encroachment of center firms into new markets erodes the employment potential of competing periphery enterprises. The total number of manufacturing firms was lower at the beginning of 1963 than in 1950."29

A.J. Alexander, "Income, Experience, and the Structure of Internal Labour Markets," Quarterly Journal of Economics, (February, 1974), p. 65.

29

Averitt, op. cit., p. 6.

So not only does this growth of center firms lead to a skewed distribution of incomes, it also, in the long-run, could lead to a serious unemployment problem.

Averitt also made an interesting assessment of the role of unions. He termed the center economy as a "private welfare state" in which both the unions and its members, and the management of the industries have an interest in maintaining. Since the strength and the bulk of organized labour is in the center economy, it is in their interest to promote its continued existence in its present form. In most of these industries, it is becoming increasingly less expensive to pay the nucleus workers overtime than to employ additional workers from the periphery. Thus there is a developing pattern of over-employment of primary or center firm workers and an accompanying underemployment or structural unemployment of periphery workers. Again, the long-term effects of this process could be devastating.

"As automation continues in center plants, the union reaction is to preserve the status of the nucleus through gradual reduction in employment when demand is low leaving the transients to longer periods of unemployment or eventual banishment to the periphery economy."30

Thus, Averitt's Dual Economy is not really a dual economy in the sense of two separate distinct economies operating in differing environments which are not related to each other. What Averitt has demonstrated, is that the periphery economy is really the sector of

³⁰Ibid., p. 152.

the economy which is less amenable to technological advancements which could make it more capital intensive and the firms more profitable. It is the sector of the economy which the center firms have not yet advanced their operations into because of a lack of profitability. It is underdeveloped as such, only relative to the "development" of the center economy, which is usually measured by the profitability of the firms and the high wages or income it gives workers. ³¹ However, in terms of a measuring standard of employment generation in an economy that has surplus labour, it is the center economy relative to the periphery economy that is underdeveloped or badly developed.

Thus, from Averitt's analysis it follows that traditional thinking on development and its progress changes. The process of development should be viewed not only by its generation of success in the center economy but also by its employment and stagnating effects on the periphery economy. To not fully understand this process of development may result in a faulty analysis of what many Dual Labour market proponents are saying. They are not hypothesizing two separate dual economies but a dynamic development process which produces a skewed

For example, Albein defined progressiveness of industries in the following manner. "To a reasonable degree of approximation, economic activities can be classified as either technologically progressive or technologically stagnant. In the former case, technology results in steadily increasing labour productivity; in the latter, there is little favourable impact of changing technology." Peter S. Albein, "Unbalanced Growth and Intensification of the Urban Crisis," Urban Studies, (June, 1971), p. 139.

distribution of productive activity and the incomes it generates. Within this working framework, the reasons for the observations and areas of research of many writers on the Dual Labour Market become more apparent, and it is within this framework that they should be analyzed.

The initial ghetto labour market studies emphasized that the center and periphery firms operated in distinctly different input markets. The center firms input market benefits of easily obtainable credit and a stable labour force are often lacking in the periphery or the ghetto economy. Similarily, the labour market information environment also differs sharply. The center firms operate in a fashion which promotes labour stability and they often make use of internal job heirarchies or internal labour markets. On the other hand, labour recruitment in the periphery economy often occurs through information gained from relatives or friends or is conducted through institutional mechanisms especially designed for this purpose. In fact, many of the manpower programs created in the 1960's were created to meet the crisis imposed by the increasing numbers of unemployed secondary workers while job vacancies in the periphery industries were high.

Various studies of the activities of government labour market placement services and programs have all indicated that what these programs lack most is the ability to obtain jobs for their clients that offer higher than minimum wages and chances for advancement.

Instead, the jobs are often low-paying and are with what are universally considered poor employers:

"Many of the employers who were heaviest users of A.B.C.D. referrals were among the least preferred employers in the Boston labour market. A.B.C.D. placements with these employers showed high quit rates in the first week and month of employment. Despite reports from followup interviewers recommending that A.B.C.D. cease servicing these employers, placement interviewers continued to refer applicants to them."32

For example, Doeringer concluded that A.B.C.D. was used primarily by secondary employers who found it difficult or expensive to hire workers on their own. As such, A.B.C.D. was simply serving the role of a hiring hall for these secondary employers. Thus these programs, which were initially developed to facilitate labour market transactions, are really only serving the secondary labour market and its periphery employers. The need for these institutions arose when the "problem" of high unemployment was officially recognized as a policy problem by government. As such, these programs are attempts to cure the problem by attacking the effect of dual development. They do not attempt to deal with the cause of long-run high frictional unemployment. Thus these programs serve only the needs of the secondary employers and do not lead to a bettering of the workers utilizing them. Unfortunately, many of these programs in both Canada and the United States are financed by the federal governments. Thus the states or provinces tend to view them as free and do little to analyze their effectiveness per public dollar spent.

³² Doeringer, op. cit., p. 31.

Summary: Chapter 3

The first studies on the Dual Labour Market were published in the late 1960's. They differed from many of the previous writings on the labour market by focusing heavy attention on the structure of labour demand in an economy. Rather than individual human failings accounting for poor work behaviour and performance, these authors believed the undesireability of many forms of employment could explain the observed high rates of job turnover in many industries. Writers such as Baron and Hymer, and Ferman went on to focus attention on the "ghetto culture" and the sociological nature of low-wage and/or low-skill employment. Their writings and findings closely paralleled similar endeavours on the Informal sector. However, the form of Dual Labour Market hypotheses we have emphasized are those that examine and utilize an industrial structure approach.

Authors such as Vietorisz and Harrison, Doeringer and Piore, Bluestone, and Fusfeld have emphasized the industrial formation of the economy and the occupational composition of industries in their hypotheses of the Dual Labour Market. The economic environment of ghetto industries and/or those industries which employed members of the secondary labour market seemed to differ radically from primary labour employers. In fact, the secondary labour employers operated in a laissez faire environment while primary labour employers were typically oligopolies or monopolies.

Many authors then attributed the emergence of labour force and industrial dualism to the existence of barriers to competition erected by institutions such as labour unions, government, or employers. However, other authors began to explore Averitt's Dual Economy hypothesis. Averitt's emphasis on utilizing techniques of production when dynamically analyzing enterprise production processes and labour force organization provides the key for linking together the paradigms of the Informal Sector and the Dual Labour Market.

CHAPTER 4

A COMPARISON OF THE DUAL LABOUR MARKET AND THE INFORMAL SECTOR

"Discovery commences with the awareness of anomaly, i.e., with the recognition that nature has somehow violated the paradigm-induced expectations that govern normal science. It then continues with a more or less extended exploration of the area of anomaly. And it closes only when the paradigm theory has been adjusted so that the anomalous has become the expected. Assimilating a new sort of fact demands a more than additive adjustment of theory, and until that adjustment is completed — until the scientist has learned to see nature in a different way — the new fact is not quite a scientific fact at all."

The paradigms of the Informal sector and the Dual Labour Market both arose in times of governmental concern over the persistence of highly observable pockets of poverty. By highly observable pockets of poverty is meant the existence of slums or ghettos in North America or barrios or favellas in less developed countries. Although slums had existed in their present form in many countries for several decades, the 1960's saw many of these areas expanding.

For the affluent North American economy, these areas were anomalies which were a potential and actual (riots) source of policy problems. However, for less developed countries, these areas posed even greater policy problems. The highly affluent North American economy could afford officially to tolerate and support poverty and various

Thomas Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1962), pp. 52-53.

transfer payment programs such as unemployment insurance, welfare, and family allowances, were created.

However, most less developed countries are not affluent and most have limited or no social assistance programs for the poor. Thus poverty can and does take an extreme form (i.e. starvation and ill health) in these countries. In the 1960's, rising rates of rural-urban migration quickly transformed rural into urban poverty and the ranks of the urban poor grew at an alarming rate.

The urban poor in less developed countries pose special problems for various levels of government. In many urban areas their residences are constructed illegally on property they do not own. Since their settlement is illegal, services such as water, electricity, sewage disposal, police protection, etc., cannot be provided. Consequently, these areas are typically unsanitary and unsafe. Attempts to remove the squatters have met with resistance or have simply resulted in the people settling illegally on another piece of unoccupied land. However, one of the greatest policy predicaments which the urban poor present arises from their potential for violent activity. In countries with unstable governments, the community of the poor is a perpetual breeding ground for various politically undesirable activities. Whether the poor respond in a traditional lumpenprolitariat fashion or serve to further the cause of a left-wing revolution may still be a source of debate, but whatever the direction of their action may be, the threat and potential for political activity remains.

In developed countries the nature of government concern with poverty is similar. Riots may not overthrow governments but they do destroy property and lead to racial tension. To some degree this problem can be held in check with massive amounts of transfer payments, but the standard of living remains low and often inadequate and the cost of such programs is enormous.

Thus the community of the poor has become a policy problem for both developed and less developed areas. However, the form of this policy problem differs in the manner outlined above. With the expansion of the ranks of the poor in the 1960's, the attention paid to their problems also expanded. Various I.L.O. commissions examined "urban poverty" and in the United States researchers began to examine the reasons for the ghetto's continued existence. It was found that traditional thinking on the form and nature of poverty in these two differing economic environments failed to correspond to observable In developed countries a lack of formal education or an absence of human capital failed to explain earnings differentials and upward job mobility seemed non-existent. Thus all the money poured into retraining programs did not really achieve the desired result of eliminating poverty. Either not enough money was being allocated, or the theory underlying the policy was inappropriate. In less developed countries the nature of development was not following the labour absorbing growth path predicted by the Lewis-type Dual Development models. Instead, the masses of surplus urban labour were not being used in industrial establishments but were often self-employed or unemployed.

From the research into poverty in the less developed countries grew the theory of the Informal sector and from North American research grew the theory of the Dual Labour Market. The early literature on the Informal sector dealt with the significance and place of the Informal sector in a Lewis Dual Development framework. The concern was to modernize and develop as quickly as possible and attention was focused on relating the role of the Informal sector to the development process.

In North America, concern was more with the employment or supply side of poverty. Development was progressing rapidly and the rate of industrial growth was considered to be quite acceptable. Instead, concern was focused on the persistence of what was considered an anomaly, poverty. Since development was considered to be normal, the problem was usually assessed to lie on the supply side of the market.

The first studies of the Dual Labour Market found this a priorihypothesis to be inappropriate. Although a lack of human capital could
explain some of the earnings differential between the primary and
secondary markets it could by no means explain it all. Instead,
earnings seemed to be more closely linked to job stability and job
stability was not seemingly tied to educational attainment or skill
level. Instead, a person's position of employment in the ghetto
economy seemed to be more closely tied to the labour demand requirements
of ghetto industries. High paying capital intensive industrial conglomerates
did not locate in ghetto areas of North American cities. Companies that

had tried to do so, quickly found the economic environment to be hostile and either withdrew or faced sustained losses.²

However, many of the avenues of research opened by the initial studies on the Dual Labour Market have remained unexplored. There has been little work done on the role of rural-urban migration of labour into the ghetto, or on the history of the rise of the "ghetto" economy. Instead, research has followed the initial emphasis on the segmentation of labour markets. Thus, although many of the first studies on the Dual Labour Market emphasized its linkages to an industrially underdeveloped ghetto economy, this avenue of research was left unexplored. Instead, most authors have concentrated their efforts on examining labour force dualism from the labour supply side.

But even if the research on the Dual Labour Market has dealt only with the labour force, the parameters and implications of the theory are far more extensive. When one compares the various findings of the Dual Labour Market and Informal sector research, an observable pattern of similarities in findings appears. Both emphasize that the sectoral division of markets is characterized by: (1) differing input and output markets; (2) turnover in the low-wage sector or market is high and low in the high-wage sector; (3) underemployment or inadequate wages and not unemployment are the policy problem; (4) mobility between the two sectors or markets is limited; (5) and lastly, female employment is often concentrated in the low-paying sector or market.

 $^{^{2}}$ See pages 47 to 49of chapter three for a fuller discussion of this process.

In this chapter we will compare these various similarities and show how they are not simply interesting sidelines to the main avenues of research. Instead, these similar patterns of dual growth are a result of a particular development pattern which leads to an increasingly skewed industrial, social, and labour force structure. At first glance, it may seem that the two sides of the sectors or markets are not closely linked to each other, or in fact that the segmentation is total and complete. However, the duality appears only on the surface of development and the two sectors are really the two differing poles of one development process.

Following this line of analysis the reasons for the similarities of findings between the two theories becomes more apparent. Since a similar process of a skewed development pattern is taking place in both less and highly developed countries, it is not surprising that researchers of both theories should mention similar characteristics in their writings. Thus, when we explore these similarities we will be doing so in a manner such that their role or function in the development process becomes more apparent. In fact, the comparison of the theories will really be a comparison of how the two paradigms point to this skewed pattern of development.

As shown in Chapter 2, the early writings on the Informal sector analyzed the sector within a Lewis-style Dual Development framework.

Thus its role was at first defined to be that of an absorptive or transitional sector which soaked up a temporary surplus of labour.

However, this surplus labour was thought to be temporary only to the

degree that institutional barriers prevented labour from being employed in the Modern sector. Taking this line of thinking to the extreme, if all barriers were absent, the Informal sector would not exist, and all labour would be employed in the Modern sector. Thus, the early writers viewed the Informal sector as a transient and passing anomaly in the development process. As such, it was a temporary aberration which would disappear as soon as development returned to "normal".

In contrast, the theory of the Dual Labour Market was never viewed or approached as a temporary anomaly in development. To demonstrate more clearly its focus and meaning we will first briefly review the traditional approach to poverty. Traditional thinking identifies two major sources of poverty. Poverty could arise from a lack of adequate income or returns to labour, or for these unable to work, from low levels of assistance payments. To allieviate the plight of the working poor, two options were available. The level of aggregate demand could be raised so that the level of unemployment would fall. Or if poverty resulted from a lack of human capital, the level of retraining programs could be raised. For the non-working poor, the levels of assistance from the various social assistance programs could be raised. Thus poverty was both viewed and treated as a highly flexible policy option. Depending upon where the government of the day saw its priorities, programs would be varied. Thus, the traditional view of poverty saw it as an anomaly only in times of affluence or in times of economic expansion. Thus, for the decade of

the 1960's, the high level of observable poverty was viewed as an anomaly.

The early Dual Labour Market studies had shown that many people who possessed the necessary education or skill levels, were unable to obtain jobs that corresponded to their level of human capital. Instead, they seemed to be trapped in employment in jobs that were below their capabilities. Attention was focused on the "problem" when attitudinal studies revealed that these people did desire better employment opportunities. Thus, for many, confinement to secondary market jobs was not voluntary.

Additional research on the Dual Labour Market has focused attention on two possible explanations for the existence of the two markets. Some researchers have studied the supply characteristics of those employed in the secondary labour market. They have typically explored such areas as employment discrimination because of sex, age, colour, and national origin. On the other hand, authors like Doeringer, Piore and Bluestone, have stressed that the theory of the Dual Labour Market has its roots in the pattern of demand for labour. Thus they focus attention on areas such as the origins of the internal labour market and its affects on the stability of labour. Thus, although there is disagreement over the source of the dualism, both views still emphasize that the dualism is not a temporary anomaly. Instead, an emphasis is placed on analyzing additional factors in order for us to understand the operations of the labour market.

The early writers (and many writers today) did not approach the Informal-Formal sector dictomy in the same manner. The Informal sector was thought to be an anomaly created by the institutional barriers erected by government, unions, and enterprises. Presumably, if these barriers did not exist, the Informal sector would also not exist. Working within the framework of this hypothesis the authors explored the form of barriers erected and the manner in which they effected development.

Within this framework, these early versions of the Informal sector were really attempts to formulate appendages to the Lewis form Dual Development Models. They were formulated so that empirical anomalies could be explained within the prior paradigm framework of the Lewis form of Dual Development Models. As such, these early versions of the Informal sector followed the classic paradigm development pattern. They first attempted to incorporate anomalies within the accepted framework.

For example, the I.L.O. report on Kenya, which first introduced the term Informal sector to a wide audience, stressed the role of government intervention in the market in the form of tax concessions, building or product specifications, etc., as promoting the growth of a protected, noncompetitive formal sector in Kenya. This in turn was thought to lead to the creation of a highly paid formal sector labour force:

"Moreover, distorted protection has serious social effects. Heavily protected industries can make high profits; they can then pay high wages and these spread to other industries."3

Thus to allieviate this distorted income distribution, the report recommended more favourable government attention and regulations directed at the Informal sector. In fact, it specifically recommended the use of a more labour intensive growth path for Kenya.

John Weeks, one of the principal authors of this I.L.O. report then went on in a further article to elaborate how the formal sector is characterized by imperfect competition brought about by government protectionism while the informal sector is characterized by a complete lack of government intervention with its economy typically being highly competitive. He then concluded the following:

"The duality in the non-agricultural sector is, I have argued, largely the consequence of the rationing function of the state; the duality is not the result of characteristics inherent in each sector, but the result of the structural position in which each finds itself."4

Many of the other early writers on the Informal sector, who did not merely factually review and report on its various activities, seemed to follow Week's approach. However, often the role of labour

International Labour Organization, Employment, Income, and Equality:

A Strategy for Increasing Productive Employment in Kenya (Geneva: I.L.O., 1972), p. 72.

⁴ John Weeks, "Uneven Sector Development and the Role of the State", Bulletin: The Informal Sector and Marginal Groups, (October, 1973), p. 80.

unions or other institutions were cited to be more important. Other writers simply viewed the sector as playing a labour aborptive or transitional sector role and did not elaborate their thesis to any great degree. Since this theory of the Informal sector is both time and place specific, some authors then went on to examine a specific country's informal sector and compared their findings to those of the I.L.O.'s Kenya report or other similar findings for other countries. They then compared notes on how various institutional barriers affected development in differing countries.

One example of this type of approach is Dasgupta's study of Calcutta's Informal sector. He estimated that it accounted for at least forty percent of the city's workforce but that "...most of those engaged in it are workers in unskilled or obsolete occupations, which make little contribution to the national economy." Dasgupta then concluded that only one-fifth of the workforce was productively employed and therefore the structure of Calcutta's Informal sector was unproductive. Thus, given this structure of Informal sector activities, the author concluded that a policy of promoting its development was unsuitable.

The other type of research approach on the Informal sector explored its presumed role as an absorptive and/or transitional sector.

B. Dasgupta, "Calcutta's 'Informal Sector'," <u>Bulletin: The Informal Sector and Marginal Groups</u>, (October, 1973), p. 72.

One example of this approach is the I.L.O. report on the informal sector in Abidjan (Ivory Coast). ⁶ The researchers found that the informal sector was largely concentrated in primary producing industries.

"The breakdown into informal and formal sectors in Table 2.5 shows that the great bulk (over 90 percent) of those in the informal sector in the Ivory Coast are also in primary producing industries (agriculture, forestry, fishing and hunting). Within the primary sector, only 3 percent are employed in the formal sector; the other 97 percent in the informal sector."7

However, an even more surprising finding was that "....67 percent of those working in industry (manufacturing, handicrafts, and power) in 1965 and 61 percent in 1970, were employed in the informal sector."

However, even though the authors found the Informal sector to be supporting such a large proportion of the working population, because the activity was concentrated in primary industries and it supported a number of secondary income earners, the authors concluded the sector played a transitional role: 9

Heather Joshi, H. Lubell, and Jean Mouly, Urban Development and Employment in Abidjan Urbanization and Employment Research Program, Working Paper No. 4, International Labour Office, (1974).

⁷Ibid., p. 2-18.

^{8&}lt;sub>Tbid</sub>.

^{9&}quot;A survey of Port Bouet, near Abidjan, recorded 931 additional incomes for 3,446 families or a supplementary income for more than one family out of four. Of these secondary incomes, one third (37 percent) were earned by women." Joshi, op. cit., p. 415 citing AURA Amenagement de Port Bouet: Enguete socie-economique. Vol. I: Analyse des resultats, p. 46.

"The informal sector can play a double role in the development of the Ivorian economy: a passive role by absorbing rural manpower unable to find a place in the modern (formal) sector, and an active role by complementing the modern sector's production of goods and services but using capital saving, labour intensive techniques. Protection and utilization of the informal sector to achieve development ends in no way signifies immobilism and renunciation of technical progress.

Indeed one of the aims of policy toward the informal sector may be conceived as the creation of a "transitional sector" which would evolve into a part of the modern sector as the economy develops."10

Thus the report concentrates on how the activities in the informal sector differ from those in the formal but are still economically useful to society. But the aim of development is still focused on "technical progress" which is equated with the formal sector. Development of the informal sector was then viewed as supporting its development in the hope that it will also evolve and become "technically progressive" like the formal sector. Thus, this report views the promotion of the informal sector activities in a different way from the 1972 I.L.O. Kenya report. The Kenya report recommended the promotion of the informal sector so a more egalitarian labour-intensive growth path could be introduced. This report on the Ivory coast works within the framework of the older Lewis-style Dual Development Models and simply changes the older passive role assigned to the informal sector.

¹⁰ Joshi, op. cit., p. 7-11, 7-12.

Thus the labour absorptive or transitional sector approaches are really appendages to the older Lewis-style Dual Development Models for less developed countries. When features such as differing input and output markets, easy or difficult entry and exit for both labour and firms, differing infrastructures and differing competitive conditions, are mentioned as observations of the market segmentation, it is done so within the prior given framework of analysis. The authors then viewed these differing operating structural conditions as arising from the institution of government, (government officially recognizes and financially helps to protect the formal sector while the informal sector goes unaided) or labor union organization, etc.

However, some authors began to take a closer look at the causal forces behind the institutions. People such as Mazumdar then found that the operational forces which created the institutions were important. In fact, it might even be possible that they were more important in explaining the rise of the informal sector than citing the role of institutional mechanisms:

"...there is considerable evidence to the effect that even in the period when trade unions were weak, and state intervention in labour matters was minimal, employers of labour in the organized sector were interested in the development of a stable labour force firmly attached to the employing unit."!1

Dipak Mazumdar. The Theory of Urban Underdevelopment in Less Developed Countries, World Bank Staff Working Paper No. 198, World Bank, (February, 1975), p. 3.

Thus the need for a stable labour force was thought to encourage the growth of a protected formal sector labour force.

The growth of union and protective state legislation would then arise in response to pressures to increase the barriers protecting that labour force from competitive labour market conditions.

Rempel and House have outlined the conditions under which they think the formal sector may require a stable labour force. For some firms in these countries there is no effective choice between a labour or capital intensive technology. There might exist a more labour intensive production technique, and the factor prices between labour and capital might indicate that production technique should be labour intensive, but imperfect product market conditions enable the firm simply to adopt an externally determined capital intensive technology.

However this technology was designed for conditions existing in a totally different economy and it often requires the employment of a stable labour force for the production process to operate at top efficiency:

"The most efficient utilization of this externally imposed technology requires a stable labour force that develops an appreciation for the maintenance and care of expensive machinery with only limited supervision.

The first step to accomplishing this efficient

The first step to accomplishing this efficient utilization of the externally imposed technology is to purchase low labour turnover."12

¹² Henry Rempel and W.J. House, The Kenya Employment Problem: The Impact of Growth in the Labour Supply in the Modern Sector Wage Structure, World Employment Program, International Labour Office, (1975), p. 66.

Thus a relatively high wage would be paid to labourers in the formal sector enterprise and a resulting low labour force turnover would result. It should be noted that the authors still deemed the resulting labour market developments to have arisen from institutional factors:

"What has been described here is a particular wage strategy that can be pursued by those firms which can, in some way, affect market prices in a particular Less Developed Country. Given such market power, we feel justified in calling such wage policies an institutional intervention."13

However, in a particular industry some firms may not have this market power while others do:

"Therefore, among firms in an industry characterized by differentiated products and among industries, a dual labour market is likely to emerge.

In the "protected" part of the labour market a limited number of employees will receive a wage above that available to those who fail to gain access to the protected portion of the market. Protection is defined in terms of the producing techniques used by certain firms."14

This view of the Informal sector now closely resembles the initial writings on the Dual Labour Market in developed countries.

They emphasized that the stability of labour was important to primary labour employers and an adequately educated or skill-equipped person could be barred from primary employment on the basis

¹³Ibid., p. 68.

^{14&}lt;sub>Tbid</sub>.

of their work history. Thus education and skill levels were necessary but not sufficient requirements for primary employment. Like Rempel and House, authors such as Doeringer, Piore, Baron, Hymer and Bluestone among others, have emphasized that primary employers are likely to be capital intensive enterprises operating in imperfectly competitive product markets. Secondary employers would be enterprises operating in competitive product markets. So to this point both theories agree that the labour force dualism arises from an industrial dualism. However, the two theories differ at this point.

House and Rempel argue that the industrial dualism arises from the use of an "imported" capital-intensive technology which is utilized even though a plentiful supply of cheap labour exists because of imperfect product market conditions. The firm can segment the demand for its product and be insulated from alternative product competition. Even in the same industry they believe that there might exist firms with this market control while those without it would face competition and be in the informal sector or pay secondary wages.

Thus a formal sector brick factory might meet government specifications for brick standards and be able to sell to formal sector construction projects. On the other hand, a small brick factory run by a family might not be able to meet these high specifications and will be forced to sell to a different clientele at a lower price, and will pay basic minimum wages.

However, House and Rempel never indicated what factors separated those firms that are informal and those that are formal or how these factors arose. They did indicate that the formal and informal sectors are probably complementary, with the informal enterprises serving a market composed of those people who cannot afford to buy the more expensive, generally better quality, formal sector enterprise products.

The research on ghetto economies in North America has also emphasized that certain ghetto industries complement the core or formal industries. However, Vietoriz and Harrison's study of Harlem also emphasized that the industrial structure of the ghetto was markedly different from that of the rest of the economy.

Harlem's manufacturing sector was small and fragmented, it was lacking in infrastructure and financial services, and the disproportionately large retail sector was inadequately supported by a small wholesaling sector. Some of these points have also been noted by writers on the Informal sector. For example, both Webb and Peatti have emphasized that much of Informal sector activity is concentrated in retail sales. In fact most writers have stated that retail activities have absorbed the surplus labour resulting in disguised unemployment in this trade. However, for Harlem, Vietorisz and Harrison cite different reasons for this overemployment in retail activities:

"Harlem's economic development has been a process whereby a mixed industrial-residential neighbourhood has deteriorated through the inability of its residents to command the resources necessary to implement a balanced type of growth. Businessmen have established themselves in the retail market because they have been excluded from entry into more capital-intensive wholesale and other infrastructural support activities."15

In fact, Vietorisz and Harrison have postulated that economic growth develops so that highly profitable capital intensive firms cannot exist in the differing economic climate of the ghetto. Thus the complementarity of ghetto or informal enterprises to core or formal enterprises would arise because the ghetto economy develops its own economy and enterprises as the center firms develop and no longer find it profitable to operate in the ghetto.

Thus, we have two possible alternative reasons that the duality in industry may have developed. We will now go on to explore this facet of the two theories in more detail. Rempel and Houses's view of the rise of dualism is not necessarily inconsistent with Vietorisz and Harrison's view. However, Vietorisz and Harrison's hypothesis, and some of Bluestone's and Piore's writings, point in the direction of a hypothesis to explain the dualism which breaks radically with the initial writings on the Informal sector. They suggest a skewed pattern of general industrial development which leads to the various patterns of observed duality. This duality does not arise from institutional barriers but is thought to be the natural

¹⁵T. Vietorisz and B. Harrison, The Economic Development of Harlem (New York: Praeger, 1970), p. 34.

pattern of economic development.

Before going on to examine this question in more detail, we will review the various descriptions of the common findings and characteristics on the two sectors. This is done so that it will then be easier to trace back and demonstrate how these similarities relate to our hypothesis on the relation between industrial and labour force structure.

Quite often in the literature on the Informal sector the fact that the two sectors operated in differing input and output markets was emphasized. Thus the formal sector utilized highly developed technology, a skilled labour force, newly acquired raw materials (i.e. not recycled rejects), and it sold its output to a high income consumer market or to a "technologically advanced" intermediate product market. In contrast, the informal sector was often typified as having a backward technology, low skilled labour force, lack of access to official sources of low interest credit, and a high use of recycled, discarded formal sector materials. It sold its product to the low income consumer market or a "technologically stagnant" intermediate product market. In many cases its product was simply not suitable for high-income markets:

"Certainly the hand-made bricks and the hand-made sewer pipes are not identical to the products produced by machine, and they sell to a different market. Hand-made brick is softer and less standardized in size than the machine-made, and it sells both at a lower price and in smaller quantities which makes it suitable for a low income market. Sewer pipes made at the big Moore plant down the road cost three times the hand-made and are much harder. The market for these

products is not local; San Bla bricks and sewer pipe are sold over a large area of the city. But it is a class market, a market of people who buy in small quantities and who cannot afford the best grade."16

Research on the division between the ghetto economy and the higher income suburban areas also points toward differing input and output markets. Most ghetto enterprises are small scale and serve only other ghetto inhabitants. These enterprises typically identify one of their most crucial operating difficulties as being the availability of suitable credit.

As well, in the Informal sector literature it was often emphasized that Informal sector enterprises seemed to have the absolute inability to expand their operations:

"...to be characteristically stunted in terms of individual and global development and growth by a structural inbalance at the local regional, national and international levels."17

Thus the lack of mobility of labour between the two sectors or markets also seems to be matched by a split between enterprises in the two sectors. Therefore the two sectors or markets are not only

Lisa Peatti, "The Informal Sector: A Few Facts from Bogota Some comments and a List of Issues," June, 1974, (Mineographed). p. 18.

Chris Gerry, Petty Producers and the Urban Economy: A Case Study of Dakar, World Employment Program, Working Paper No. 8, International Labour Office, (September, 1974), p. 13.

thought to operate in different input and output markets but there is also an inability of peripheral or informal enterprises to expand or develop into formal or core enterprises.

The reasons these sectors operate in different input and output markets was often attributed to the size of their operations or was left unexplained. So an informal sector activity utilized informal lending methods because it was inherently a low profit, high risk operation and would be refused credit through the normal lending institutions. Once a firm was restricted to operating in this differing input market its costs of operating remained so high that its chances for advancement were slim. Thus, to a large degree the line of argument over causality of differing input markets and inefficiency of operations, is unclear in the literature, or is simply left unexplained.

In the Dual Labour Market literature, Vietorisz and Harrison have explored this division of input and output markets and the inability of ghetto enterprises to expand or to operate efficiently with high profits. Like writers on the Informal sector, they emphasize that Harlem lacks an adequate infrastructure to support highly profitable core industries. However, the authors do not explore the reasons or causation behind this lack of an adequate industrial base.

Another related point emphasized in both theories was that the ghetto economy and Informal sector had differing modes of operation

from the regular or formal economy in their respective labour markets and industries. Thus the formal and core enterprises not only differed from the informal and ghetto enterprises in their scale of operation but most importantly in their whole organization of business procedure. Similarly, the secondary labour market and informal sector differed from the primary and formal sector not only in wage levels, a lack of career ladders, and job stability but also in such matters as supervision and work procedures and recruitment techniques.

Writings on the Dual Labour Market have also indicated that to some degree the secondary labour market corresponds to those employed in periphery enterprises. Although some of these enterprises might be family owned or run the real aim of the distinction was to indicate that secondary employment corresponds closely to those enterprises that are competitive in the product market and thus cannot as easily afford to pay a high wage to labour. These enterprises are not as likely to be unionized as the formal enterprises and work procedures are typically non-formalized and less well-defined.

Writings on both theories also mention the function that casual labour plays in relation to the formal or core enterprises. Simply because an enterprise is in the formal or core sector does not mean that it pays high wages to all its employees. During times of expansion, formal or core enterprises frequently recruit secondary labour to handle the extra production. However, these extra workers are employed only on a temporary basis and when production is cut back they are the first to be let go. Since the nature of their employment is different

from that of a full-time primary employee, the work procedures under which they work are also different. They do not have access to the internal labour market and frequently do not receive the benefits such as pension plans and the application of protective government legislation that accrue to primary workers.

Similarily, the labour recruitment techniques between the two markets differs. Because stability is valued in the formal sector or primary market, potential employees are screened carefully so that those with a high risk of instability are eliminated. Therefore, a past work history becomes a very important hiring criteria to the prospective employer. Secondary employers will be somewhat less likely to regard job stability as important. Frequently little or no training costs are involved and there is a plentiful supply of workers to fill the vacant jobs.

However, the same test of stability cannot be applied to the informal sector in less developed countries and cannot as easily be applied to ghetto enterprises in North America. Stability of employees may be highly valued for many informal sector enterprises for a craft may not be quickly or easily learned and there may be costs in the form of lost productivity through the training period. Similarily, for some ghetto enterprises there could also be costs involved in learning a job and stability might be valued.

The important point associated with this discussion of work and training procedures is the link to differing stages and levels of industrial organization. Product market competitive forms

of firm organization, such as periphery or ghetto and informal enterprises, more often are associated with secondary labour markets. Similarily, firms that are non-competitive in the product market value stability of labour more carefully, supposedly because the costs associated with instability outweigh the premium wages paid. Thus these firms are more likely to organize their production organization in a manner so that unions and internal labour markets will evolve. In fact, it is to these firms advantage, as well as the workers, that these forms of organization exist.

Thus the stability of a work force can be seen to be a function of two different factors — whether the firm is competitive in the product market and what the costs of training are for a particular job. If the firm is a core or formal enterprise, which is non-competitive in the product market, then there is a high probability that its labour force will be organized in an internal labour market fashion. If training costs are high and outweigh the extra cost to the firm of paying primary wages, then there will likely be an internal labour market in the firm, it will likely be unionized, and it will pay relatively higher wages to labour than similar firms with a competitive structure.

Similarily, periphery or informal enterprises will typically be competitive in the product market. They may have associated costs with the training of labour but these costs will not be as high as for center firms. However, primary or formal enterprises may organize some parts of production so that the labour force is secondary. If some portions of the production process can effectively be segmented from other portions, and if the jobs in this sector are of a nature such that the cost of skill training is low, it will be to the firm's advantage to organize production on a basis where parts of the labour force can be hired on a casual basis. Thus, the organization of the labour force in a firm is a function of the economic opportunity costs of organizing the labour production force in a particular fashion. We will now go on to examine more closely the relationship between firm structure in the peripheral or informal economy and the center or formal economy, and the labour force structure in these firms.

Summary: Chapter 4

The theoretical orientation and framework of the Lewis-type
Dual Development models largely predetermined the early orientation
of research on the Informal Sector. The informal-formal sector
dichotomy was primarily viewed as a passing anomaly in the development
process. Thus most research was directed towards rationalizing
the existence of the informal sector within the prior paradigm
framework.

However, the paradigm of the Dual Labour Market was initially viewed as a challenge to much of the existing theory on the operations of the labour market. Thus research was oriented towards demonstrating the various facets of these differences.

However, many similarities of findings between the two avenues of research were emerging. These similarities may seem superficial at first. However, research on both paradigms pointed toward a pattern of dual or skewed growth of industrial development. Corresponding to this duality of firm structure in an industry was a differing organization of the labour force.

CHAPTER 5

THE DUAL ECONOMY

"Few people who are not actually practitioners of a mature science realize how much mop-up work of this sort a paradigm leaves to be done or quite how fascinating such work can prove in the execution. And these points need to be understood. Mopping up operations are what engage most scientists throughout their careers. They constitute what I am here calling normal science. Closely examined, whether historically or in the contemporary laboratory, that enterprise seems an attempt to force nature into the preformed and relatively inflexible box that the paradigm supplies. No part of the aim of normal science is to call forth new sorts of phenomena; indeed those that will not fit the box are often not seen at all. Nor do scientists normally aim to invent new theories, and they are often intolerant of those invented by others. Instead, normalscientific research is directed to the articulation of those phenomena and theories that the paradigm already supplies."1

When Robert Averitt wrote <u>The Dual Economy</u> in 1968, he intended it to be a questioning critical evaluation of the relevance of the competitive theory of the firm given present day industrial structure. He hoped his work would be the starting point for further similar investigations:

"My hope is that the ideas contradicting the old theory will be a starting point for seminal work. These pages represent one economist's view of a direction in which the study of American industry structure might turn. In particular, they express my conviction that the long-run problem of full-employment growth demands a new, structural micro economics..."2

Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago: The University of Chicago Press, 1969) p. 24.

²Robert T. Averitt, <u>The Dual Economy</u> (New York: W.W. Norton and Company Incorporated, 1968), p. ix.

He contends that secular long run trends are increasingly important features of industrial organization and that traditional short-run micro theory is simply inappropriate, and even deceiving, given North America's changed industrial structure.

The book centres around the explication of three main concepts: (1) the centre and periphery economy, (2) the use of the firm's technical system of production as a factor of analysis, and lastly, (3) the use of the concept of key industries. Utilizing these three concepts, Averitt traces the history of the evolution of North America's industrial organization and the ramifications this changed industrial organization has for public policy. He advocates a changed governmental approach from that of a "trust-buster", to a central planning agency which would co-ordinate the new enterprise-conglomerate structure on a balanced growth path. So the orientation of Averitt's writing is directed toward demonstrating and arguing this end. In the process he outlines: (1) a description of the evolution of the productive enterprise unit and the emergent dualism of industrial structure, (2) the technical aspects of each industrial organizational form and its evolution, (3) the labour force and employment ramifications of this dualism, and, (4) the changing role of the state in business affairs.

As such, Averitt's thesis and framework of analysis differ from the writers on the Dual Labour Market and the Informal sector.

He is not trying to analyze the sources or the existence of long-term poverty but is instead focusing on the evolution of industrial structure and its social ramifications in terms of industrial technique, labour

force employment, and public policy. However, Averitt's thesis is not unrelated to the two theories we have been exploring for he has examined an area they have largely and unfortunately ignored. Instead of analyzing an anomaly by largely discriptive means, he has analyzed the evolution of a changing industrial structure as the source of the observed anomaly. Instead of citing the existence of institutional barriers as the source of the dualism, he has shown how these institutions have arisen in response to a changing industrial structure. Institutional barriers are then seen not as the cause of dualism but as the effect.

Averitt starts his analysis by tracing the evolution of enterprise structure:

"A common form of business organization in preindustrial America was the one sketched by Adam Smith; the enterprise was run by an owner-manager who, like the contemporary barber in his own shop, worked alongside the hired help."3

By the mid 1850's, the owner-manager began to devote more of this time to the managerial and financial aspects of the enterprise, and a separation occurred between the physical work and ownership-managerial functions of the enterprise. The third stage of organizational evolution was the separation of ownership from control. The corporate form now enabled the enterprise to have a life of its own where success was not threatened by the death of the owner. The fourth stage Averitt

³Ibid., p. 4.

identifies as the separation of the firm from one industry and a specific country:

"Already freed from the life cycle of human beings, large firms now seek, through conglomerate diversification, to free themselves from the life-and-death cycle of specific products and even particular industries. By diversifying its product base, a large firm can imitate the structure of the American economy. A well-diversified firm tends to share in the national prosperity regardless of the fate suffered by specific products. When the U.S. economy goes slack, strong foreign markets may preserve the multinational firm's health."4

Averitt then traces how the techniques of production change and evolve in response to the changes in business organization. In the preindustrial economy, most manufacturing output was produced in units and small batches:

"As the railroads and canals in time pried open a national market, several industrial products, including sewing machines, shoes, clocks, clothing, agricultural implements, watches, and guns moved into the large batch category. At first, the production of large batches of goods may proceed in the same labour-intensive way as in small batch times. But with the manufacturing of large quantities comes the potential for standardization of parts and moving assembly lines; in short, mass production. And the mass production of a few goods, by lowering costs and further expanding markets, leads to mass production in other sectors."5

Technological change has not stopped with mass production but has continued and evolved into a continuous flow process:

⁴Ibid., p. 5.

⁵Ibid., p. 6.

"Petroleum, chemicals, and metals in continuous rolling and casting mills are prime examples of the latest stage of technical development wherein the product literally flows into the desired form or shape. Indeed, the automation of mass production extends the continuous-flow principle through the last stages of assembling and packaging."

Thus, these industries have tended to develop in a manner where the complete "...production processes are vertically integrated through ownership and control of critical raw material suppliers and product distributors..." As well, the firms in these industries tend to be diversified as to industrial location and products. Through diversification the risk of business failure in the event of economic crises is spread. Enterprises that have developed along this line, Averitt calls the "center".

On the other hand, there are numerous small enterprises still existing in the North American economy. These firms are typically family or individually owned and run, sell to a small local market, earn low profits, and find long-term financing difficult to obtain. They also tend to be technologically backward in relation to those in the center and many are handicraft in orientation.

Averitt categorizes these periphery enterprises into three groups according to their relationship to the center enterprises

(1) free agents, (2) satellites and, (3) the loyal opposition.

⁶Ibid., p. 6.

⁷Ibid., p. 7.

Free agents operate in the industrial system without interaction with the center economy either as a factor supplier or product buyer. They typically produce products such as "...jewelery, games and toys, signs and advertising displays, and the like." On the other hand, satellites interact with the center by either subcontacting or providing materials for the center firms, or by acting as distribution centers for the center firms' output. One example of a backward satellite is machine tool firms. Forward satellites include such operations as gasoline service stations and automobile dealerships.

The last form of periphery firm, the loyal opposition, Averitt divides into two differing groups — the pioneering small firm and the sturdy loyal opposition. The pioneering small firm takes a given center commodity and develops a new product or process. However, because these firms produce only one commodity or product their expansion is limited and the firm's life cycle is tied to the life cycle of the product it produces. The sturdy loyal opposition also concentrates on marketing or producing a single product. Because the centre firm typically produces for a mass market it leaves fringes of the market available for exploitation by more specialized enterprises. These fringes of the market can then be served by a firm that more closely meets the consumer's product demands. One excellent example of this type of enterprise is the Maytag Company, which has continued to serve approximately ten percent of the market for new washers and dryers.

⁸Ibid., p. 89.

Similarily, the Fuller Brush Company, a seeming anacronism, continues to survive.

Averitt then goes on to demonstrate how a theory of the firm must be tied to its form of production. Thus, a theory of firm behavior must be linked to its manufacturing technique whether it be unit and small batch, large batch and mass production, or process production. Since the history of manufacturing technique is linked to the evolution of an industry, it follows that the theory of a firm must be based upon a theory of the evolution of industrial organization. Thus enterprises that can serve a large market have developed from small batch into large batch and mass production industries as their market expanded. If possible some of these enterprises have then advanced into a continuous flow production process.

The earliest form of manufacturing technique was unit and small batch. Typically this form of technique existed and continues to exist where the market is severely limited. If the market for the product does not expand, then the production technique also does not expand. This technique also tends to have a heavy craft orientation. The product is typically produced in response to a given specified order and therefore has to be "custom made" to meet the specifications outlined. As such, it becomes very hard to transform these enterprises into mass production technique enterprises. These periphery enterprises include such production forms as the following:

"(1) production of units to customer's requirements (large electrical generating equipment), (2) production of prototypes (experimental aircraft and automobiles), (3) fabrication of large equipment in stages (major missile systems), and (4) production of small batches to customer's orders (dies from the machine tool industry)."9

Typically these firms base their production schedules upon orders received. Thus planning is of a very short-term nature. Because of the heavy craft orientation of these enterprises, the efficiency of the craftsmen employed is very important. However, the product flexibility given to the firms, because of their craft orientation, is achieved at the price of the efficient use of capital. As a result, the per unit cost is high, and prices are highly regulated by market conditions.

The second form of firm structure arises because of an expansion of the product market. With this development mass production becomes possible and some form of moving assembly line often develops. Production schedules are now less directly related to orders as planning is more of a long-term nature. Thus, "the short-run success of the firm depends mostly on productive efficiency (reduction of costs), although long-run prosperity depends on development as well."

The occupational structure of the firm also changes. The production process is typically segmented into small tasks which an untrained person can perform. This segmentation of the production

⁹Ibid., pp. 23-24.

¹⁰Ibid., p. 25.

process and also the standardization of the product, enables the firm to replace the skilled craftsmen by unskilled workers who can perform a given segment or task with little or no previous training.

Braverman is one writer who traces the deskilling process of the worker as an enterprise advances. With craft or handicraft operations, "...men or women may habitually be connected with the making of certain products, they do not as a rule divide up the separate operations involved in the making of each product."

The first step in the deskilling process is the division of the operations of the craft and the assignment of these operations to different workers. This enables the owner to substitute capital for labour and to purchase less skilled workers to do the separate operations:

"Insofar as the labour process may be dissociated, it may be separated into elements some of which are simpler than others and each of which is simpler than the whole. Translated into market terms, this means that the labour power capable of performing the process may be purchased more cheaply as dissociated elements than as a capacity integrated in a single worker." 12

Not only does this development lead to a deskilling process of labour but it also leads to the development of mobility barriers between the worker "on the line" and those skilled workers hired to plan and manage the efficiency of the production line:

Harry Braverman, Labor and Monopoly Capital (New York: Monthly Review Press, 1974), p. 71.

¹²Ibid., p. 81.

"Every step in the labour process is divorced, so far as possible, from special knowledge and training and reduced to simple labour. Meanwhile, the relatively few persons for whom special knowledge and training are reserved are freed so far as possible from the obligations of simple labour. In this way, a structure is given to all labour processes that at its extremes polarizes those whose time in infinitely valuable and those whose time is worth almost nothing."13

Thus, these firms will develop a division between white and blue collar labour. "The individual worker may climb the management ladder, but he usually reaches only the foreman rung." 14

The last form of manufacturing technique, process production, is achieved through a conversion of the manufacturing procedure into a continuous material flow process. It originated with the manufacture of liquids, gases, and crystalline substances and is now spreading to the manufacturing of solid shapes. "Absolute capital costs soar in process production, making the barriers to new firm entry substantial. But if the plant can be operated full time at near capacity levels, the per unit costs of capital can be dramatically reduced." 15

Thus it becomes important to operate the plant as close to full capacity as possible. In fact, operation at high capacity becomes so important that Averitt suggests these firms behave in a manner suggested by Baumol — they maximize sales (production) subject to a profit restraint. 16

¹³Ibid., pp. 82-83.

¹⁴Averitt., op. cit., p. 26.

¹⁵Tbid., p. 27.

¹⁶ Tbid. William J. Baumol, <u>Business Behaviour</u>, Value and Growth, (Macmillian, 1959).

The marketing of the product now becomes critical. Low costs can best be achieved through a high sales volume and the retailing of the product becomes highly critical to the success of the firm. Planning becomes of a very long-term nature and the removal of even more skilled craftsmen from employment removes the possibility of bottlenecks arising through labour unrest. These firms also tend to use fewer numbers of unskilled labourers. Instead, most of the routine work is performed by the machines.

At first the distinction between mass and process production seems artificial. However, there is an important distinction between the two:

"Both depend on product flow and on very large markets. Overhead costs are considerable in both cases. But discrimination between the two production modes is useful in pointing up the shift in emphasis from production costs to marketing costs; and from formal managerial systems to informal ones."

Mass production industries typically use large amounts of low-skilled labour. Since labour costs are high, labour output and the speed of the production line become considerable cost considerations. Both Averitt and Braverman have discussed this point and both agree that close managerial supervision becomes necessary in this form of production, because of the "...handsome cost economies" that can be gained. 18

18_{Tbid}.

¹⁷ Averitt, op. cit., p. 34.

When the product can be made to flow, the need for low-skilled labour is greatly reduced, production is much more automatic, and cost reductions depend more heavily on plant load —another name for sales. Thus mass production firms have not neglected marketing, for they are dependent on a mass market, but they most closely attend to production. Thus, "...old-style mass production techniques become automated, removing low-skill labour from the line, mass production management shifts its attention to marketing." 19

Thus the scope of both an industry and its individual firms changes when process production becomes important. No longer is an industry broken down into the production and then the retailing of a particular products. Instead, the outlook for the industry is toward the entire production, processing, and marketing of a product. Thus an entire industry becomes more unified in purpose and the success of the individual sectors of the industry have an effect on the success of the other components. This unity of purpose often is formally recognized through either forward or backward vertical integration. Manufacturers may purchase their suppliers to ensure a reliable and continuous factor supply, or they may engage in long-term contractural purchasing agreements.

Similarily, many large retailers have now vertically integrated backward into the manufacturing of the commodity. This final group of center firms identified by Averitt, were originally oriented to retailing and entered manufacturing by backward integration.

^{19&}lt;sub>Ibid</sub>.

Averitt specifically mentions grocery retailers and general merchandise retailers as examples of such industries.

Unlike Gailbraith's theory of countervailing power, Averitt does not view the retailing center as countervailing the power of the manufacturing center: "...it establishes instead a largely self-sufficient syndrome buttressed by a community of manufacturing satellites." These satellites may be connected to the retailer either by outright ownership or control (as is generally the case in the food industry) or through long-term contractural buying agreements (as is the case with general merchandise retailers) as illustrated below:

"But unlike periphery retailers, Sears purchases about one-third of its merchandise, including most of its major appliance line, under long-term buying arrangements with firms relying on Sears for a large share of total sales. These are normally small manufacturers."21

As previously mentioned, Averitt primarily focuses his research to argue for a reorientation and restructuring of micro economics. Thus, he has developed his thesis of the Dual Economy to emphasize the need for central government planning and management of the economy. However, he has also conveniently laid a theoretical basis for a theory of the structural evolution of an economy.

²⁰Ibid., p. 69.

²¹Ibid., p. 67.

As the production orientation changes with the evolution of an industry so too does the production technique of the firms in that industry and their resulting labour force requirements. The production, manufacturing and processing, and retailing components of an industry become more dependent upon each other for their continued success and development. In fact, it becomes more analytically correct to view an industry such as food retailing, not as the food retailing industry, but instead as one component of the total food industry. To look at one component (i.e. production, manufacturing, and processing) of an industry will therefore give one an unclear picture of the dynamics of that industry. To demonstrate this point we will briefly review the developmental dynamics of the food industry.

The marketing of food products begins when the producer markets the food to the processor. From there the processed food goes to the wholesaler, or in some cases, directly to the retailer. Until the 1920's the food industry in North America was competitive in all of these markets. The economic units were typically small and the producer, processor, wholesaler and retailer were price-takers.

During the 1920's the food industry in North America underwent a "chainstore movement" where the principle feature was the backward integration of retailers into their suppliers. The retail food industry at this time was characterized by numerous small locally oriented corner food stores which typically specialized only in groceries. "The chainstore movement put many of these small retailers

together in one organization, leaving the retail units essentially unchanged but making substantial development in the supply organization behind them."²²

By combining wholesaling with retailing, and to a lesser extent with processing, the chain operations were able to offer lower prices to their patrons. Soon these chains discovered that general overall lower prices attracted high volume. This higher volume then enabled them to demand and receive price concessions from their suppliers. The process then fed on itself. Lower prices led to higher volume, which led to price concessions from suppliers, which enabled the chains to offer lower retail prices.

In response, the independents developed their own integrated operations:

"Some groups of independent retailers created co-operative wholesale units to supply them with merchandise. In other cases, wholesalers assembled "voluntary groups" of retailers into chain-type organizations. These affiliated independent groups adopted most of the methods used by chains."23

Thus, the wholesaling and retailing components of the food industry were now linked together in a manner where the success of one component critically depended upon the continued success of the other components.

²²U.S., National Commission on Food Marketing, Organization and Competition in Food Retailing, Technical Study No. 7 ([Washington: Government Printing Office, June 1966]), p. 31.

23 Ibid., p. 69.

The early chain store movement brought many efficiencies to the various retail food stores. This process forced their competitors, the independents, to imitate their behavior. The forces of competition then led the industry to develop in another way. The independent food retailers created the supermarket.²⁴

Whereas the chains had changed the nature of pre-retail operations to reduce costs, the supermarket was the reorganization of the retail operations designed to achieve the same objective. The rapid growth of the supermarket has come at the expense of literally thousands of small corner grocery stores. In the United States, the number of single-store grocery firms dropped by more than 130,000 between 1948 and 1963:

"All categories of stores with annual sales below \$300,000 declined in numbers during that period, with the smaller stores dropping out fastest. Stores with annual sales less than \$5,000 dropped 86 percent."

Historically, food retailing systems have involved the proliferation of many small localized shops. People shopped often not out of choice, but because of a lack of modern conveniences such as the refrigerator, which permitted longer food storage, and the automobile, which permitted the cartage of a larger bulk of goods at one time. Thus retail food outlets were typically small and served only a few customers. Family incomes were typically low and this

²⁵Ibid., p. 165.

The conventional definition of a supermarket is a grocery store with annual sales in excess of \$500,000.

limited the size of retail outlets in another way.

"Poor people lack the effective demand for the great variety of 5,000 and 10,000 food products in a large supermarket. Smaller store assortments and stores were adequate when buying power is so limited ...Not until recent years did general economic growth establish the essential conditions of demand for the growing number of supermarkets and superettes in many nations."26

Thus, while the independents may have created the supermarket because of the force of price competition, the supermarket soon became the most efficient and rational way to distribute food at the retail level. The supermarket grew at a tremendous rate after the second World War for they could easily under-price the local small-scale grocery stores. However, the number of small grocery stores had fallen dramatically and the era of rapid expansion of the supermarket was suddenly halted by the lack of smaller stores to outcompete. The market demand for supermarket services was saturated and the supermarkets had to compete with each other for customers.

Many supermarkets were operating far below efficiency for they had developed only on the basis of competition with the inefficient corner grocery store. The easiest way to increase efficiency was to expand sales and utilize personnel and facilities more efficiently. It has been estimated that "...a substantial increase in sales, in the neighbourhood of 20 percent, would lower costs sufficiently to increase profits by 50 percent."²⁷

Organization for Economic Co-operation and Development, Food Marketing and Economic Growth, (Paris: O.E.C.D., 1970), p. 58.

²⁷U.S. National Commission on Food Marketing, op. cit., p. 76.

Both the independent and chain segments of the industry were now vertically integrated into wholesale operations, and both operated through retail supermarkets. Thus no segment of the retail food industry had significant cost advantages over the other segment. All available structural changes leading to significant cost reductions had been adopted in the industry. The only form of cost advantage (leading to increased profits) that could be realized was the expansion of sales which would lead to a more efficient utilization of store capacity. The industry was evolving on a significantly different form of competition in response to the changed structural conditions of the industry. Competition was non-price and was directed to the expansion of sales. Considerable effort was now spent in the search for ways to increase sales by non-price means.

The food retail market was now primarily composed of the supermarket. The orientation was toward competing for as much of the market as possible so that higher profits could be realized through an efficient use of fixed capital. However, by adopting this pattern of growth, the supermarkets were orienting themselves only to a high turnover retail market. Unfortunately, the lower income areas of cities did not meet this criteria. As a result, the poor paid substantially more for food than the average consumer. The reasons for this differential were often thought to rise from a discriminatory pricing behaviour on the supply side of the market. However, the few studies that have been conducted on this subject have found that the poor pay more for food for many diverse reasons — none of which originate in

retail discriminatory pricing behaviour. Instead, the reason the poor pay more resides in the way economic growth has unevenly distributed the benefits of development. It can be demonstrated that the poor have a uniquely different buying pattern for food. This differing nature of demand effectively puts them in a retail food market separate from the middle-class oriented supermarket.

A survey of buying patterns of the poor in 1966, found that "food prices are associated with the kind of store rather than with the geographic area." The study found no significant differences between average food prices in poor areas and those in better-off neighbourhoods, when the same type of store (corner, chain, large independent and small independent) and the same quantities and qualities of food were compared. However the significance of this conclusion is rather empty since very few chains were found in low income areas. In fact the survey found that small independent stores tended to predominate in low income areas, and it "...showed that in both income areas the small independent store prices averaged higher than those of the large independent or the chain store." The study also found that many of the staple items in the survey sample (flour, milk, sugar, bread) sold in smaller quantities in "poor" neighbourhoods.

The National Commission on Food Marketing also conducted a comparative survey of food retailing in high and low income areas. It

Phyllis Groom, "Prices in Poor Neighborhoods," Monthly Labour Review, (October, 1966), p. 1085.

²⁹Ibid., p. 1087.

found that chain stores simply did not operate in low income neighbourhoods and instead, small stores tended to dominate the market. Therefore, "since these small stores typically charge higher prices than larger stores, particularly chain stores, consumers in these areas generally face higher prices than consumers in other neighbourhoods." 30

Unlike the previous study, the commission went on to explore the reasons for these findings in more detail. They did this by examining operating data for chain stores in both low and higher income areas. They found the following results:

"...Chain stores in the poorer neighbourhoods were older, smaller, did less business per square foot, had greater inventory shrinkage (which includes pilferage and waste), had lower sales volume per store, and had lower average purchases per customer than did stores of the same chain in higher income areas."31

The average gross profit margins for the two income areas were found to be similar but average store expense was considerably higher in the low-income areas which pulled down their net margins substantially. The commission then concluded:

"These circumstances help to explain why chain building and expansion efforts have been directed mainly to higher income suburban areas. This leads to substantial differences in the access that residents in different income areas have to stores of the kind operated by chains."32

³⁰ National Commission on Food Marketing, op. cit., p. 337.

³¹Ibid., p. 339.

^{32&}lt;sub>Ibid</sub>.

These conclusions are also shared by Bloom. He argues that "the increasing minimum size required for optimum efficiency in supermarket operations will further increase the gap between prices paid by ghetto residents and more efficient residents of the suburbs." This is because of the nature of the demand for retail services in lower income areas. The poor, as Bloom found, tend to buy food more frequently and in smaller quantities. Most poor people do not own an automobile. Thus their buying habits are necessary and rational. However, because of these circumstances, they cannot experience the increasing benefits of retail innovations to the same degree as the middle class. Thus development benefits in food retailing have tended to favour the middle and higher income groups.

The lower income groups, with a differing nature of demand for food products buy food in an entirely different market. This differing nature of demand then necessitates the existence of a differing industrial structure to serve these people. Whereas a highly integrated, efficient, "modern and progressive" food industry serves one segment of the population, the other segment cannot be profitably served by these industries and continues to be served by "technologically backward" small corner grocers. Furthermore, this market duality arises not from a deliberate policy of discrimination by the retail grocery chains, but because of the nature of the evolution of the food industry.

Within this framework of industrial duality, or skewedness of

Gordon Bloom, Productivity in the Food Industry (Cambridge, Mass.: The M.I.T. Press, 1972), p. 213.

industrial growth, the observed characteristics and descriptions of the ghetto economy, the Dual Labour Market, and the Informal sector take on a greater significance. No longer do findings, such as the lack of an adequate wholesaling base to support an overly large retail sector, or an inadequate financial sector, appear only as unfortunate anomalies. Instead, Harlem's lack of an adequate infrastructure and its differing industrial structure become the expected given the pattern of industrial growth in the community. Similarily, the attitudes and motivational behaviour of the labour force in the ghetto and Informal sector become clearly understandable and expected.

Given the necessarily underdeveloped nature of the ghetto and Informal sectors' industrial structure, few if any, center industries with internal labour markets operate in these locations. Thus, the lack of an adequate wholesaling base in Harlem is expected given the nature of its retail trade. Instead of being serviced by the large retail chains, Harlem is serviced by many small locally oriented stores. Some of these stores may purchase their supplies from a wholesaler but many are also one man operations or are handicraft in orientation. Therefore they tend to process or produce the product they sell.

Similarily, the findings that indicate that ghetto or periphery economies lack an adequate financial base are expected and natural.

Center industries are usually good credit risks and have a high rate of success. They are generally deemed to be "efficient" and "progressive"

enterprises. The center economy financial institutions which serve these enterprises are then able to offer them the best credit rates available. 34

The ghetto and informal sectors on the other hand, most commonly use "unofficial" sources of credit and financing. Vieoritz and Harrison may have found Harlem lacking in a financial base simply because they included in their study only "official" or center economy credit facilities. Periphery economy credit, may never enter the G.N.P. accounts or the accounts of many surveys. Loan sharks and other similar financiers are in what Fusfeld calls the semi-legal section of the irregular economy. Thus, when businessmen in Harlem complain of a lack of suitable credit facilities they are really complaining of the lack of formal or center economy credit facilities.

The writings on the ghetto economies and the Informal sector also emphasized that these sectors used a relatively labour intensive technology compared to the core or formal economy. ³⁵ In some cases, the authors consciously equated this labour intensive technology as being equivalent to a "backward" technology. However, the significant difference between formal and informal sector activities has been shown to rest in the differing market orientation of the two sectors. Thus, simply because an enterprise utilizes a more labour-intensive

This assumes that these firms even use outside financing. Many studies now indicate that these firms are financing themselves internally.

For example, Gerry found that only 38.7 percent of petty producers "...were equipped with machinery; the rest effected repairs or manufactured articles with hand tools, renting necessary but expensive equipment when this was needed." Gerry, op. cit., p. 44.

technology, does not mean that it is technologically backward.

The informal sector enterprise serves only the local market. The operation is small and typically only employs a few employees. Often these people are serving in an apprenticeship fashion to the owner of the enterprise. Given the smallness of the operation, it is often unfeasible for these operations to mechanize for it would be an inefficient use of capital.

The formal sector enterprises on the other hand, serve a much larger market and employ a greater number of employees. Given the volume at which they produce, it becomes feasible to use a capital-intensive mass production technology. They therefore mechanize and make many handicraft firms and the craft-oriented skills of their workers obsolete. They are then deemed by many to be progressive and efficient for doing so. However, they are simply serving their market in the most efficient way possible. Similarily, the informal sector, by using a labour-intensive technology, is also serving its limited market in the most efficient manner. Mass production or distribution is simply not possible in the limited market of low-income areas, whether they be ghettos, favellas, or barrios. Thus, this process of industrial marginalization takes place universally in both developed and less developed countries.

Thus, the first important difference between informal or ghetto and formal or core enterprises is their market orientation.

The formal enterprises serve a mass market and has a capital-intensive production process to efficiently serve this market. However, the

peripherial industries are left to serve the fringes of the market which the formal industries cannot serve efficiently. Because of the nature of the demand in these markets, mass production or distribution is impossible. Indeed, if the demand were of a nature where mass production or distribution was possible, then the market would not be periphery.

Writers on the Informal sector (Bose, Peatti, Temple, Gerry) have also indicated that informal sector enterprises could be distinguished by an "...absolute inability even for the surviving units to expand themselves." Again, given the developmental nature of their operations, this finding is what one would expect. These enterprises are typically craft oriented, and are this way simply because they serve only the limited market for local ghetto or informal sector residents. Their operations are therefore oriented to the residual sector of the economy and have survived or have evolved only to serve this market.

This differing nature of center and periphery enterprises naturally has a profound effect on the organization of the labour force. Indeed, it will be argued, it is because of this different enterprise organizations that the Dual Labour Market has evolved. We will now go on to explore these labour force ramifications in chapter 6.

^{36&}lt;sub>Bose</sub>, op. cit., p. 3.21.

Summary: Chapter 5

Following a framework for industrial analysis formulated by Averitt, we have investigated the theoretical underpinnings of the development of the Dual Economy. As an economy matures and develops, the nature of the organization of its industrial structure changes. As a development of this evolution of industrial organization, we have the present-day structure of a Dual Economy.

When an economy is composed of many small competitive enterprises it typically is also localized in its marketing of goods. With a growth in an industry's market, some firms in that industry undergo a change in their production orientation and therefore also in their production organization. Those enterprises that successfully compete and evolve to serve the mass market change the nature of their production process so that they efficiently serve the mass market that exists. They typically adopt capital-intensive mass production and continuous-flow production processes which minimize the risk of bottlenecks developing in production.

However, this process of development of center firms in an industry is not universal to all the firms in that industry. The center economy firms typically cannot efficiently serve the "fringes" of the market. The firms that do survive or arise to serve the periphery economy are therefore oriented to a different market and have a different organization of the production process.

CHAPTER 6

THE DUAL ECONOMY AND THE DUAL LABOUR MARKET

"The transition from a paradigm increases to a new one from which a new tradition of normal science can emerge is far from a cumulative process, one achieved by an articulation or extension of the old paradigm. Rather it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications. During the transition period there will be a large but never complete overlap between the problems that can be solved by the old and by the new paradigm. But there will also be a decisive difference in the modes of solution. When the transition is complete, the profession will have changed its view of the field its methods, and its goals."

Now that we have examined the essential dynamic differences between the structure of the informal or ghetto economies and the formal or center economies, we may go on to examine how these differing enterprise structures organize and utilize their labour input. At a first glance it may appear that the distinction between the primary and secondary labour market rests on a division between the center or formal economy and the periphery or informal economy. Center enterprises would be oligopolistic and distribute higher wages to their employees while periphery enterprises would be competitive and

Thomas Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1962), pp. 84-85.

be less able to afford to pay their employees a premium wage. 2 Wage rates between the two markets would then differ to the degree that institutional barriers prevented the mobility of labour between the two markets. However, this simple distinction is not the true source of the existing labour market dualism. Instead the distinction will be shown to rest on the development of new skills and the destruction of the older craft skills as the center or formal economy develops. As centre enterprises develop, the skills utilized in production by the workers in the firm, become more firmspecific. On the other hand, the skills needed for work performed in the periphery enterprises are relatively more of a general nature and are more easily transferable to other jobs. It will be argued that this differing nature of the form of skills between enterprises effectively puts the workers in different labour markets with little or no mobility of labour existing from market to market. The labour market dualism that has been observed is then related to the changes in labour force skill requirements of center enterprises as they mature in their development.

In 1954 Clark Kerr wrote his now famous article on the balkanization of labour markets. He hypothesized that the operational

Quite often authors have distinguished between the primary and secondary labour markets on the basis of high and low salaries and/or flat or rising life-time earnings profiles.

definition of labour markets is institutional in nature.

"Their dimensions are set not by the whims of workers and employers but by rules, both formal and informal. These rules state which workers are preferred in the market or even which ones may operate in it at all, and which employers may or must buy in this market if they are to buy at all. Institutional rules take the place of individual preferences in setting the boundaries."3

Unlike the long run where all men may compete for all jobs, Kerr views the short run as being characterized by a situation in which several men are competing for several jobs. Because of the length of time needed to gain particular skills, segments of the labour force do not compete with labourers who do not possess these skills. Thus "...a medical practitioner today can hardly be said to be competing in the market with the unborn son of a pipefitter."

Kerr states that he views the segmentation of labour markets as only "...one aspect of the general trend from the atomistic to the pluralistic, and from the largely open to the partially closed society." The institutional rules of employers, workers and the government are then simply a reflection of the diversity that exists in society. However, he did specifically mention two very important general systems of rules that lead to labour market segmentation.

"The two systems are the communal—ownership approach of craft groups

Clark Kerr, "The Balkanization of Labour Markets," <u>Labour Mobility</u> and Economic Opportunity, ed. E.W. Bakke (Cambridge: Technology Press of M.I.T., 1954), p. 93.

⁴Ibid., p. 94.

⁵Ibid., p. 96.

and the private-property method of industrial workers."

In craft unions the members are associated on the basis of a clearly defined occupational area. When a particular employer needs work done pertaining to this occupation, he or she must hire union members. Thus the craft union, as an organizational whole, asserts proprietorship over jobs falling within a particular occupational classification. The worker in a craft union has a very tight tie to his or her occupation and a loose tie to a particular employer, industry or geographical area:

"Movement is primarily horizontal in the craft market. The worker gets his security not from the individual employer but from his skill, the competitive supply of which, is controlled by his union; and he is known as a carpenter and not as an employee of a certain company."7

In industrial enterprises there is more of a private-property aspect to job classification and assignment. An individual rises vertically in the enterprise employment heirarchy and seniority considerations weigh heavy in job assignment and promotion. "The man on the job (given good behavior) is the only man eligible for it, and when he leaves the next man on the seniority list (given minimum ability to perform the task) is the only eligible candidate."

⁶Ibid., p. 97.

⁷Ibid., p. 98.

⁸Ibid., p. 99.

Stability of employment becomes exceedingly important in industrial enterprises. Since mobility is vertical and based largely on seniority, inter-firm and inter-industry mobility of labour is limited. As well, it becomes exceedingly difficult for external workers (external to firm employment) to gain employment in the firm except in a few specific "ports of entry".

Kerr's basic hypothesis has been developed and refined considerably since its formal introduction in 1954. Most importantly, it has been incorporated into the theory of the Dual Labour Market via Doeringer and Piore's work on internal labour markets.

Along with Gary Becker's work on general and specific training, Doeringer and Piore have shown how the evolution and existence of internal labour markets has led to the evolution of the primary labour market. However, they use the terms "specific" and "general" in a somewhat different and exceedingly important sense. Instead of relating the terms to training and its effect on worker productivity they relate them "...to skill and to the frequency with which various skills can be utilized within different internal labour markets."

The authors identify two ways in which skill specificity affects the internal labour market. Firstly, it is identified as increasing "...the proportion of training costs borne by the employer, as opposed to the trainee, and (secondly) ...it increases the absolute level of such costs." As the production skills needed become more specific,

⁹P.B. Doeringer and M.J. Piore, <u>Internal Labour Markets and Manpower Analysis</u> (Lexington, Mass.: Heath Lexington Books, 1971), p. 14. 10 Ibid.

the employee has less chance to transfer them if he or she changes jobs. Thus, the rate of labour turnover is reduced.

"This reduces the incentive for him to invest in such training, while simultaneously increasing the incentive for the employer to make the investment. Skill specificity tends to increase the absolute cost of training (regardless of who provides it) because the less prevalent a skill in the labour market, the less frequently training for that skill is provided, and economies of scale in training cannot be realized. Both of these effects encourage the employer to seek to reduce labour turnover."11

The methods that can be employed by the employer to reduce turnover are varied. Large parts of the wage bill could be in the form of benefits which accrue on the basis of length of tenure in employment (ie. pensions, length of holiday, etc.), a wage higher than that offered in the external market could be paid, or chances for upward mobility in the employment heirarchy could be offered. However, whatever method or methods the employer ultimately uses is really not important. The main point is that the purpose of the practice is to obtain employment stability because of skill specificity in the firm's labour market.

Although the authors state that "...in the generation and operation of the internal labour market, it is the specificity of skills and training that is the key, they do not attempt to determine the source of this specificity." In fact, they seem to take it for granted that it is the result of a natural process of industrial growth.

Il Ibid.

¹²Ibid., p. 15.

Thus, their analysis begins and ends with an examination of the workings of skill specificity and no effort is extended to examining how or why it arose. Therefore, like previous writings, the investigation of the Dual Labour Market begins and ends within the parameters of labour market analysis.

However, Clark Kerr in his original article, and other writers on the internal labour market such as Alexander, have examined the industrial framework behind internal labour markets. They have linked the theory of labour market balkanization to a theory of how the labour market is organized in response to differing production methods of firms or industries. The differing production methods then generate different types of internal labour markets with different "...on-the-job training patterns within the firm or industry." Thus, the differing patterns of labour market stratification are thought to correspond to different training patterns which result from differing production methods.

Katherine Stone is one author who has researched this area. She examined the steel industry and how it refashioned its labour market as the industry's product market expanded. It changed from a small competitive industry which employed both highly skilled and unskilled labour, to a oligopolistic industry with a highly stratified internal labour market.

¹³A.J. Alexander, "Income, Experience, and the Structure of Internal Labour Markets", Quarterly Journal of Economics (February, 1974), p. 64.

"In 1860, there were only 13 establishments producing steel, which employed a total of 748 men to produce less than 12,000 net tons of steel a year. After the Civil War, the industry began to expand rapidly, so that by 1890, there were 110 Bessemer converters and 167 open hearth converters producing 4.8 million net tons of steel per year. This expansion is generally attributed to the protective tariff for steel imports, the increased use of steel for railroads, and to changes in the technology of steel production."14

However, the greatest period of expansion in the industry took place from 1890 to 1910. "During that period, steel replaced iron as the building block of industrial society, and the United Stares surpassed Great Britain as the world's prime steel producer." 15

Stone then traces the corresponding changes which took place in the industry's labour force. When the industry had a limited market in its early period of development, it had a labour system in which the employees contracted with the steel companies to produce steel:

"In this labour system, there were two types of workers -- "skilled" and "unskilled". Skilled workers did work that required training, experience, dexterity, and judgement; and unskilled workers performed the heavy manual labour -- lifting, pushing, carrying, hoisting, and wheeling raw materials from one operation to the next. The skilled workers were highly skilled craftsmen who enjoyed high prestige in their communities. Steel was made by teams of skilled workers with unskilled helpers who used the companies' equipment and raw materials."16

¹⁴Katherine Stone, "The Origins of Job Structures in the Steel Industry," The Review of Radical Political Economics, (Summer, 1974), p. 125.

¹⁵ Ibid.

¹⁶Ibid., p. 127.

Thus, the structure of the labour market closely resembled the craft system described by Kerr, where the labour market was stratified horizontally. But more important than this, was the control which the individual workers could exercise over the amount of steel that was produced. Employers simply contracted a job with the workers and wage payment was in the form of a "tonage rate" or a percent of the selling price of the product. This tonage rate was then based upon a sliding scale which fluctuated with the market price of steel. Thus the tonage rate — sliding scale system of wage payment was actually a form of profit sharing between the employer and the employee. However, it also added another important facet to the labour market:

"The employers had relatively little control over the skilled worker's incomes. Nor could they use the wage as an incentive to ensure them a desired level of output. Employers could only contract for a job. The price was determined by the market, and the division of labour and the pace of work was decided by the workers themselves."17

This organization of production remained in existence until the 1880's when changing market conditions severely strained the system. The market began to expand rapidly and "firms competed for the new markets by trying to increase their output and cut their costs. To do that they had to increase the productivity of their workers — but the labour system did not allow them to do that." Thus the old form of production which existed when the industry operated in a limited

^{17&}lt;sub>Tbid., p. 127.</sub>

¹⁸Ibiq., p. 128.

market was no longer suited to the changed conditions after the market expanded. Given the tonnage rate and contract for a job arrangement of production, the employers could only expand output extensively with the employment of more skilled workers. This presented two problems. Firstly, there was a limited supply of skilled workers and an increase in demand could very well significantly raise the wage-rate in the short-run. This would conflict with the firms second objective — to cut costs. Thus, the changed conditions of product demand necessitated that the production methods of the industry also change. This was indeed done and in the following manner:

The steel masters needed to replace men with machines, which meant changing the methods of production. To do that, they needed to control production unilaterally."

The first step in this direction was taken by breaking the union. Once this was done, the employers were left to mechanize freely. With this mechanization the nature of industrial production changed. No longer was innovation and the introduction of new technology designed to augment the old contractual basis of production. Instead, most of the new machinery was designed to eliminate certain forms of bottlenecks in production. Specifically, these bottlenecks were of a variety which could potentially limit or delay the smooth flow of the production process. The need to eliminate the potential for these bottlenecks arose because of the changed marketing orientation of the

¹⁹Ibid., p. 129.

industry. The main aim of production was now to attain and maintain new markets. To do this, the enterprise had to have an assured production level and be able to deliver the product. Thus the need to market efficiently the product had become a very important consideration when organizing the production process.

Braverman has shown how the same process of a reorganization of the production process took place at the Ford Motor Company with the introduction of the model T.

"In 1903 when the Ford Motor Company was founded, building automobiles was a task reserved for craftsmen who had received their training in the bicycle and carriage shops of Michigan and Ohio, then the centers of these industries."20

The final assembly of the car took place in one spot by various skilled mechanics. The first model T car was introduced in 1908 and demand was so great that the production methods of the company were changed.

"...Special engineering talent was engaged to revise the production methods of the company. The key element of the new organization of labour was the endless conveyor chain upon which car assemblies were carried past fixed stations where men performed simple operations as they passed."21

Harry Braverman, Labour and Monopoly Capital (New York: Monthly Review Press, 1974), p. 146.

21 Ibid., p. 147.

By 1925, when the assembly-line had been put into full operation, as many cars could be produced in one day as had taken an entire year when the Model T was first introduced.

Like the steel industry, the organization of the labour force had also changed. No longer were workers performing a job involving craftsmanship, but instead were performing jobs involving repetitious operations determined by the nature of their skill as it was utilized in production. Since the workers had no control over the work process, they also had no control over the use to which their skills were utilized. In effect, the use of their human capital was predetermined by the operations of the machines or the line. Therefore, the possibility of an underutilization of a person's full productive potential became more of a possibility.

However, the most important change that had taken place was in the nature of the use of a person's productive capacity. No longer was a person using machines or capital to produce a product. Instead, the person's labour or skill was being applied to operate a machine. Thus the very essence of the use of a person's skill in production had changed.

Some authors (Braverman, Stone) claim that the mass mechanization of production and the resulting change in the need for craft-orientated skills in the labour force, led to a generalized deskilling of the industrial labour force. In essence, the labour force had been reduced to one low unskilled level. However, this led to excessive turnover of employees, and worker dissatisfaction. The employers then created what

is now known as the internal labour market to counteract these tendencies.

However, various other writings have demonstrated that the basis for the internal labour market may not be as insidious. For instance, Doeringer relates the structure of an internal labour market to both "...the technology of production and the work methods within the plant." The technology of the capital equipment combined with the product mix then determine "... the skill mix and the proportion of specialized jobs in the plant at any point in time." Whatever flexibility existed in the firm's job structure results "....from the discretionary fashion in which tastes may be combined to produce broadly or narrowly skilled jobs (ie., job design) and decisions regarding the division of the work between internal employees and subcontractors." 24

The corresponding optimal structure of the internal labour market will then be designed to establish hiring and promotion patterns of least cost. The costs to be minimized are then identified as those corresponding to the training necessary to fit the employees to the jobs. Vertical patterns of promotion would then correspond to a production process where lower level jobs contain skills which partially overlap

Peter B. Doeringer, "Determinants of the Structure of Industrial Type Internal Labour Markets, "Industrial and Labour Relations Review, (January, 1967), p. 213.

²³ Ibid.

^{24&}lt;sub>Ibid</sub>.

with the jobs above them in the job heirarchy. A person would then be able to retain and use most of the skills they acquired in their employment experience with the firm.

Jobs within a firm that required skill, but which could not be linked with the skill requirements of other jobs in the firm, would then be structured in a more horizontal fashion. On the other hand, jobs that required little or no skill and thus involved little or no training costs, and which were not related to the skill requirements of other jobs in the industry, are likely to be organized in a casual fashion. The costs of turnover are low or negligible so no effort is made to reduce turnover by paying high wages or offering chances for advancement.

Both Stone and Braverman emphasized that the mechanization of the production process has led to a general deskilling of labour. Involved with this deskilling process was a resulting reduction in the length of time needed for a worker to learn a particular job. However, the figures they cite as being short training periods vary significantly from those cited by Dual Labour Market authors. For example, Stone cites Charles Schwab as saying that the time needed to train a melter was six to eight weeks:

> "When we realize that the job of melter was the most highly skilled job in the open hearth department, we can see how narrow the skill range in the industry really is."25

²⁵Katherine Stone, op. cit., p. 140.

She then concluded that since learning to be a melter took only six weeks "...then certainly the training required for most jobs was so minimal that no job ladder and only the minimum of job tenure were needed to acquire the necessary skills." 26

However, when Doeringer and Piore first wrote on rapid labour turnover, they found amazingly high rates of turnover for Action for Boston Community Development (ABCD) applicants:

"Among those in the sample, the median tenure on their last job was only 21 weeks, or about 5 months; a third of the applicants had spent 3 months or less on their last job. Only 23 percent had remained on their last job 18 months or more."27

Thus, a six to eight week firm-specific training period would amount to half the period of job tenure for a full one-third of the sample group.

Thus the distinction between the nature of the deskilling and labour homogenizing process emphasized by Stone and Braverman and the importance of the firm-specific training period emphasized by Doeringer and Piore becomes more apparent. Stone and Braverman are emphasizing a transformation which has taken place in the utilization of labour in major industries. Compared with the craftsmenship involved in earlier production processes in these firms, there has been a drastic deskilling of labour. However, the production process has also under-

²⁶Ibid., p. 142.

²⁷ Peter B. Doeringer and others.

gone a massive capital-intensive technological change. Thus, the costs associated with a high turnover labour force are not restricted to the loss of firm-specific human capital investment. Indeed, there are very significant costs associated with a suboptimal use of a very capital-intensive production process.

If the production process is an assembly line operation, the costs associated with the training of one new worker affect the performance or productivity levels of all the other workers associated with that production process. To train the worker it may be necessary to slow down the speed of the line reducing output, and therefore, the productivity of all the resource inputs associated with the process It may even be necessary to stop production entirely if the worker inadvertently destroys some of the capital equipment through inexperience.

All major studies of labour turnover or mobility attest to the extremely rapid turnover of the Canadian labour force. A recent study by the Economic Council of Canada obtained labour turnover figures from examining Canada Pension Plan data. Over a five year period, "...between half and three-quarters of male and female workers aged 25 to 44 had changed employers at least once...About one-quarter of the males aged 25 to 44 in Ontario had left their jobs in the first year; half had left by the fourth year."

Economic Council of Canada, People and Jobs: A Study of the Canadian Labour Market (Ottawa: Information Canada, 1976), p. 90.

Our thesis hypothesis suggests

that the source of the high turnover is associated with the productive organization of an enterprise. If a firm in the industry served a wide market, where the efficient and uninterrupted delivery of the product was necessary, then the firm would organize its capital equipment so that a given output would be assured. However, if a firm served a competitive market, its production orientation would be short-run. As a result, its production process would be organized so that short-run profit maximization was obtained. It would then be less likely to mechanize highly its production process and in fact would probably find it unprofitable to do so.

Summary: Chapter 6

The changes in the technical organization of production in firms leads to changes in the use of the labour input in production. It is this change in the use of the labour input of center firms that has led to the evolution of the Dual Labour Market.

The nature of the use of a person's human capital in production changes with the growth of center firms. No longer does a skilled person use machines to produce a product. Instead, a person is slated to fill a particular job in a production process. Thus, the change in the production process of center firms leads to the creation of firm-specific jobs and firm specific skills. Frequently, the skills learned on a lower level job in the employment heirarchy may be utilized as that person rises to higher job levels. Thus, what has become known as the Internal Labour Market is created.

The primary labour market would then be associated with employment in those enterprises that allow a person to accumulate firm-specific skills. As the employee accumulates these skills, the likelihood of job turnover is reduced for the human capital accumulated is firm-specific. Therefore, employment in the primary labour market would be characterized by upward sloping lifetime earnings profiles and low rates of labour turnover.

CHAPTER 7

AN EMPIRICAL TEST OF THE HYPOTHESIS

"A new theory is always announced together with applications to some concrete range of natural phenomena; without them it would not be even a candidate for acceptance. After it has been accepted, those same applications or others accompany the theory into the textbooks from which the future practitioner will learn his trade. They are not there merely as embroidery or even as documentation. On the contrary, the process of learning a theory depends upon the study of applications, including practice-solving both with a pencil and paper and with instruments in the laboratory."1

The nature of empirical tests of the theories of the Informal sector and the Dual Labour Market have followed a very predictable pattern. The theory of the Dual Labour Market first arose because of the inability of human capital theory to explain Doeringer's findings of high labour turnover in the ghetto area of Chicago. Similarily, the first writings on the Informal sector arose because of the non-labour absorbing growth path of development in many underdeveloped areas. The empirical research on both theories has tended to follow this initial pattern. Research on the Dual Labour Market has examined human capital variables such as

Thomas Kuhn, The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1962), pp. 46-47.

earnings differentials and/or turnover differences between the two markets.

Research on the Informal sector has been much more limited. This is primarily due to the paradigm of the Informal sector being much less cohesive than that of the Dual Labour Market. Given this initial and continuing disagreement over the actual form of the Informal sector, the nature of a suitable test of a not too certain theory was naturally difficult to specify. However, many authors have centered their research on examining the proportion of migrants and the age and sex distribution of the work force in each sector. Thus the avenue of investigation has usually consisted of tests which attempt to support or disprove, the initial Lewis style Dual Development theories. However, some research has also been conducted on earnings differentials between the Informal and Formal sectors.

In this chapter we will examine some of the various empirical and qualitative findings on the Informal sector and the Dual Labour Market which pertain to our hypothesis of a Dual Industrial Growth pattern. However, before examining these various empirical tests it is necessary to specify the data results which would support our hypothesis. To do this we will briefly outline the form of tests that have previously been conducted and then go on to specify the findings which relate to our hypothesis.

The first studies on the Dual Labour Market hypothesized that labour markets could be segmented on the basis of labour stability and the nature of various sectors' labour force unemployment. The primary

market would have a stable labour force with low turnover and unemployment and this market would be of a structural or long-term nature. Unemployment would tend to take less of a cylical pattern because of the training investment loss to the firm in having to retrain workers in the upswing. For similar reasons the patterns of unemployment would also tend to be less seasonal in nature.

On the other hand, the secondary market was hypothesized to have a high rate of frictional unemployment due to the nature of employment instability. This instability would then be reflected in a short-term nature of unemployment and probably a pattern of frequent periods of unemployment. This reasoning follows logically from the definition of what employment means to a person in the secondary labour market. Given their low level of earnings, the option of going on unemployment insurance or welfare instead of accepting a low paying secondary labour market job is a viable alternative.

Another form of test frequently conducted was on earnings.

Jobs in the primary sector were thought to be of a nature where returns to human capital could be enjoyed. On the other hand, secondary employment was of a form where no skills and little return to human capital could be gained or realized. Therefore, a comparable

The report of E.D.A.B. Manpower Issues in Manitoba examined and tested the cyclical responsiveness of wage rates in "primary" and "secondary" occupations. They found wage rates to be unresponsive to both changes in unemployment rates and to the level of unemployment for both "primary" and "secondary" occupations.

worker (i.e. of the same age, sex, education level, race, etc.) in the secondary labour market would have a flatter life-time earnings profile.

Many of the aforementioned tests were based on an assumption that institutional barriers prevented secondary workers from obtaining primary jobs. Thus the number of primary jobs was thought to be limited and institutions would artificially segment workers between employment in the two sectors.

Our hypothesis of a Dual Industrial Growth pattern would not disagree with the previous empirical tests for the Dual Labour Market. However, it would go a step further in a testing of the hypothesis. Like previous tests, unemployment in the secondary market would be hypothesized to be of a short-term frictional nature. Similarily, unemployment in the primary market would be more of a long-term structural nature. However, the definition of what a secondary market would entail would be more clearly defined.

Firstly, we hypothesized that on the demand side, lower-wage employment would roughly be associated with those peripheral enterprises that served the lower-income informal economy. Correspondingly, higher-wage employment would then be associated with the technologically advanced industries in the center economy.

However, the industrial dicotomy between primary and secondary employment would not be this simply. As has been pointed out by numerous writers (Averitt, Braverman, Gerry, Peatti, Bluestone, Baron and Hymer, Doeringer), many center economy enterprises employ massive

numbers of unskilled casual workers. These enterprises would then employ workers in both a primary internal labour market and in a secondary labour force composed of casual low-skilled workers. As well, as many enterprises develop their production processes into a continuous flow process, machines begin to replace the massive number of low-skilled workers. So depending upon the degree to which the technology of a center firm is labour displacing, there may or may not be a large number of casual workers employed.

Similarily, it would be equally difficult to categorically state that the periphery economy's industries pay low-wages and employ vast numbers of secondary labour market workers. Firstly, the periphery economy is composed of industries of various forms. Those enterprises that are peripheral because of the specificity of the product, (i.e. the machine tool industry) would tend to employ a relatively high number of skilled craftsmen because of the industry's inability to mechanize the production line. These workers may or may not be paid wages equivalent to those of similar craftsmen in other firms depending upon the bargaining strength and structure of the union or labour supply variable, and the nature of the product market which the firm served. Thus a cabinet maker who makes handcrafted wood cabinets to sell to a select high-income market may earn a salary that is two or three times that of a cabinet-maker who works in a factory which produces furniture by means of a production line. Similarily, a cabinet-maker who makes hand-crafted wood cabinets for a low income product market may have a low income level. Thus, the

key to understanding how the incomes of the occupation can vary is found in the formation of the product market.

In effect, these workers are producing a very specific product to sell to a certain segment of the cabinet market. The extent and size of the fringes of the market would then vary directly with the organization of the center firms in the industry. The center firms would produce for a mass market and the fringes of the market which they could not efficiently serve would be served instead by the periphery economy. To this extent, the periphery economy is really a marginal economy and its absolute size and growth would be related to developments in the center firms in the industry. Our distinctions between primary and secondary labour markets would then rely upon examining how employment patterns change in response to developments in the center economy and the implications these changes have for the periphery economy.

Mazumdar developed a model for analyzing changes in the distribution of income between the Informal and Formal sectors in LDC's over time based upon a similar reasoning of the nature of the relationship between the two sectors. "We start with the observation that in the urban labour market the informal sector sells its output entirely to the population in the urban area — who derive their income from the informal (U) as well as the formal (o) sectors. The 0-sector, however, sells most of its output to the population outside the labour market. Consequently, U-sector output is dependent on the income of the 0-sector, but 0-sector output is autonomously determined." Dipak Mazumdar, Analysis of the Dual Labour Market in LDC's, Employment and Rural Development Division, Development Economics Department, International Bank for Reconstruction and Development, (January, 1975) (Mimeographed), p. 19.

In chapter five we demonstrated how center firms change the nature of the production process as they increasingly orient production to a mass market. Technological change is designed to facilitate production targets and not to enhance the operating capacity of the worker or to make work easier. Increasingly people utilize their skills to operate a machine and the internal labour market develops to facilitate the efficient accumulation of these human-capital firm-specific skills in the enterprise.

On the other hand, the periphery firms are serving the fringes of the product market and are operating in a highly competitive environment. There is less range for long-term planning and this typically results in a different market orientation of the firm. This different orientation of the firm then results in a different organization of the labour force and probably few internal labour markets would exist.

Therefore, since the changes in the industrial organization of the industry should result in changes in the industrial labour force, we should be able to test our hypothesis. Specifically our investigation would center on the structure of wage rates and turnover rates between firms in an industry. Ideally, we would like to examine the turnover rates within a specific occupational grouping, between firms or companies in a specific industry or industries.

Wage and Income Distribution

Relatively fewer empirical studies have been conducted on income distribution than on the question of turnover or worker

instability in the Dual Labour Market literature. Similarily, very few empirical studies have been undertaken on the Informal sector. The reasons for this absence of studies lie in the extreme difficulty of adequately specifying an appropriate test.

For example, one popular way of "testing" for the presence of a Dual Labour Market structure has been to demonstrate that the monetary returns to education or training are lower for workers in the secondary labour market. As Gordon points out various authors have conducted such tests and the "...initial evidence on returns to education among blacks tends to confirm the dual market and radical expectation." However, these studies do not provide conclusive evidence to support the Dual Labour Market paradigm.

Firstly, as Thurow, Mincer and Berg have all pointed out,
"...there are important complementarities between education and later
on-the-job investments in training, and one needs precisely to control
for those later opportunities in order to make proper inferences about
the potential of educational advancement."⁵

⁵Ibid., p. 119.

David M. Gordon Theories of Poverty and Underemployment (Toronto: D.C. Heath and Company, 1972), p. 118.

"In fact, however, many of the explanatory variables which affect income flows are not independent but complementary. This may be clearly seen in on-the-job-experience and education. The returns from experience depend partially on the trainee's level of formal education. Low education levels make some types of training impossible and other types expensive, but as the levels rise, training costs fall and the variety of training which can be given expands. These complementaries also work in the opposite direction. Most jobs require some knowledge which is peculiar to the job and is not or cannot be acquired in school. Without this experience, education is of little value. Education and experience combined yield larger benefits than the sum of the two."6

Thus the problems associated with utilizing wages and wage rates as a test of the Dual Labour Market are numerous.

One further analysis that has been attempted with a fair amount of success is to examine the relationship between education and worker productivity. The orthodox paradigm of the labour market assumes that increased education levels leads to increased worker productivity. Conversely, all forms of the Dual Labour Market paradigm assume that worker productivity is related to the demand characteristics of firms. Firms that produce for a mass market have mechanized production to assure a given level of output. The nature of skills utilized in production changes and the worker is employed to operate a machine and not to utilize a machine or a process to increase his or her own output. Therefore,

⁶ Lester C. Thurow, "Poverty and Human Capital", Problems in Political Economy: An Urban Perspective, ed. D.M. Gordon (Lexington, Mass.: D.C. Heath and Company, 1971), p. 88.

a significant amount of job skills would be acquired on the job and education would simply serve as a screening process for selecting potential workers with certain aptitudes.

Ivor Berg is one author who has reviewed the research conducted in the area of the relationship between education and productivity. The evidence he has reviewed seems to demonstrate that levels of educational achievement are fairly unrelated to various measures of worker productivity. Firstly, he cites work by Eckaus and Scoville and others who relate aggregate trends in educational achievement to aggregate trends in the educational requirements of jobs. Their findings demonstrate that educational achievements are increasing far more rapidly than jobs and thus it can not be automatically assumed that there is a direct relationship between job requirements and educational attainments.

However, more importantly, Berg's summary suggests that various ratings of educational achievement bear little relationship to measures of productivity such as promotions or merit ratings:

"Both in blue-collar and white collar work, Berg cites numerous studies which suggest that "success" on the job has only rarely been related to superior educational achievement or attainment."7

Thus the whole area of the relationship between education, skills, and/or human capital and monetary returns is to say the least

Gordon, op. cit., p. 120, citing Ivor Berg, Education and Jobs: The Great Training Robbery (New York: Praeger Publishers, 1970).

confused. However, one fact that has become clear from these studies is that most empirical tests do not support the Orthodox paradigm and most results are not inconsistent with the Dual Labour Market paradigm. However, as Gordon has clearly emphasized, a suitable test of the Dual Labour Market paradigm is exceedingly difficult to specify:

"Is there a clear and evident separation between "primary" and "secondary" markets, for instance, characterized by behavioral differences along the stability/instability axis? As I argue in my dissertation..., it has not been possible to specify the dimensions of this primary/secondary division a priori because there have been some disagreements about the relative importance of personal and job characteristics in the evolution of the dual structure."8

However, in his dissertation he divised a very clever test for market duality which, seemingly lets the data speak for itself:

> "Making use of factor analysis and relying on some analogies with the factor analysis of intelligence test scores, I devise an explicit empirical test for market duality in which one is not forced to specify the parameters associated with that duality before the analysis. The test seems very clearly to confirm the dual market hypothesis. Controlling for a first factor reflecting the general distribution of income among jobs, one finds a second factor, which I label the "dual market factor", which reflects almost all of the predicted dimensions of difference among primary and secondary jobs -- differences in stability, attitudes, worker characteristics, and labour market behavior. Ranking jobs by their scores on this "dual market factor", one finds that jobs are bimodally distributed along the factor score axis. One detects a clear division into two sectors, in other words, between which one can draw a line."9

⁸Ibid., p. 116.

^{9&}lt;sub>Tbid</sub>:

Up to this point in time, this one test (which tests from the labour supply side), seems to be the most conclusive evidence for the Dual Labour Market.

There have really only been three articles in the Informal sector literature which deal with the question of earnings and income differentials between the two sectors. The first study was one done by Merrick for Belo Horizonte in Brazil in 1975. Using data obtained from the 1970 census and a November 1972 survey, he examined earnings differentials between informal and formal workers in a given occupation. The differentials ranged between 25 and 70 percent. He concluded that "the average informal worker in these occupations earns half of what formal sector workers in the same occupations earn. All of the occupations are in industrial sectors which are more traditional, such as construction, commerce and services."

However, Merrick admitted there was a serious problem of multicollinearity of variables in this study. He attempted to remedy this problem in a second study by (a) studying the earnings function separately for males and females and (b) including interaction variables combining education and position in the labour force. The following results were obtained:

¹⁰ Dipak Mazumdar, The Urban Informal Sector World Bank Staff Working Paper No. 211, International Bank for Reconstruction and Development, (July, 1975), p. 26.

"...The coefficients of the interaction variables do show that the same level of education (controlling for age) produces lower earnings for those in the informal sector for both males and females It is seen that participation in the informal sector leads to a much larger percentage drop in earnings compared to the formal sector for females than it does for males ... But for both groups the differential effect of the formal-informal sector location is large."11

However these results are subject to a data collection bias pinpointed by Mazumdar. Merrick differentiated between Informal and Formal sector participants on the basis of payments of social security dues:

"It is arguable that this procedure excludes those of the self-employed in particular who are brought within the state system (eg. for income tax purposes) because of their relatively high income. The criterion might thus have preselected the persons with low income as belonging to the "informal sector."12

Mazumdar then went on in the same article to review some of the data findings from a World Bank household survey in Malaysia in 1970. Unfortunately, a sizeable amount of their data differentiated between workers on the basis of employees and the self-employed. Thus the findings are not really appropriate for hypothesizing on the differing income levels between formal and informal sector activity. However, the survey generally found "...a wide diversity of earnings among the self-employed, suggesting that a substantial proportion of this group perform better than the wage-earners." 13

ll_Ibid., p. 25.

^{12&}lt;sub>Ibid</sub>.

¹³Ibid., p. 32.

However, as Mazumdar points out in another article, any attempt to measure earnings differentials between the two sectors will encounter statistical problems associated with the selectivity of workers in the informal sector. The Informal sector has consistently been found to be composed of a disproportionate number of young, old, females, and less educated people. Because age, sex, and education are the most significant variables determining earnings, an attempt to estimate an earnings function using regression techniques "...including age, sex, education and additionally location in the market (formal or informal sector) as the explanatory variables, the estimated coefficients would probably be unreliable because of the intercorrelation between the formal-informal sector variable and the age-sex-education variables."

Thus, it would be better to estimate a series of earnings in the two sectors for cohorts of workers of a particular age, sex, and educational background.

Turnover and Unemployment Rates

Interest in the question of labour turnover and mobility has increased in the past few years. Some of this interest has been kindled by the writings on the Dual Labour Market. However, a substantial amount has arisen for other reasons. Increasingly,

¹⁵Ibid., p. 5.

Dipak Mazumdar, Analysis of the Dual Labour Market in LDC's
Employment and Rural Development Division, Development Economics
Department, International Bank for Reconstruction and Development,
(January, 1975)(Mimeographed).

researchers have been reporting data from studies which indicate that selected industries, occupations, firms and social assistance programs had "problems" because of rapid worker or participant turnover. The problem was recognized as such because this rapid turnover was thought to be a source of an inefficient utilization of a resource input. We will now examine some of the findings and will demonstrate how they support our Dual Industrial Growth hypothesis.

Data from both the United States and Canada indicate that a large proportion of the labour force experiences unemployment during a one year period. A study by the U.S. Bureau of the Census for the Bureau of Labour Statistics indicated that approximately one in eight persons experienced unemployment in 1968. When this figure was broken down into city areas, Detroit had one out of three workers and New York had one out of six. Similarily, "...each year one out of six working Canadians experiences some unemployment." Further to this, the authors who conducted the study for the Economic Council of Canada observed that:

Bureau of Labour Statistics, "Employment Problems in Six Ghettos", Problems in Political Economy: An Urban Perspective, ed. D.M. Gordon (Lexington, Mass.: D.C. Heath and Company, 1971), p. 75.

¹⁷ Economic Council of Canada, People and Jobs: A Study of the Canadian Labour Market (Ottawa: Information Canada, 1976), p. 143.

"....the proportion of people experiencing unemployment over the course of a year was much higher than the conventional annual average unemployment rates would suggest and this proportion rises rapidly as the unemployment rate rises." 18

This recent examination of Canadian data also revealed that parts of the Canadian labour force were highly mobile and prone to frequent bouts with unemployment.

"It is clear that an understanding of overall unemployment rates cannot be obtained by considering the Canadian labour market only in terms of its stocks. Moreover, it is also evident that we can no longer take the view that the labour force is mainly composed of workers who stay put, holding ones job year in and year out, while only a small number change jobs frequently and experience recurring unemployment. A more realistic view is that a large number of participants, probably 40 percent or more of the total, may change their employment, leave or enter the labour force, or be confronted with unemployment sometime during a year." 19

Many of these unemployed individuals receive unemployment insurance and an examination of UIC data indicates that approximately one third are:

"...primary breadwinners; one-half, supplementary breadwinners; and one-eighth, unattached individuals. And, during the course of a year, between a third and a half of these beneficiaries experience two or more bouts of unemployment."20

²⁰Ibid., p. 143.

¹⁸ Frank T. Denton, Christine H. Feaver, and A. Leslie Robb, Stock and Flow Relationships and Short-Run Dynamics: A Study of the Canadian Labour Market Discussion Paper No. 32, (Ottawa: Economic Council of Canada, September 1975), p. 173.

Economic Council of Canada, op. cit., p. 94.

Thus, the macro data does indicate that segments of the labour force are prone to high turnover. Additional studies have also indicated that this segmentation takes place with respect to specific occupations, industries and regions.

For example, Donner and Lazar have estimated the composition of unemployment in the various regions of Canada. They analyzed these regional unemployment disparities by breaking the actual unemployment rate figures down into their constituent components of (1) the average duration of unemployment and (2) the proportion of the labour force that is newly unemployed each month. The last measure was used to approximate job turnover behaviour. Using 1966 and 1971 data, they found that both higher rates of job turnover and longer durations of unemployment contributed to the higher rates of unemployment in 1971.

However, the nature of the structure of this increased unemployment varied between the different regions of Canada:

"Between these two extreme years, the sharpest increase in the duration of unemployment occurred in Quebec and Ontario, while job turnover rises were most rapid in the Prairie Provinces. However, in both years, regional disparities in job turnover rates were relatively much larger, than the corresponding differences in unemployment duration."21

Arthur Donner and Fred Lazar, "Regional Unemployment Disparities Remain Surprisingly Constant," The Globe and Mail, December 11, 1975.

Thus the Prairies have an unemployment pattern that is consistent with that of a "periphery" economy.

Other studies have also indicated that the occupational pattern of turnover is highly skewed. For example, Table 7:1 shows that the first two occupational categories; Labourers and unskilled workers; and Craftsmen, production process and related workers; which account for thirty percent of the workforce, account for nearly fifty percent of the unemployment. A further investigation into occupational unemployment also indicated that "...there can, at the same time, be large numbers of vacancies and many unemployed workers." However, as the authors of this study indicated, these occupations are prone to working conditions such as seasonal swings, harsh working conditions and frequent layoffs. Thus they conclude that "...the large number of long-standing vacancies hardly seems surprising." 23

The authors of a similar study, who found the same conditions pertaining, came to similar conclusions. After examining unemployment and vacancy figures from Canada Manpower Centers Registered Clients and

Economic Council of Canada, op. cit., p. 103.

²³Ibid., p. 103.

Table 7:1

Comparision of Unemployment Distribution with Labour Force
Distribution, by Occupation: 1970-72 Averages

	% Unemployment Rate	Cumulative % of Total Labour Force	Cumulative % of Total Unemployment
Labourers and Unskilled Workers	16.6	4.8	14.4
Craftsmen, production process and related workers	7.7	29.9	49.9
Transportation	7.4	34.4	56.0
Primary (including agriculture)	5.7	42.2	64.1
Service and Recreation	5.5	54.5	76.3
Office and Professional	2.8	100.0	100.0
First quartile point	9.4	25.0	43.0

Note: Persons who have never worked are excluded for purposes of this table.

Source: Frank T. Denton, Christine H. Feaver, and A. Leslie Robb, Patterns of Unemployment Behaviour in Canada, E.C.C.

Discussion Paper No. 36, September, 1975. Table II-6, p. 18.

Vacancies data, Phillips concluded that "...we cannot dismiss any of the three explanations as contributing to the labour market disequilibrium."²⁴ The three explanations offered were (1) structural maladjustments, (2) voluntary "unemployment" and (3) the Dual Labour Market. Therefore, the position that the low wages and unattractive working conditions of these occupations "...tends to contribute to high turnover, voluntary withdrawal from the labor force, and apparent high rates of frictional unemployment."²⁵ was found to be a feasible explanation of the labour market disequilibrium by both authors. However the data also supported the Dual Labour Market hypothesis. Thus, an examination of occupational unemployment and vacancy data may reveal many interesting features of the labour market but it does not provide us with findings which are inconsistent with any paradigm's view of the labour market.

Data on industrial turnover and vacancies such as shown in Table 7.2, also reveal that approximately thirty percent of the industrial labour force accounts for fifty percent of the unemployment. However, as Gordon has argued, "...it seems more and more true that using the "industry" as the unit of observation for studies of enterprise characteristics begins to miss the central points." 26

Paul Phillips, "The Occupational Structure of Unemployment and Job Vacancies in Manitoba," Manpower Issues in Manitoba ed. Report of the Manitoba Economic Development Advisory Board, June, 1975, p. 184.

25 Ibid. p. 185.

²⁶Gordon, op. cit., p. 126.

Table 7:2

Comparison of Unemployment Distribution with Labour Force
Distribution, by Industry: 1970-72 Averages

······································	% Unemployment Rate	Cumulative % of Total Labour Force	Cumulative % of Total Unemployment
Construction	15.0	6.7	18.4
Primary industries (excluding agriculture)	12.4	9.6	25.0
Manufacturing	6.2	32.2	50.7
Transportation, communication and other utilities	, 5.0	40.9	58.6
Trade, finance, and service	4.0	94.0	97.4
Agriculture	2.3	100.0	100.0
First quartile point	8.2	25.0	42.5

Note: Persons who have never worked are excluded for purposes of this table.

Source: Same as Table 7:1, Table 11-8, p. 17.

For instance, he cites work by M.S. Gordon and Thal-larsen²⁷ that indicates that:

"...As local firms are acquired by national companies, their behaviour changes in important ways with respect to personnel and hiring policies. The Bay Area Employer Survey found, for instance, that single unit establishments used rather different employee selection practices than branches or head-quarter units of multi-unit firms."28

The small local single unit establishment were less likely to use selection tests and the large firms that used such tests adhered to their use very strictly.

These findings led Gordon to conclude that:

"It may be, that is, that variations within industries (as conventionally defined) have begun to equal inter-industry variations in their importance for explaining the behaviour of employers and the incomes of workers. The differences between giant corporations and single-unit establishments may effectively outweigh differences among industries."

Our thesis hypothesis also concentrates on this area, and an appropriate test of the theory would consist of comparing labour force turnover data within a specific occupational grouping, between firms or companies in a specific industry or industries. A recent publication by the Economic Council of Canada (E.C.C.) reported data that indicated wide variations in labour turnover rates between firms in an

²⁷M.S. Gordon and Thal-larsen, Employer Policies in a Changing Labour Market (Berkeley: Institute of Industrial Relation at the University of California, 1969) cited in Gordon, op. cit., p. 126.
29 Gordon, op. cit., p. 126.
Tbid.

Employee Turnover Rates for Companies Surveyed in Selected Industries, 1973

	Low	High	Average	. Male .	Female
		(Per	Cent)		
Mining	15.5	111.6	43.2	43.9	33.8
Primary Oils	18.1	48.3	24.3	22.8	37.3
Integrated Oils	10.8	22.0	13.2	11.0	24.8
Pulp and Paper	12.4	128.3	43.6	18.7	31.0
Manufacturing, non-durables	3.8	89.2	32.3	22.4	32.8
Manufacturing, durables	11.6	46.4	22.6	26.8	34.0
Trade-wholesale and Retail	12.1	68.5	41.7	ONN MER	2000
Transportation and Storage	5.5	36.2	16.4	8.8	10.9
Telephones	9.4	28.2	19.7	9.8	29.7
Other Utilities	5.2	16.7	8.1	6.7	15.1
Banks	23.0	36.1	28.2	14.3	34.0
Other Finance and Insurance	12.3	50.0	31.3	22.3	41.1

Source: Economic Council of Canada, <u>Jobs and People: A Study of</u> the Canadian Labour Market Ottawa: Information Canada, 1976, Table 5-4, p. 92.

industry. One-hundred and twenty-three companies reported information on separations as a percentage of the average number of employees during a year. The turnover rates as shown in Table 7:3, demonstrate that there is a large disparity in rates between the high-turnover and low-turnover firms in certain industries and that some enterprises seem to have almost acute levels of turnover. The E.C.C. has generously provided us with a further breakdown of the data from this survey. We will now examine this data in greater detail.

When Joe Bain wrote his now famous book, <u>Industrial Organization</u>, he described the process by which an industry's structure affected the economic conduct and performance of enterprises in that industry. The important component of an industry's structure was thought to be the degree of concentration of firms or enterprises in that industry. To measure this degree of concentration he examined two main features of structure in an industry: 1) the structure of company ownership and control, and 2) the structure of the industry's product market. When examining the structure of industry ownership, he typically examined company assets. Similarly, when examining the structure of the product market he looked at the "...sales income of all corporations,..."

In our empirical analysis we have followed this now standard practice of analyzing an industry's structure using the variables of equity or assets and dollar sales or sales income. Specifically, we have examined labour turnover data for firms or companies in an industry.

Joe S. Bain, <u>Industrial Organization</u> (New York: John Wiley and Sons, Inc., 1968), p. 83.

The original data obtained from the E.C.C. survey permits a listing of many companies' turnover rates by three occupational categories; blue collar, clerical, and other — which includes white collar and managerial. For those companies listed in the Financial Post's survey of industries, the E.C.C. also indicated whether the company had total annual sales of less or more than 100 million dollars per year. Where possible they also indicated whether shareholder's equity was less or more than 100 million dollars. Unfortunately the number and incidence of cross-listings between the occupational group turnover rates and the measures of sales volume and company worth were too small and ill-matched to permit an accurate comparison between categories or for a testing of significance. However, there are enough cross-listings between total employee turnover rates and sales volume and company worth to enable a meaningful comparison.

Thus the testing of our thesis hypothesis is of the following form. Center firms or companies would be more likely to have larger sales volume than periphery firms because they are serving the mass market. Similarly, center firms or companies would have larger dollar values of shareholder's equity than periphery firms because of the greater capital-intensity of the production process. Thus, if our thesis hypothesis of the relationship between industrial and labour force structure is valid, those firms or companies with greater dollar sales and/or greater shareholders' equity should have lower rates of labour turnover. They will be center firms and they will have adopted capital-intensive production processes which will have led to the creation of internal labour markets.

Table 7:4

Total Employee Turnover by
Firms' Annual Total Sales

Industry Grouping	Mean Total Employee Turnover - Firm Sales <100 million \$	Number of Observ- ations	Mean Total Employee Turnover - Firm Sales > 100 million \$	Number of Observ- ations
ı	32.05	6	56.00	3
II	27.70	3	23.04	8
III	58.23	3	28.36	13
IV	N/A*	N/A	N/A	N/A
V	37.75	2 2	31.45	6
VI	#	City-Said	. Cost one	
VII	N/A	N/A	N/A	N/A
VIII	17.30	2	17.55	2
IX			Case spec	

^{*}Not available in original survey.

Source: Economic Council of Canada, unpublished data from a survey of 123 major companies.

[#]One of the categories had less than or only one observation, therefore, means were not computed.

fit for the first industry grouping as well if it were not for the mean turnover rate of the >100 category being pulled higher by the inclusion of a firm with an abnormally high turnover rate. 31

Table 7:5 lists total employee turnover rates for the two categories of shareholder equity. For every industry except the eighth where the difference is marginal, the average turnover rates are lower for the larger companies.

A final test for significance of the difference between the mean turnover rates for each grouping (< 100 million and > 100 million) in the two measures, sales volume and shareholder's equity, was made. For the first measure, sales volume, the null hypothesis consisted of the hypothesis that the mean turnover rate between the two groupings of firms (< 100 million and > 100 million) would be equal across all industries. The alternate hypothesis posits the mean turnover rate of the > 100 category to be lower. The null hypothesis could be rejected at the 97.5% level of confidence. For the second measure, Shareholder's equity, the null hypothesis again consists of the hypothesis that the mean turnover rate between the two groupings of firms (< 100 and > 100) would be equal across all industries. As well, the alternate hypothesis has the mean turnover rate of the > 100 category being lower. The null hypothesis could be rejected at the 99% level of confidence.

As can be seen in Table 7:4, in all industries but the first, the mean total employee turnover is lower for those firms that have sales greater than 100 million dollars per year. The pattern would

Table 7:5

Total Employee Turnover by Shareholder's Equity

Industry Grouping	Mean Total Employee Turnover - Firm Equity < 100 million \$	Number of Observ- ations	Mean Total Employee Turnover - Firm Equity > 100 million \$	Number of Observ- ations
I	49.28	6	21.53	3
II	30.14	5	19.45	6
III	52.36	5	25.60	11
VI	N/A*	N/A	N/A	N/A
V	34.17	3	32.34	5
VI	#			
VII	N/A	N/A	N/A	N/A
VIII	17.30	2	17.55	2
IX			-	9079 MAN

^{*}Not available in original survey.

Source: Same as Table 7:4

[#]One of the categories had less than or only one observation, therefore, means were not computed.

The E.C.C. also provided where possible, category data indicating the total number of employees in each company. The categories consisted of five groupings, < 500, 500-1000, 1000-5000, 5000, 10000, and 10000+. We grouped these categories to form two groups, less than 1000 employees and greater than 1000 employees. The mean employee turnover rate was greater for all companies employing more than 1000 employees. However, this overall pattern did not hold true within the separate industrial groupings as can be seen in Table 7:3.

Thus, our empirical findings are all consistent with our thesis hypothesis concerning the relationship between industry and labour force structure. Those companies or firms that serve a mass market, as measured here by sales of 100 million dollars or more per year, have lower employee turnover rates. Using a second proxy measure of a firm's technological position, shareholder's equity, we also found those firms with a higher worth to have lower employee turnover rates. Our last measure, turnover rates by total number of employees, found that overall, firms with a large number of employees had higher employee turnover rates. However, there was a great variability among industry groups, with industry groups I, V, and VI having higher turnover rates for the 100+ category and II, III and IX having lower turnover rates.

At a first glance these latter results would seem to contradict the pattern observed from the first two measures. However, our original hypothesis said nothing about a pattern of labour force

The average turnover rate for this industry group is 43.2. However one firm had a turnover rate of 111.6. Given that there were only three firms contained in the 100+ category, the mean is highly influenced by this one high turnover rate. If it is eliminated, the turnover rate for this category drops to 28.2 which is lower than the 32.05 for the less than 100 category.

Table 7:6 Total Employee Turnover by Total Number of Employees

Industry Grouping	Mean Total Employee Turnover - Total Number of Employees < 1000	Number of Observ- ations	Mean Total Employee Turn- over - Total Number of Employees > 1000	Number of Observ- ations
I	30.69	12	40.60	10
II	33.35	4	25.80	12
III	45.66	3	38.96	21
IV	N/O*	N/O	N/O	N/O
V	22.98	5	30.30	7
VI	9.30	3	22.06	7
VII	N/A#	N/A	Ν/A	N/A
VIII	·+	direct seaso		
IX	10.93	3	8.48	7
Total	26.57	31	29.25	72

^{*}No observations.

Source: Same as Table 7:4

[#]Not available in original survey. +One of the categories had less than or only one observation, therefore, means were not computed.

turnover rates by the size of the labour force in a firm. Indeed, many comparatively small firms in terms of sales volume and worth may employ a large number of employees in a year because of labour-intensive production processes or high rates of employee turnover. Thus, using total number of employees as a proxy measure of a firm's position of "technological advancement" is inappropriate. This is supported by the great variability of mean turnover rate patterns between industries.

CHAPTER 8

SUMMARY AND CONCLUSIONS

Summary

"By focusing attention upon a small range of relatively esoteric problems, the paradigm forces scientists to investigate some part of nature in a detail and depth that would otherwise be unimaginable. And normal science possesses a built-in mechanism that ensures the relaxation of the restrictions that bound research whenever the paradigm from which they derive ceases to function effectively. At that point scientists begin to behave differently, and the nature of their research problems changes. In the interim, however, during the period when the paradigm is successful, the profession will have solved problems that its members could scarcely have imagined and would never have undertaken without commitment to the paradigm. And at least part of that achievement always proves to be permanent."l

To some degree, all social science disciplines suffer because of a fragmentation of the areas of research. Specialization may make a detailed and therefore hopefully more precise analysis possible. But it can also mean that one group of researchers operate in partial isolation from the activities or research of other groups. Thus, one of the costs of specialization is a possible disjointed research with limited interaction. New ideas or discoveries may spread slowly or imperfectly. As well, discoveries or observations in one area may not be cognitively linked to similar findings in another research field. Thus, many

Thomas S. Kuhn, The Structure of Scientific Revolutions. (Chicago: University of Chicago Press, 1962), pp. 24-25.

separate findings may seem relatively unimportant when viewed individually. However, when viewed as individual parts of a collection of similar findings which cover a diversified field, these relatively unimportant individual findings can take on a new significance. They become one aspect or part of a process and derive their importance from being an individual part of the total process. Thus, before the true significance of the parts can be recognized, the existence of the process would have to be realized. The recognition that there is a process or a total picture to which all the individual parts fit in place, can often be long in coming. Unfortunately, like the seven blind men observing an elephant for the first time, many participants in a debate tend to view the debating process as an exercise in simply restating their data and their position in stronger verbal or written terms. Little or no effort is made to link the findings together or to hypothesize on their source or cause.

Unfortunately much of the above seems to have occurred with respect to the research on the Dual Labour Market and the Informal Sector. Although similar patterns of findings were emerging, there was little interchange between the two groups of researchers. Even when the occasional author made reference to the research of the other group, it was often of a somewhat casual and passing nature.²

For example, Lisa Peatti makes reference to the theory of the Dual labour Market in "The Informal Sector". She correctly notes that many of the authors have emphasized the importance of skill differentials and career pathways. However, she concludes that more study should be conducted in this area and proceeds to distinguish between the formal and informal sectors on the basis of income. Vietoritz and Harrison noted in their research that the dichotomy between Harlem and the rest of the economy was similar to that noted for less developed countries. However, they did not proceed to examine the similarity in depth.

Instead, many of the writers on the Informal sector continued to investigate the developmental implications related to their "discovery" of the informal sector. As was shown in Chapter 2, most researchers simply incorporated or related their findings to the existing paradigm framework of the Lewis form of Dual Development model. Only very recently have authors such as Mazumdar suggested that the implications of the existence of the Informal sector may be more extensive.

The Dual Labour Market paradigm first arose because of the inability of conventional labour market theory to explain the persistence of poverty in a time of economic expansion. Some of the early authors, such as Vietori tz and Harrison, and Bluestone had emphasized that perhaps industrial forces and forms could explain the existence of the Dual Labour Market. However, because unemployment was the foremost policy concern at the time, additional research effort was concentrated on the labour supply side of the market. Thus the needs and findings of the old paradigm seemed to heavily influence the direction of research. However, the research on the Dual Labour Market has differed from that on the Informal Sector in one important aspect. Most Dual Labour Market authors viewed their research as a challenge to the "Orthodox" paradigm. Thus some of their writing was directed toward examining the wider implications of their research findings.

Research into the Informal Sector has taken a different path.

Most researchers never viewed the informal sector as a challenge to
the old paradigm. Instead, it was primarily thought to be an anomaly
that could be incorporated into the existing paradigm framework.

However, as we went on to explain in Chapter 4, the findings and described characteristics of each paradigm are strikingly similar.

The literature on both the Dual Labour Market and Informal Sector stressed the divergent economic characteristics of the informal or periphery economy and formal or center economy.

Center or formal firms differed from periphery or informal firms in their product markets, their production techniques, and their input markets. The center or formal firms were described as being progressive and efficient while the periphery or informal firms were described as being backward and inefficient. Further to this, there seemed to be an inability of periphery or informal firms to expand or develop into center or formal firms. In total there seemed to exist a developed-underdeveloped dichotomy between two sectors of an economy. Thus, not only was there a dichotomy of firm structure, but there was also a duality between the input and output markets these firms served.

Using Averitt's description of a dual economy, we examined the process by which a firm's adoption of a mass production technique necessitates a change in the organization of the labour force within that firm. The stages of production are fragmented so that individual tasks can be performed by a single worker. Thus, as authors such as Braverman have demonstrated, the older craft orientation of production is largely destroyed and the demand for skilled craftsmen is reduced or altered.

However, the most important aspect of this process of labour deskilling is the change it necessitates in the formation of human

capital. In the craft system of production the organization of
the work force is largely horizontal. The knowledge of how to
produce a product is embodied in the worker and he or she is employed
by a firm to apply that skill to make products. Once a firm has
adopted a mass production or capital-intensive technique it organizes
the production process so that workers utilize some or all of their
human capital to operate machines. However, there is also a human
capital formation process involved in learning to operate the machines
efficiently. The worker therefore accumulates firm-specific human
capital. Because the firms has a capital investment in each worker,
the risk that an employee is unstable is minimized. Therefore, these
center or formal firms adopt or continue to use both formal (employee
screening procedures) and informal processes to minimize employee turnover.

Informal or periphery firms would then differ from formal or center firms by the absence of a production technique that creates firm-specific capital and firm-specific human capital. Employee turn-over in these firms would therefore be higher than in center or formal enterprises. As well, employees in periphery firms would have relatively flat life-time earnings profiles for there would be relatively little or no opportunity for them to accumulate firm-specific human capital.

Thus, the essential difference between the primary and secondary sectors of the Dual Labour Market rests on the opportunity for an employee to accumulate firm-specific human capital on the job. Those firms that have little or no firm-specific capital and therefore generate little or no firm-specific human capital would be

secondary labour market employers. Those firms that utilize firmspecific capital and therefore generate firm-specific human capital would potentially be primary labour market employers.

In Chapter 7 we reviewed the empirical literature which relates to our thesis hypothesis. Specifically we reviewed the literature concerning income generation and returns to human capital, labour turnover and labour mobility. All the literature reviewed had findings consistent with our hypothesis. We then devised a specific test of the hypothesis. Using employee turnover data obtained from the Economic Council of Canada, we found that firms with large sales volumes and large amounts of shareholder's equity, (proxy variables for center firms) had lower employee turnover rates. Thus our empirical test was not inconsistent with our hypothesis.

Conclusions

The Dual Labour Market, as we have defined it, has been shown to have arisen primarily as a result of the nature of the change of the utilization of human capital in production. The development of firm-specific human capital and the resulting change in the way human capital is utilized in production has effectively led to a situation where two workers, of the same occupation, can have different lifetime earnings profiles because of the way their skill is utilized in production. The workers in a primary job will have an opportunity to gain firm-specific human capital on the job,

while the worker in the secondary labour market will have little or no opportunity to do so. The Dual Labour Market is then defined on the basis of a dynamic analysis of skill and human capital and its accumulation and/or utilization in production over time. At any point in historic time, a static analysis of the labour market will reveal the extent to which a dichotomy in human capital or skill utilization and/or accumulation in production exists within occupational categories. Some occupational categories, such as doctors and lawyers, may not exhibit this primary-secondary labour market dichotomy because the labour market for that occupation is stratified in a horizontal craft fashion where the workers still have control over the utilization of their skill in production. However, in many occupational categories, a dichotomy will exist between primary and secondary jobs.

The Dual Labour Market is therefore not defined on the basis of income or different occupations which may yield high or low returns to labour. Thus as outlined above, it is not appropriate to identify certain occupations as belonging to the primary or secondary labour markets. Instead, within every occupational category some individuals will be employed in a primary labour market job that permits them to exercise all the potential of their human capital and/or to accumulate firm-specific human capital. Others in the secondary labour market will be underemployed and/or not given the opportunity to accumulate firm-specific human capital. It is therefore simply incorrect to identify a total occupational category of the labour force as belonging to the secondary labour market.

We tested our thesis hypothesis using labour turnover data because of the various problems associated with analyzing and empirically researching the secondary and primary labour markets on the basis of income. Specifically, it was reasoned that firms with large amounts of firm-specific capital would employ large amounts of primary labour and would exhibit lower employee turnover rates. The primary labour employees in these firms would have accumulated various amounts of firm-specific human capital and would find it difficult to transfer some or all of it if they changed employment. Similarily, firms with little or no firm-specific capital would employ large amounts of secondary labour and would exhibit relatively larger employee turnover rates. Since the employee has little chance to accumulate firm-specific human capital they will lose only a small amount of income by dropping out of the labour force or transferring employment.

Although authors such as Doeringer and Piore have researched the area of internal labour markets to some degree, additional research efforts should be directed in this area. Specifically, further efforts are needed in the investigation of the evolution of firm-specific capital and firm-specific human capital. In this thesis we have primarily focused our attention on demonstrating and exploring the complementarity between firm-specific capital and firm-specific human

 $^{^3}$ See pages 142 to 152 of Chapter 7 for this discussion.

⁴P.B. Doeringer and M. Piore, <u>Internal Labour Markets and Manpower Analysis</u>. (Lexington, Mass.: Heath Lexington Books, 1971).

capital. We accepted Averitt's description of the evolution of duality in firms' input and output markets and went on to demonstrate the precise nature of the duality in the labour market. However, our findings do suggest that further attention should be directed toward exploring the factors behind the rise of the "dual economy". For example, what is the dynamic relationship between the growth of center and periphery firms' in industries over time? If there is a common pattern to the development of center and periphery firms in industries then it is possible that the significance of Averitt's description of the dual economy may be more extensive.

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