THE COORDINATION OF DEVELOPMENT FINANCE
AND
EMPLOYMENT & TRAINING PROGRAMS

by

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ABSTRACT

This thesis is an analysis of how and why intervention in the two factor
markets must be coordinated. First, labor and capital markets are
examined in isolation, specifying the causes of their respective
deficiencies, employing a model of segmentation and intermediation.
The fundamental bifurcation of the labor market is traced to the pertur-
bations in final demand. The barriers to economic mobility posed by
social networks are also analyzed. These informal intermediaries are
found to have an important role both in facilitating entry into a firm
and ensuring the retention and promotion of workers after they are hired.
A similar model of capital market segmentation is introduced following
an assessment of small firms' economic role and lack of access to capital
markets. A reconciliation of the two dualist models is offered,
indicating their unique attributes as well as their conceptual inter-
dependence. A case study on Bedford Stuyvesant Restoration Corporation
is provided to elaborate the problems posed by development agencies that
attempt to address segmentation and coordinate their factor market
interventions. An institutional analysis of linkage concludes the essay.
This chapter summarizes the opportunities and obstacles confronting
development agencies that couple labor and financial intermediation.

Thesis Supervisor: Prof. Belden Daniels
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INTRODUCTION
Our capital and labor markets are structurally flawed. Both of the factor markets have a strong and well developed sector which operates side by side with a weak or "secondary" sector. Small new firms seeking capital must draw heavily on personal savings, having little access to the dominant financial institutions that serve larger corporations. Similarly, a class of disadvantaged workers have limited channels through which to secure information about jobs, particularly jobs that develop their productive potential. This discontinuity in the input markets has been referred to in some quarters as segmentation.

The central purpose of this thesis is to demonstrate why attempts to reduce capital and labor markets segmentation must be linked. Linkage here refers to three objectives.

First, the economic models used to analyze segmentation in the two factor markets must be synthesized. Second, the public policies formulated to address deficiencies in capital and labor markets must be conceptually integrated. Third, the actual institutions that carry out these policies must be merged or coordinated.

Before one can assess the relationship between the bifurcation of capital markets and the discontinuities in labor markets, one must clearly identify the causes of each of these two phenomena. There exist many provocative parallels in the genesis of capital and labor market segmentation. The duality in each of the factor markets arise, in part, from the attempts of certain economic agents to shield themselves from instability and uncertainty. Both forms of segmentation also derive from the severe
constraints in the transmission of information--information about jobs and workers in the case of the labor market and data on firms and sources of financing in capital markets.

The first factor--the "risk aversion" that segments both markets--is particularly problematic. Labor markets are internally divided partially because managers of large firms prefer to relinquish the unstable portion of demand to smaller labor intensive enterprises. These smaller enterprises are considerably more flexible and can expand and contract their operations to accommodate cyclical swings in demand.

Similarly financial markets are segmented partially because investors and intermediaries are reticent to bear the risks associated with perturbations in small firms' earnings. The behavior of these financial institutions violates neoclassical efficiency criteria because the type of risk they fear can frequently be eliminated through diversification: combining an investment in many small firms would stabilize the income earned by these investors.

These two risk-related causes of factor market segmentation are slightly different--and it is critical that their differences are acknowledged. However, the functional interaction between these two segmenting forces make it difficult to address labor and capital market segmentation concurrently: If one tries to increase the efficiency of capital market institutions by ameliorating their risk aversion one is likely to increase the instability of employment.

One way out of this trap is to recognize that the other type of structural economic defect that gives rise to segmentation in financial
markets—imperfect information dissemination mechanisms—can often be ameliorated without aggravating the discontinuities in labor markets.

A critical institution that shapes the way information is transmitted in both factor markets is the intermediary. Factor market intermediaries facilitate the allocation of capital and labor. There exist both formal and informal intermediaries, intermediaries in the external and internal sectors of input markets, and public and private intermediaries. Public intermediaries are increasingly relied upon to develop distressed local economies. However, a theory of public intermediation is still far from fully developed.

There are three ideal types of intermediaries. The first are institutions which simply disseminate information and carry out factor market transactions on behalf of other economic agents. The information they transmit describes: (a) factor resources that are idle and seek employment (unemployed workers and sources of uncommitted financing); and (b) employment opportunities (job vacancies and investments). The paradigms of this type of intermediary are the employment agency and the stockbroker.

Another type of intermediary is one which holds its own "portfolio" of factors in addition to transmitting information and engaging in transactions. In the labor market this is exemplified by a temporary agency which contracts out labor services. A financial intermediary that conforms to this model is a dealer in stock.

Finally, the third and somewhat more interesting type of intermediary "transforms" factors before or after they are transacted. Most financial institutions fit this description since they alter the assets
they purchase before they are re-sold to liability-holders. For instance a mutual fund purchases financial assets that are in larger denominations and somewhat riskier than the securities they re-issue.

Some labor market intermediaries "modify" workers--i.e., a public manpower agency frequently provides pre-vocational training, counseling, and a variety of supportive social services to their clients before and after they are referred to jobs. This essay will focus on the intermediation functions of transmitting information and transferring factors.

Private intermediaries exacerbate the segmentation that exists in the two input markets. Although the primary cause of segmentation is the instability of product markets and profit rates, the duality of factor markets is aggravated by the informal and formal institutions which allocate labor and capital.

In the labor market friends and relatives serve both to refer workers to job vacancies and to help them to adjust to their positions once they have been placed. One important cause of labor market segmentation is the fact that disadvantaged workers have poor access to the informational and training resources of these "informal" intermediaries. Their social networks do not transmit information that is nearly as useful as that disseminated by higher status groups.

Social ties are also critical to the functioning of formal and informal financial intermediaries. Formal capital market institutions like banks depend on the close rapport that develops between their loan officers and the managers of borrowing firms. Informal loan clubs consciously exploit the ethnic or occupational nexus that binds their members. In both cases
the social character of the financial relationships facilitates the exchange of information and the maintenance of trust.

Small new unstable firms have difficulty establishing this type of rapport with conventional financial intermediaries. The flow of information about their projects is constrained by the inability of financial analysts to communicate with the managers of these firms. The volatility of these enterprises makes it difficult to collect up to date and accurate information about them. Their personnel are likely to be experts in crisis management but not very effective at building stable relationships with financial institutions.

Thus there exist systematic distortions in factor market information systems that impair the economic status of certain workers and firms. As noted above, public agencies that seek to ameliorate both labor and capital market segmentation should concentrate on resolving these information dilemmas.

This intervention strategy does not simply ensure a consistency of policy objectives, but also constitutes the principal rationale for merging the public institutions responsible for rectifying the capital and labor market allocation process. Public intervention in capital and labor markets are complementary. When information drawn from the two markets is synthesized, development planners can reap synergistic benefits. The coupling of labor and financial intermediation allows public agencies to improve both the wisdom and the efficacy of factor market interventions.

The information required to assess whether a firm is impaired by capital market segmentation is essential in determining whether the
enterprise can also provide valuable employment opportunities. Conversely the services and information that public manpower agencies offer can improve the financial viability of publicly capitalized firms.

Finally, the economic and political leverage possessed by manpower and development finance institutions can be heightened when it is exercised by the same institution. This leverage allows public development institutions to re-structure firms to realize valuable social and economic objectives.

This essay has three major parts. The first (Chapters I and II) deal principally with labor markets, the second (Chapters III and IV) with financial markets, and the third (Chapters V and VI) with public policies that link labor and capital market interventions.

Chapter I describes the features and some of the causes of segmentation. It focuses on the way in which firms cope with market instabilities. It also contains a general review of the literature on discrimination, providing a background for the analysis of social networks in the subsequent chapter.

Chapter II examines the role of public and private intermediaries in segmented markets. First, formal labor market intermediaries' role is briefly described. Then a model of informal intermediation is developed to account for the job search behavior of black and white workers. This model is elaborated to illuminate the role of social networks in the internal labor market--e.g., within the firm. Finally, the policy implications of the first two chapters will be outlined.
Chapter III provides some evidence that capital markets are segmented. In an attempt to assess the social significance of financial segmentation, a brief review of the literature on small businesses will be offered.

Chapter IV develops a model of financial intermediation and capital market segmentation. The problems of risk aversion and information dissemination failures will be explored in depth. This chapter will conclude with an attempt to reconcile the theoretical frameworks of labor and capital market segmentation.

Chapter V describes the history of the economic development programs of Bedford Stuyvesant Restoration Corporation, an agency that has intervened in both capital and labor markets. This case study has a variety of purposes. It will serve first to substantiate the model of informal labor market intermediation provided in Chapter II. The case also highlights the financial costs and organizational risks associated with capital market interventions designed to ameliorate segmentation. Finally, the genesis of Restoration's programs illuminates the obstacles confronting development agencies when they attempt to link labor and financial intermediation.

Chapter VI elaborates the rationale for coupling factor market interventions. To add substantive content to this analysis, the chapter proceeds by examining the five critical phases of a development program. The costs and benefits of linkage during each stage will be identified. Drawing on the case study, this chapter will also identify the institutional and political stumbling blocks that development agencies encounter when they attempt to synchronize factor market interventions.
CHAPTER I

LABOR MARKET SEGMENTATION:

BIMODALITY AND DISCRIMINATORY BARRIERS TO MOBILITY
Introduction

One of the principal flaws in the U.S. labor market is its segmentation. Segmentation can be defined in many ways but in this essay it refers to two specific phenomena: (1) the bi-modality or multi-modality of jobs when arrayed along dimensions like wages, jobs stability, opportunities for promotion and training; and (2) the lack of mobility that obtains between the upper (or "primary") and lower (or "secondary") segments.

Segmentation exacerbates social inequities by increasing the disparity between different groups' economic well being. It can also be very costly for society as a whole. By heightening inter-modal barriers, segmentation can prevent labor from flowing into expanding sectors. This worsens the trade-off between unemployment and inflation because the economy will tend to overheat at higher levels of unemployment. These labor bottlenecks can also check economic growth by constraining the expansion of viable new industries.

One policy dilemma faced by public manpower agencies is to identify firms that can provide valuable training opportunities to workers who have been confined to the lower segment of the labor market. A related issue is how to deal with the fears that are aroused when disadvantaged workers are introduced into primary sector firms for the first time. These two problems are the principal foci of the next two chapters.

To deal with all of these problems one must understand the forces that bifurcate the market. The main forces explored in this essay are (1) the instabilities of markets; and (2) the role of social networks
in both allocating jobs and providing support to workers after they obtain employment. The perturbations in product markets are examined in the first part of this chapter. I will review the literature on the economic instability and bimodality of the labor market. The second part of this chapter focuses on the issue of inter-modal mobility and employment discrimination. This discussion will serve as general background for the analysis of intermediation and social networks offered in Chapter Two.

**Labor Market Segmentation and Demand Instabilities**

A well developed literature on labor market segmentation has evolved over the last decade. It is characterized by two fairly distinct strains, one rooted in institutional economics and liberal sociology, and another founded on a more radical intellectual tradition. Although some of the work in this field tends to be descriptive rather than analytical in approach, it represents an increasingly cohesive alternative to orthodox labor economics.

The labor market in the U.S. has two related characteristics:

1. a bimodal, or multi-modal distribution of jobs. This distribution is apparent when jobs are mapped along a multi-faceted axis that defines quality of employment (a weighted measure that captures such characteristics as wages, stability, opportunity for upward mobility, grievance procedures and working conditions); and

2. the lack of mobility that obtains between or among the various "modes", "segments", "sectors", or "tiers".
There exist two somewhat different types of bi-modality: (1) a bi-
furcation in the substantive outcomes of the labor market--wages, working
conditions, and fringe benefits--and (2) a dualism in the processes
which "lead" to outcomes--wage bargaining procedures, job hunting tech-
niques and hiring and firing policies. Although closely related, these
phenomena are logistically independent. It is possible for the outcomes
of the labor market to be fairly uniform (or normally distributed) and
yet have two separate spheres with very distinct rules that constrain
economic agents' actions.

David Gordon has generated the principal body of evidence demon-
strating that the labor market is segmented in the first sense. He has
shown that there exist two fairly discrete classes of jobs. The first
segment-- the "primary sector"--is characterized by low wages, high turn-
over, poor opportunities for advancement or training. Perhaps the
classic ideal type of such a job are those provided by fast food non-
immigrant restaurants. The "secondary" sector, in contrast, has the
opposite characteristics: higher wages, low turnover, and fairly substan-
tial opportunities for promotion and training.

Piore refined the framework developed by Gordon, noting that the
primary sector itself consists of two rather different "tiers." The upper tier consists of professional and managerial jobs which have
higher wages but somewhat greater turnover. The lower tier is identical
to Gordon's original description of the primary sector. The chief
focus of this essay is the bifurcation between the secondary sector
and the lower tier of the primary sector.
The second type of polarity, the disjunctions in labor market processes, is also noteworthy. The secondary sector tends to be un-unionized and thus wage determination occurs outside the bounds of collective bargaining. Although in theory this would increase the sector's sensitivity to competitive market forces, this is not always the case.\(^8\)

However, labor relations in the secondary sector are quite distinct: there tends to be a "highly personalized relationship between workers and supervisors which leaves wide latitude for favoritism and is conducive to harsh and capricious work discipline."\(^9\)

The genesis of the bifurcation in the labor market is best understood in terms of the fundamental instabilities that buffet a market economy. Piore argues that segmentation stems from differences among firms with respect to the degree of stability in their production processes, product forms, and final demand.\(^10\) The markets of "primary sector" firms are either stable or fluctuate in a predictable manner and involve products that can be easily inventories. In industries where total demand is stable, all of the firms may be large oligopolistic primary sector concerns. In more dynamic industries, large primary firms are likely to exploit economies of scale only up to the point where total demand begins to fluctuate. Above this aggregate level of production, smaller secondary firms, or divisions of large firms, will fall in and out of the industry to accommodate the swings in demand. Since these firms or branches typically are less efficient, having smaller investments in physical and human capital, they are the first ones to discontinue operations when demand declines. However, their labor intensity also makes them more
flexible, allowing them to expand quickly when the total industry's market is revitalized.

The production process of primary sector operations tends to be sufficiently standardized to require a fixed set of well-defined skills that are firm-specific. Skill specificity, in conjunction with output stability, facilitates the development of on-the-job training, promotional opportunities, and more extensive grievance procedures. These benefits also accrue from the relatively extensive hierarchical and geographic breadth of primary sector firm operations.\textsuperscript{11}

One elusive issue in the segmentation literature is the "type" of product market instability that gives rise to the discontinuities in the labor market. Thompson identifies three different kinds of cyclical instability, each of which are potential contributors to the variability of the demand for labor in the secondary sector market: a) daily cycles, b) seasonal cycles, and c) business cycles.\textsuperscript{12}

The daily cycles of demand, most noticeable in the retail and service sector, are largely a result of the geographic concentration of businesses with similar working hours. Jacobs and Thompson have argued that the absence of mixed land use schemes and staggered work weeks have exacerbated this dilemma. By creating a wider diversity of working hours and combining residential and commercial facilities, development agents could promote a more continuous utilization of urban infrastructure and personal service firms.\textsuperscript{13}

Conroy notes that seasonal fluctuations in the demand for labor can be attributed largely to annual cycles in weather (e.g., agricultural harvests), custom (Christmas shopping) or production processes (auto
Freedman has pointed out that, even though sales industries have become more concentrated, a variety of trends have increased the seasonal and daily instability of employment in that sector, and thus the preponderance of secondary jobs. Among the factors contributing to this pattern are the growth of nondurable sales firms relative to the durable retail sector. The latter type of retail firm has historically required higher skilled labor with a more intimate knowledge of product characteristics and markets. In addition, Freedman notes:

> The trend toward longer business hours, simplification of tasks, standardization and self-service has made for increasingly fragmented manning schedules (in all of the sales industries).

Thirdly, a number of industries vary their demand for labor over the business cycle. Thompson notes the importance of four related industrial sectors characterized by this kind of cyclical instability: (1) consumer durables, the demand for which declines when households attempt to stretch out the life of their physical assets; (2) producer goods, which must be foregone by businesses when demand is low or when loanable funds are scarce; (3) intermediate goods stored in inventories that are liquidated during a recession; and (4) the goods produced by export industries (exported vis-a-vis a local economy) which are likely to first feel the impact of a national or international decline.

Apart from the sectors that have regular undulations in demand corresponding to recurring market cycles with daily, seasonal or multi-year wave lengths, there exist many firms with fairly random fluctuations in output. The instabilities are caused by: (a) rapidly changing fashions, (b) the idiosyncratic demands of other firms, (c) techno-
logical change, (d) a thin management structure, or (e) simply a highly competitive industry.

The apparel industry in the major centers of fashion design is the prototype of a sector subject to the first type of irregular perturbations. Waldinger aptly describes the way fluctuating aesthetic trends foster agglomerations of highly unstable apparel enterprises in cities like Paris, Los Angeles, New York and London.17

The printing industry is a good example of a sector governed by the second type of nonrecurring fluctuations—those associated with the highly peculiar intermediate demands of other firms. Tobier and Willis note the way in which the financial capitals like New York require a network of flexible printing shops which can accommodate unanticipated editing changes as well as highly specific graphic formats.18

Another type of employment variability is associated with innovation. If a business is in a highly dynamic industry in which technological change is rapid and where a firm's future hinges on its ability to develop new products and processes with exceptionally high tolerances, performance levels, and yields, the probability of business failure can rise. The literature on the degree and effects of the instability associated with the high technology industry is not well developed but one should acknowledge this fourth source of instability.19

The last two forms of employment inconstancy are created in sectors where management is weak and barriers to entry fairly low. For instance, some retail and personal service firms have markets that are fairly stable but have unpredictable output levels because they are poorly
managed 20 and face a great deal of competition. 21

It is sometimes difficult to determine whether a firm's occupations
are in the primary or secondary labor market strictly on the basis of the
firm's structural characteristics. The archetypical primary sector job
is one in a large firm within a capital intensive and concentrated industry,
where the production process is fairly standardized and final demand is
stable or at least predictable. However this paradigm is often misleading,
and needs to be refined.

One of the most important theoretical refinements that is needed
pertains to the unascertained correlation between labor market segments
and firm size.

It is true that most of the data on wages and fringe benefits
indicate that small firms provide lower compensation packages to their
work forces. This seems to be the case even after one controls for
sector, 22 industry, 23 and the age and race of employees. 24

However, Freedman demonstrates that it is very dangerous to make
generalizations regarding the wages, advancement opportunities, and
training provided by different sized firms. First she notes that
labeling all jobs in large firms as primary sector employment is inappro-
priate. For instance, although large oligopolitic enterprises usually
have positions that are embedded within broad internal labor markets,
requiring firm-specific skills, and offering opportunities for promotion,
other occupations in these firms are frequently cut off from the rest of
the establishment's job hierarchy. 25 For instance, secretaries and
telephone operators are often systematically isolated from the career
ladders of the internal labor market. Morse had shown earlier, how this typically occurs within businesses which allocate the dynamic portion of their output to a division employing "peripheral" workers—that part of the firm's labor force that is laid off as soon as a cyclical or erratic decline in demand occurs. 26

Conversely, Freedman notes that some relatively small firms with unstable product markets have offered good jobs to their employees. This improvement in job quality, however, is typically associated with an occupations' success in creating craft union or licensing systems that constrict labor supply and rationalize the recruitment process. 27

In addition the empirical data on the relative instability of small firms is not entirely consistent. Birch has generated the principal body of data that indicates small firms are much more volatile. In a given time interval these firms seem to both create a great deal of employment through births and expansions and concurrently destroy a large number of jobs through deaths and contractions. In 1972 through 1974 for instance, the gross percentage of jobs destroyed in small firms was about 18%, just over two times the comparable percentage for large business. 28 However, the net change for small businesses was actually positive and exceeded that of large businesses because of the former's expansions and births.

Notwithstanding the rigor of Birch's methodology, the reliability and significance of his data can be questioned. Brookings, for instance, has recently generated a comprehensive critique of Birch's work. Although the Brookings analysts, Armington and Odle, take issue mainly with Birch's
estimates of job generation they also critically review his findings on employment instability.*

In her most recent article, Armington concludes:

Small business is often thought of as more volatile, or less stable than large business. This popular impression appears to have no basis in fact...

(Armington and Odle’s analysis is colored however by the fact that they use a measure of volatility that is somewhat misleading: e.g. the number of jobs created and destroyed as a percentage of the net new jobs created. The Brookings analysts now agree with Birch regarding his basic finding that small firms generated more net new jobs. Thus given the same amount of jobs destroyed per net new job created, smaller firms will actually destroy a larger number of jobs during any given time period.)

A second issue pertaining to Birch's work is the significance of his overall findings. One might interpret Birch's work as implying that if more small firms are created (i.e., through targeting public funds to these enterprises) there will be less stability of employment in the economy. Although this proposition has some basis in fact, it receives little empirical support from Birch's results. This is because Birch does not describe the inter-relationship between small and large firm's employment instability.

One might subscribe to a demand driven view that posits an immutable amount of instability in the economy. If the public sector reduced

*The issue of small business contribution to job generation is examined in Chapter Three.
assistance to small firms this instability would simply be "transferred" to larger firms. Conversely, if one imposed constraints on hiring and firing in larger firms it is likely that small firms will become more numerous and increasingly less stable. Indeed Piore and Berger have compiled an impressive array of historical evidence to defend at least the latter assertion. In Chapter IV, the phenomenon of inter-firm "transfers" of instability will be re-examined. I will attempt to discern when such transfers can be expected.

Another feature of the primary/secondary bifurcation is somewhat ambiguous: the degree of product standardization in the two sectors. Increasing the uniformity of a firm's products and the division of labor in a firm can be associated with either: (1) a shift from primary to secondary sector employment, when the standardization is so complete that few skills are required to produce or sell the product; or (2) a shift from secondary to primary jobs when the production process has become sufficiently uniform to require a fixed set of skills which can be learned on-the-job.

Finally, as indicated above, the durable/nondurable product distinction has a complex relationship to the primary/secondary bifurcation. Durable and nondurable industries each have their own peculiar forms of instability. Nondurable sales firms have pronounced cycles, with daily, weekly and/or seasonal wave lengths. Nondurable manufacturing firms, as Stone notes, often serve markets which are "more susceptible to style or component change" creating sporadic fluctuations in their demand for labor. On the other hand, durable sales and manufacturing firms
face declines in product demand during the nadirs of investment cycles.

On balance, workers employed in nondurable manufacturing and sales industries with cyclical demands for labor, tend to be worse off because they must deal with more frequent layoffs. This rapid turnover rate tends to undermine the development of career ladders, formal grievance procedures, labor organization, and on-the-job training. In contrast, business cycle variability historically has been more characteristic of the primary rather than the secondary sector.

Thus, in sum, it is somewhat dangerous to formulate generalizations about the correlation between firm size, product standardization, product durability and labor market segment. However, on the most general level, there is some evidence that secondary employment is concentrated in smaller firms that produce unstandardized nondurable goods and services.

Inter-Modal Mobility and Discrimination

As indicated above, segmented labor markets are characterized not only by a polarity in the types of jobs offered by employers, but also a lack of mobility that obtains between segments. It is difficult to define an objective standard against which to judge the extent of movement between the secondary and primary sectors. There are empirical studies which have measured inter-modal mobility and come out on both sides of this issue. Carnoy, Rumberger, and Birinbaum have argued that the degree of inter-modal mobility is quite low, while Leigh and Andisani have tried to demonstrate that it is substantial.
A central theme of the dualist literature is that to the extent that inter-modal movement occurs, it can not all be explained within a narrow neoclassical framework. Orthodox economists assert that income and occupational mobility is a function of workers' skills and education. Since labor is paid its marginal product, individual workers who would like to obtain more attractive occupational positions simply need to increase their productivity through formal and informal training.36

However there is a vast body of literature, much of it generated by dualist economists, demonstrating that education is a poor predictor of economic achievement. Only about a quarter of the inter-racial income differential can be explained by education.37 A related failure of the orthodox model is its inability to account for the unequal "payoffs" on educational investments undertaken by different social strata. Groups like blacks, who tend to be confined to the secondary sector, reap a much smaller return on education, particularly for schooling below the post-secondary level.

A variety of explanations have been given as to why racial minorities, women and youth are concentrated in the secondary labor market. In his earlier works, Piore attempted to show how the cultural background of the "upper", "working" and "lower" classes affect their labor market status. Drawing on Gans' sociological framework, Piore asserted that primary workers prefer stable employment and derive satisfaction largely from their private relations with the extended family. In contrast, lower class culture, with its emphasis on "action" and peer group relations is said to reinforce disadvantaged workers' confinement to unstable secondary sector jobs.38
This correspondence or cultural fit can be viewed as a product of the
dynamic interaction between work place and worker, each shaping the other
until the skill and attitudinal characteristics demanded by the job are
in accord with the actual characters of the employees.

But compelling critiques of this line of inquiry have been developed
by Valentine and others. Valentine demonstrates that there are few
fundamental differences between the value systems of lower and working
class cultures in America that could account for these groups' quite
different labor market status.39 Many sociologists have rejected models
that view the behavioral differences among classes as causes rather than
consequences of their position in the labor market. Piore himself, though
still interested in the interaction of cultural and economic variables,
places less weight on the Gansian "supply side" framework in explaining
the persistence of segmentation.

Since groups like blacks do not receive as large a payoff from
education, many social scientists have turned instead to discrimination
as a factor in the allocation of jobs. This phenomenon is particularly
relevant to the segmentation literature because discriminatory selection
procedures divide the labor force into discrete economic groupings and
frustrate inter-occupational mobility.

Freedman and Barrett, analyzing the special labor market problems
faced by women, have argued that employers incorrectly assume that most
women's attachment to the labor force is weak, refusing to invest in their
female employees through on-the-job training. Freedman notes middle-
aged women actually have commitments to the labor force comparable to
those of their male counterparts, although they continue to be confined to distinctly inferior jobs. This analysis can be extended to other groups (e.g., minorities, the handicapped, and the very old and very young) whose skills, education and/or labor market commitment has been underestimated or ignored by employers. To the extent that these groups do in fact have lower productivity rates or a greater tendency to quit their jobs, it is very hard to determine whether these deficiencies are the causes or effects of their peripheral labor market status.

Social scientists have explained employee and employer discrimination in a variety of ways. As Marshall notes, employee discrimination is probably the most destructive form of prejudice because it affects not only recruitment processes but also the success and productivity of a worker after he has been hired. This phenomenon will be examined closely in the next chapter.

Ironically, radical and conservative economists come to a similar conclusion regarding discrimination practiced by employees: they both assert that it is economically self-destructive. The orthodox contingent see discriminatory workers as accepting lower wage rates to fulfill their perverse "tastes" to avoid physical contact with certain groups, and thereby damage their own financial well being. The Marxists, on the other hand, view discrimination as an ideology cultivated by management in order to fragment the labor force, frustrating workers' attempts to obtain a higher standard of living or gain control over the productive process.

Since Chapter II will provide the outlines of an alternative to
these dominant strains in the discrimination literature, it is worth highlighting the weaknesses of these two frameworks. The conservative framework developed originally by Gary Becker rests on the classical assumption that individual tastes are the proper unit of analysis. This framework typically presumes that discrimination represents an individual attempt to avoid physical proximity with disadvantaged minorities. The conservative model fails to explain discrimination practiced by supervisors or managers towards rank and file employees with whom they have little or no contact. By ignoring these prejudiced actors' collective ties with the white community, and only focusing on atomistic preferences, the orthodox analysts cannot account for employees who would prefer that a member of their own social group obtains employment.

The Marxist analysis, on the other hand, focuses on management's intra-class identity and assumes that its internal ties are extremely binding, eclipsing individual managers' interests. By excluding blacks from firms or from positions held by whites, management is said to prevent the reconciliation of the white and black working classes and to weaken their combined political and economic leverage.

However, it is not clear that the optimal way to fragment one's own work force is to exclude all racial minorities. It might be far more effective, at least in the short run, to hire minority groups to work side by side with whites, frustrating workers' ability to organize and communicate with one another.

It is true that in the long run, if every firm pursued this course, interracial economic inequalities would be eliminated and the tension
between the races would probably dissipate. But to avoid this outcome requires managers to base their actions on lengthy time frames and to place the interests of their colleagues in other firms on a par with their own.

Presumably the manager of one firm has an interest in taking advantage of the racial hostility created by all other firms' exclusionary practices (an "externality" of sorts). As long as other firms segregate their workforces, maintaining social hatreds, the individual manager has an interest in exploiting these conflicts by integrating his own firm.

Managers are united to the extent that they will cooperate in preserving the most general dimensions of the market system, an ethic derived from their economic interests and education. But it is much more difficult to assert that they will forego substantial profits to maintain divisions within the labor force.

Radical analysts of discrimination often ignore that employee discrimination has a life of its own, independent of white managers' attempt to heighten inter-racial conflicts. It is true that many firms have used blacks as strike breakers, which has deepened whites' intransigence; but it is not clear that discriminatory social cultures in the U.S. derive primarily from the actions of management. 44

A more robust analysis of the discriminatory behavior of white employees can be pieced together from a model of segmentation and inter-mediation. Although the full description of this model will be deferred until section IV, a brief summary of the argument follows.
White workers in primary sector firms feel threatened when blacks are introduced into the workplace. The importation of new social groups into a firm or occupation is likely to make it more difficult for white employees to refer their family and friends to job vacancies. More importantly, new black workers will be perceived as degrading the status of any occupation they enter.

This reduction in occupational status results in part from the black workers' social stigma. It also is anticipated that disadvantaged workers will be used to de-skill or casualize the firm's labor force. If this is achieved, the current employees might be displaced, or compelled to accept poorer wages, benefits and promotional opportunities.

When white workers are confronted with this array of threats, they have a vital interest in demonstrating that their new co-workers are incapable of carrying out the productive tasks required by management. This interest, whether consciously acknowledged or not, may lead the seasoned workers to make it difficult for their neophyte peers to acquire productive and organizational skills, or to become socially integrated into the work place.

Before turning to the analysis of intermediation it is necessary to briefly describe the social and ethical costs of labor market segmentation. Unless one specifies why segmentation is inefficient or unfair, it is difficult to place a value on policies designed to ameliorate it.
The most compelling reason to reduce segmentation is simply to improve social equity. Libertarians have attempted to demonstrate that the wealthy have entitlement rights to any property they inherit or earn in a free market.\textsuperscript{45} Their historical assumptions regarding the legitimacy of the conditions under which this property was acquired are highly questionable.\textsuperscript{46} Moreover, the contention that the current "rules of the game" are fair is belied by the literature on the differential payoffs to education.

But even if the rules were fair in the sense of being meritocratic, a social system which allocates such highly disparate economic opportunities to its citizenry is suspect on both social welfare grounds\textsuperscript{47} and from the standpoint of a theory of justice.\textsuperscript{48}

One can also develop a critique of segmentation on efficiency grounds. Discontinuities in the labor market give rise to an inefficient utilization of resources. Skill potentials are left undeveloped and workers' unemployment rates are heightened. Most importantly, the consumers of products in the most volatile industries do not internalize the social costs of instability: i.e., the social welfare budget.

A third critique of segmentation relates to the goals of full employment and price stability. In a society in which neither inflation nor unemployment seem tolerable, one fundamental goal of macroeconomic policy is to achieve a better trade-off between the two.

Tobin points out that the inflationary impacts of excess demand sectors are not fully offset by the attenuated deflationary effects of
excess supply markets.\textsuperscript{48} Thurow argues that the skilled sectors of the economy are likely to overheat first as aggregate demand rises.\textsuperscript{49} He concludes that the economy would be able to accommodate a relatively expansionary monetary and fiscal policy if these skill bottlenecks were addressed through on-the-job training programs. By reducing the number of workers possessing few skills who remain cut off from the primary sector during expansionary periods, a lower level of unemployment can be achieved for a fixed rate of inflation.\textsuperscript{*}

Lastly, by checking the flow of labor into rapidly growing sectors, segmentation may adversely affect the economy's ability to grow. Labor bottlenecks have become much more serious in the last ten years as reflected in the outward shift of the Beverage curve, the basic measure of labor market imbalance.\textsuperscript{51} Medoff argues that the so-called skill mismatch is a problem that arises when the economy and the labor force are growing quickly. He also notes that the bottlenecks are aggravated "by anything which makes the labor force members less able to fill the existing set of jobs."\textsuperscript{52}

One can argue that the polarity in the job market can constrain the flow of labor into expanding sectors, particularly skilled occupations in the lower tier of the primary sector. Moreover, discrimination and closed

\textsuperscript{*This argument does have its shortcomings. When bottlenecks are cyclical rather than secular it is difficult to relax them without creating a reserve of unemployed trained workers who are prepared to fill unstable occupational demands when the economy approaches full capacity. However, it is possible that these cyclical bottlenecks might be dampened if skilled labor were more plentiful and less expensive, allowing employers to retain their own excess reserve of labor. In this case the reserve could remain employed throughout the downswing phase of the cycle.\textsuperscript{50}
social networks further limit the capacity of secondary workers to move into these positions.

To see how this occurs one must analyze the dynamics of labor market intermediation. Only by analyzing how job information is transmitted and how workers assist one another in adjusting to the demands of primary sector firms can one identify the obstacles faced by secondary workers whose social networks are poorly informed and less influential.

Summary

In conclusion, labor markets are segmented largely because product markets are unstable or unpredictable. Large oligopolistic firms exploit economies of scale up to the point where demand begins to fluctuate, after which smaller firms will fill in the slack. There is quite a bit of ambiguity in the literature as to which types of perturbations are the most crucial in bifurcating the labor market; however it is apparent that firms with shorter cyclical instabilities have a greater concentration of secondary jobs. The part time and part year job categories identified by Freedman are more indicative of positions with poor pay, benefits and opportunities for promotion than are jobs which are affected by macro-economic business cycles. However, this generalization about the cycle
length of secondary jobs, along with those pertaining to degree of standardization, size of firm, and industry of the two sectors, must be employed cautiously, since there exist a vast array of exceptions to the "ideal types" described above.

The allocation of workers to jobs is no doubt based on many "supply side" factors including motivation, culture, and skill. However equally important are discriminatory screening and recruitment institutions. Although managers are guilty of being prejudiced and exploiting the discriminatory values of their workers they typically do not create these values, contrary to the assertions of many Marxists. However, the conservative model which explains discrimination in terms of personal tastes is also inadequate.

Instead, one must assert that ethnic groups have a mutual interest that they can pursue collectively. More advantaged ethnic groups have effective channels through which they can secure information, sponsorship, and training assistance. As will be argued in the following chapter, groups with low socio-economic status do not have access to these strategically important networks and thus face problems in obtaining and retaining jobs.

Chapter III will describe some of the forces which lead to segmentation in financial markets. Many of these forces bear a notable resemblance to those that give rise to labor market segmentation. The instability of product markets that generates the secondary labor market segment has its parallel in the fluctuating profit rates of firms that have problems raising financing. The discrimination and flawed information
networks in the labor market are also echoed in the financial market. The similarity of labor and financial segmentation makes possible a synthesis of dualist factor market theory. Moreover this theoretical correspondence provides one of the major rationales for linking labor and financial market intermediation.

Labor market segmentation is both inevitable and inefficient. It is inequitable because the rules of the game, or processes that determine who wins and who loses, are unfair. But more importantly, the vast inequalities in the outcomes generated by a segmented market are unjust.

The discontinuities in the labor market segmentation also reduce economic efficiency, in both a static and dynamic sense. Segmentation is inefficient, even in a static economy that is not expanding, because consumers of goods produced in low paying, unstable firms do not internalize the social welfare costs they impose on the rest of society. In a more dynamic sense, segmentation makes it difficult for labor to flow into the emerging skilled sectors that are serving as engines for growth.

This flow is constrained by both the sheer economic chasm that lies between the two sectors but, more substantially, by the social prejudices and parochial fears that secondary workers encounter when they attempt to obtain primary sector jobs. These are the issues addressed in Chapter II.
CHAPTER II

LABOR MARKET INTERMEDIATION:

THE ROLE OF SOCIAL NETWORKS
Introduction

If manpower planners hope to improve the employment status of disadvantaged groups, they must first determine how jobs are allocated in the absence of public intervention. To understand this process it is helpful to examine the dynamics of intermediation in the labor market.

Intermediaries are defined here as agents that: (a) spread labor market information, (b) buy and sell labor services, or (c) help a worker obtain/retain a job by providing training or social support. In the external labor market--e.g., outside the firm--these functions are performed by such institutions as newspaper want ads, temporary agencies, and manpower organization. However, a critical intermediation role, particularly in primary sector manufacturing operations, is performed by friends and relatives who function as informal referral agents and sponsors.

These social networks also operate within the internal labor market--e.g., inside the firm. These networks help new workers adjust to the productive and social demands of the enterprise. In fact, from the standpoint of an employer, it is precisely their serviceability within the firm that makes social networks a useful intermediary in the external labor market.

The neoclassical analysis of intermediation and job search focuses on the narrow issue of the costs and return of information to an individual. The orthodox model neglects to acknowledge the social character of informal intermediaries. There are externalities associated with the dissemination of labor market information, which ensure that costs and benefits are not
visited entirely upon those agents engaged in any one transaction. More importantly, the neoclassical framework ignores the functions performed by friends and relatives within the firm.

To assist secondary workers to penetrate primary sector jobs one must first identify which firms are capable of providing such opportunities. The "firm-screening" process must include an analysis of the enterprise's technology, markets, and organizational structure. Ideally, a business should also be coaxed to revise its production strategy to enhance workers' ability to obtain on-the-job training.

Aside from firm screening, a public manpower agency must also screen workers who are interested in participating in training programs. Although there are a variety of legitimate reasons to attempt to "cream"—selecting only those applicants with the best educational and vocational experience—this strategy will ultimately result in vitiating the goals of inter-modal mobility.

Thirdly, the manpower agency should try to deal with the fears aroused in well established workers when disadvantaged minority trainees are placed in their firms. To ensure the trainees are retained, it is necessary to deal with this perceived threat since the older white workers can withhold training, provide misleading instructions, or refuse to orient their new colleagues to the organizational structure of a firm.

Finally, the imperfect flow of information and sponsorship in the labor market has many similarities to the deficiencies of financial markets. In both markets the movement of factors across market segments is
constrained by the narrow, personalistic and biased channels of intermediaries. This parallel in input market imperfections provides one rationale for linking development finance and training programs.

In this chapter I will first focus on the role of formal intermediaries in the labor market. The economies of scale reaped by these institutions provide one rationale for public intervention. (As will be seen in Chapter IV, a similar argument can be made to justify intervention by public capital market intermediaries.) These formal institutions contribute to segmentation because of the fiscal, political, and cultural constraints that bind them.

However, since social networks dominate the labor allocation process, informal intermediaries will be the principal focus of this Chapter. The dynamics of informal intermediation in the external labor market will be examined, contrasting the neoclassical model with a sociological framework.

As noted above, one of the major weaknesses of the orthodox model is its failure to make the connection between the roles friends and relatives play within the firm to the types of recruitment functions they perform in the external labor market. Thus the dynamics of internal labor intermediation will be analyzed in depth. Finally some policy recommendations will be offered regarding the optimal strategy for assisting disadvantaged secondary workers in light of the models of segmentation and intermediation presented in the first two chapters.
Formal Labor Intermediaries

Formal intermediaries in the labor market exploit economies of scale. Labor intermediaries (LI's) take advantage of their size in two ways:

- By creating a central pool of information about jobs and workers, they prevent any one firm or individual from bearing the entire cost of finding out about available workers or job openings.

- By spreading the fixed costs associated with the job matching process—e.g., the salaries of personnel specialists and computer costs—over a large number of consumers, they reduce the per unit cost of each piece of information.

The first economy relates to the distribution of information, while the second pertains to its production. Thus even if unit production costs per piece of information collected remains the same as output rises, the first type of economy of scale allows this information to be shared more widely and thereby reduces the unit price to any individual user.

However, the second type of economy dictates that unit costs actually do have an inverse relation to output level. This occurs largely because the staffing and equipment needs do not rise proportionately when the amount of information gathered and processed rises. It also occurs because of the "diversification effect". Firms that typically recruit workers only in one or two seasons cannot retain an efficient personnel department during the entire year. But a labor market intermediary, serving many firms with different seasonal cycles can establish a stable professional corps of labor specialists, and utilize computers and other equipment on a year-round basis. Both of these economies reduce the cost of information production.
In the case of government sponsored intermediaries, such as a job referral agency, public involvement addresses two specific types of market failure. The first is associated with the "lemon" problem outlined by Akerlof. Consumers of news about jobs or workers are not able to verify the authenticity and quality of information. Without such intervention, the price consumers would be willing to pay for information would decline, forcing the best intermediaries to either reduce the quality of their data or go out of business. The former outcome would reduce the perceived value of intermediation services even further, etc.*

The second classic justification for public intervention pertains to the economies of scale associated with creating a central pool of information. The dissemination of information has many similarities to a public good. Unless the cost of transmitting data is subsidized by a collective authority it is likely that it will be under-produced or imperfectly disseminated. Ironically, subsidies are necessary not because information is expensive, but because the marginal cost of information is so low.

The marginal cost function of information dissemination is similar to that of many infrastructure goods: it is constantly declining rather than U-shaped. As the number of consumers of one piece of information rises, the added cost of disseminating that data to the last additional user falls. This means that information's marginal cost will always lie below the average cost curve.

The implications of this type of cost function is that any producer operating at the so-called efficient level of production—where price is equal to marginal cost—will sustain a loss. A price equal to marginal

*The information quality issue is examined below in the context of federal intermediation (see Chapter IV).
cost will be less than average cost; hence, every additional unit of information sold would increase the producer's losses. Even if marginal cost stops falling at some point and levels off, a private information disseminator would have to produce an infinite amount of data to break even.

Formal LI's often contribute to segmentation. For instance the U.S. Employment Service (USES) continues to use fairly superficial measures of education when selecting workers for primary sector jobs. An Employment and Training Administration survey revealed that although the USES refers mostly workers with higher educational attainments, education was not highly correlated with the likelihood of obtaining a job offer upon being referred to an employer; apparently, formal LI's "cream" to an even greater extent than employers. In this context creaming refers to the use of crude measures of productivity which tend to benefit workers whose socio-economic status is high. This policy will tend to frustrate the attempts of secondary workers to obtain primary sector jobs and thus heighten segmentation.

The behavior of formal LI's like the ES can be explained in a variety of ways. Three reasons stand out: perverse performance measures, high information costs, and social prejudice.

(1) Perverse Performance Measures

The U.S. Employment Service (USES) is judged largely on the basis of its placement rates. In 1958, the Secretary of Labor adopted this performance measure because the USES was perceived as an inefficient bureaucracy that had not been systematically evaluated.
Using the placement rate as the measure of an LI's effectiveness is inefficient and can enhance segmentation. It induces the LI to target all of its resources on the workers who are easiest to place, even if these persons could have found jobs without the assistance of the LI.

(2) High Information Costs

Formal LI's can most easily obtain information on job seekers' sex, age, race, and educational achievements. Even publicly funded LI's must operate within tight budget constraints limiting the types of data they can afford to obtain and process in a systematic fashion. Private LI's will tend to rely on "cheap screens" to reduce their expenses. They may pretend their referrals are based on more intensive research, while continuing to utilize these unsophisticated screening techniques.

Productive workers whose superficial qualifications are inferior cannot obtain referrals because of the high costs involved in collecting more subtle information about skills and aptitude. This practice heightens segmentation by constraining the mobility of workers whose past experience is limited or whose social status is low.

Even from the standpoint of maximizing the efficiency of labor allocation processes these policies are sub-optimal. As argued above, information dissemination is a public good and thus must be subsidized to reach the efficient level of output. Moreover to avoid the lemon dilemma the quality of information must be maintained at a high level. Hence if a public LI intervenes in the market, it should generate information about
workers that an employer would not normally have recourse to—not just
data that can be obtained by any screener.

(3) Social Prejudice

Another reason that LI's rely on superficial characteristics is
because these signals are often proxies of social status that are respected
by the intermediary's staff. Biased LI workers may actually believe that
a worker's sex, age, race, or number of years of education indicate whether
a worker is productive or even whether he or she deserves a job. Alter-
natively, these workers may believe that discriminatory screening tools
are necessary evils imposed on LI's by prejudiced employers. These
institutional constraints shape the behavior of formal labor market
intermediaries' behavior. Any public intervention in labor markets should
deal with the dangers posed by these factors.

However, one cannot design appropriate policies to reform public
manpower agencies before identifying the critical forces which drive
informal intermediaries. Since formal intermediaries, like the USES,
play a relatively minor role in most lower tier primary sector labor markets,
it is misleading to develop a model of segmentation based on their actions
alone. Thus the formulation of public policies pertaining to labor market
interventions must be deferred until the end of this chapter, following a
detailed examination of the functions of informal social networks.
Informal social networks function as intermediaries in both the external and internal labor markets. Neoclassical economists argue that the capacity of these networks to transmit sophisticated labor market information explains why individual employers and workers rely on them.

Like the orthodox analysis of financial markets, neoclassical models of labor intermediation are directed toward demonstrating both the reasons informal networks are used and why they are the most efficient search techniques.

Although quite robust, the model is flawed by the fact that access to and need for labor market information is determined by the social standing of groups of workers, not by that of individuals. The designers of development programs must confront these issues in order to assist workers whose social networks are neither influential nor informed.

Informal Intermediation in the External Labor Market

Many labor market studies have revealed that a large proportion of job vacancies—particularly in blue collar occupations—are filled through social networks. About 50% of job placements in which some intermediary is involved occur through informal means.

The other 50% is split up among the employment service, temporary agencies, hiring halls, and a variety of other institutions. The dependence on very informal information channels in the labor market poses a challenge for economists; to explain how factors are rationally allocated given the
fairly idiosyncratic social networks through which this information is transmitted.

Given the fact that people enter into social relationships for a multiplicity of reasons, not all of which are based on a desire to maximize personal wealth, it seems reasonable to suspect that the process of informal labor market intermediation may not conform to an income maximization model. Moreover, since social networks are not all-inclusive, it is likely that labor market competition is not always perfect, with only a select group of workers being considered for many job openings. Although orthodox economists generally have difficulty in dealing with informal economic institutions that are tied to the social, political, and cultural existence of a group, there does exist a coherent neoclassical theory of labor market intermediation, one which purports to fully explain why informal networks play such an important role in this input market.

The orthodox wisdom, articulated most clearly by Stigler and Rees, demands that a job seeker should continue to seek additional wage offers until the discounted value of wages produced by one more search effort is equal to the expense of carrying out that last exploration. * 8

To understand why informal intermediaries are so influential, Rees argues, it is necessary to make a fundamental distinction between the intensive and extensive margin of information acquisition. 9 Pursuing job search at the intensive margin involves getting more information about

*A more sophisticated hypothesis of this form would include an adjustment for risk aversion: workers are more likely to continue their job search if the marginal expected wage offer has a smaller variance (or systematic covariation with the returns on his other assets).
one single job offer, e.g., how long the job is likely to last, how often merit increases can be obtained, the fairness of supervision, etc. Engaging in search at the extensive margin, on the other hand, represents the collection of rather superficial information—e.g., wage offers—from firms one has not yet contacted. The extensive/intensive distinction is equally applicable to employers' recruitment efforts: a firm can obtain more information relating to the qualifications of a particular job applicant or it can gather more wage bids.

Rees asserts that the labor market is similar to the used car market in that workers are so multifaceted and difficult to assess that the return on intensive search efforts tends to be quite high. Given the employment security offered by many unions, the hiring of a worker often represents a long term investment. This increases the returns associated with careful screening of workers.

The distinction between intensive and extensive search, Rees contends, reveals why the use of informal intermediaries is both pervasive and efficient. Personal acquaintances of job seekers are capable of providing the most elaborate information about the latter's qualifications to employers and more detailed accounts of their own jobs to a job applicant.

He notes,

The problem facing the employer is not to get in touch with the largest possible number of potential applicants; rather it is to find a few applicants promising enough to be worth the investment of thorough investigation.10

Rees' argument rests on the assumption that there are large variations in productivities among individuals. "Thorough investigation" is needed to discern which applicants are the most productive. It is noteworthy that
one of the ways that Rees attempts to demonstrate the high degree of variability in the "quality" of labor is to refer to the wide range of wages received within a narrowly defined occupation in the Chicago labor market. This approach inspires an obvious critique: his argument is circular. He assumes that the wages received by workers in the same profession are correlated with their productivities. He then argues that the variations in productivity manifested by these wage differentials can only be discerned through informal intensive exchanges of information. But one might equally well argue that the prevailing dependence on narrow personal networks leads to imperfections in the labor market that make possible large differences in wages among workers of equal skill and productivity.*

Although the neoclassical explanation of the dependence of job seekers on social networks is somewhat compelling, it is based on the questionable assumption that all actors engaged in labor market search processes equate their individual marginal costs and returns of information. Though this may be an accurate way of modeling some employers' decision to acquire information about job seekers, it is not clear that workers' job search efforts can be described on the basis of their own personal cost and return functions.

First, it is very difficult to predict whether investment in additional information will increase one's future discounted wage (or profit)

*Elsewhere Rees and Schulze attempt to demonstrate that in Chicago the variations in wages are correlated with, among other things, differences in education. To the extent that they achieve this goal they still fail to demonstrate the link between education and productivity, a relation which has been highly scrutinized by such economists as Thurow, Bowles, Gintis, and Berg.10,3
stream sufficiently to justify such an action. It is unlikely that the marginal cost of additional information rises smoothly and intersects a continuously declining return function at some discrete point. Moreover the return function cannot be determined ex ante while one is still engaged in search. To accomplish this a search agent would have to know the wage of the job (or the productivity of the employee) before the fact.

However, the most important flaw of the neoclassical analysis is its failure to account for decisions that are made on the basis of social rather than individual considerations. Social groups as collectivities must weigh the costs and returns in labor market information dissemination and acquisition, but it is not always useful to conceive of their members as facing such constraints individually. In part, the need to analyze search activity on a higher level of social aggregation stems from the externalities associated with the diffusion of job information.

The exchange of information on the margin is often virtually costless as far as the individual actors are concerned as long as the group to which they belong is cohesive. However, maintaining the cohesiveness of a group may involve substantial costs in terms of preserving institutional structures, protecting neighborhood boundaries, or sustaining participation in social activities. Sometimes much of these costs are hidden, because they are directly associated with other social returns such as increasing fellowship among friends. The costs involved in enhancing the internal integrity of the group may not fall on the same actors that benefit at any moment from its existence. Thus the cost of information transfer among workers seeking jobs is often borne collectively --not atomistically by the few actors engaged in any one transaction.
Similarly, the returns associated with informal labor market inter-
mediation are not entirely reaped by the individual who obtains a job
lead. If a worker is placed in a good job then he is more likely to
become an effective intermediary himself at some point in the future. The
group as a whole clearly benefits any time one of its members is placed
in a position where he or she is capable of assisting others. Thus
neither the costs nor the benefits of information dissemination are
visited entirely on the individuals involved in any particular exchange.

However, the externalized returns deriving from the placement of a
friend in one's own firm are not confined to an expansion of the job
information available to the social network. Indeed this benefit may be
fairly small when a large fraction of the group is concentrated in a few
firms in the same labor market. In this case, the new worker receiving
employment is likely to secure information that was already accessible to
the group. As Granovetter has shown, relatively weak ties to workers who
are employed in remote enterprises are the most useful in providing new
job information, since these workers are most likely to provide leads that
one does not already possess.\textsuperscript{11}

There are other perceived returns that are reaped by a group when it
places one of its members in an occupation or firm that they already
dominate. These returns are the flip side of the losses that the group
would expect to sustain were a member of a lower status group successful
in penetrating their field. Once the ethnic and racial stratification of
the economy is an accomplished fact, workers are likely to be materially
threatened when they are forced to work side by side with new groups
possessing a lower socio-economic status. The introduction of such low status groups may be interpreted as an attempt to mechanize or degrade their occupations.

Frequently employers try to increase the flexibility of their labor force, decrease their wage bill, or reduce their workers' ability to place new demands on management by transforming many of the firm's jobs into part time, temporary positions. Freedman has documented the fact that durable sales and clerical occupation have experienced such transformations. As Freedman notes, such attempts to degrade an occupation are typically accompanied by the recruitment of new demographic groups who have fewer economic opportunities. Hence many actors in the labor market associate the introduction of workers bearing a lower socio-economic status with these structural transformations.

White workers who witness the entrance of blacks into their occupations may conclude that management is trying to undercut their wages, working status with these structural alterations of their vocational role. White employees will feel most threatened when they are forced to work with disadvantaged minorities who have few skills and a peripheral relationship to the labor market. Such inter-group contact will heighten the danger of a noxious re-structuring of their occupation. Kornblum notes that the white steelworkers who display the most racist behavior are those who have frequent contact with newly hired unskilled blacks. Additionally, Hosbaum, in his analysis of the British aristocracy of labor, discovered a similar pattern at the turn of the century. The most reactionary craftsmen were those who had been forced to work side by side
with large numbers of low skilled laborers. The very proximity of these groups raised the craftsmen's fear of mechanization. (Once the process of mechanization was completed, however, these workers were among the most radical in the labor force, calling for a unification of labor to combat capitalists' control of production.)

Regardless of whether whites believe such a structural metamorphosis in their occupations and firms is taking place, they may fear that their future promotional opportunities within and outside of the firm will be severely constrained if the new ethnic or racial group succeeds in adapting to the work place. In the first place, the older, more established white workers may have to compete with a larger group if the skill supply expands rapidly, particularly if seniority is not decisive in determining promotion. Furthermore, they may feel that their occupational status will be stigmatized by the new group, threatening the continuity of existing career ladders. Finally, even if the promotional opportunities of the white workers currently employed in the firm are protected, their families' and friends' ability to fill future job vacancies is likely to be curtailed if the latter must compete with an additional set of workers.

Whether or not these phenomenon actually occur is irrelevant. What is essential is that they are likely to be anticipated given the social stratification of the work place. The fact that women and blacks have in fact been used to "casualize" a profession, has undoubtedly popularized this view. The history of unions' attempts to exclude blacks can be understood as driven largely by such concerns.

Thus a vicious circle emerges: the discrimination experienced by secondary workers confines them to lower status jobs. However, their
lower economic status is one of the main factors arousing the fears of white workers who are responsible for exclusionary practices.

Before one can formulate a model of how conflicts between primary and secondary workers impact on the latter's ability to secure information and assistance in their job search efforts, it is necessary to examine the empirical data that has been collected on this topic. Studies on the job search behavior by race are the most detailed and instructive. They are also fairly surprising in that some of the critical empirical findings are counter-intuitive. These findings, however, can be utilized to develop a comprehensive conceptual framework which specifies the nature of the employment barriers faced by secondary workers.

Empirical Findings on Inter-Racial Differences in Job Search Behavior:

Specification of an Interpretive Model

The empirical findings on jobs search behavior by race can be used to elaborate and confirm the model of segmentation and inter-group conflicts described above. The substantiation of the model will be very indirect since it involves the specification of some unmeasured variables. However, the framework developed in this manner can serve to generate some useful interpretative hypotheses. I will focus on the experience of blacks since their labor market behavior is fairly well documented and because they are concentrated in the secondary labor market.* 15

*Although I will focus on the experience of blacks in the labor market, much of the analysis will be applicable to other groups with a low socio-economic status. In fact, throughout this essay blacks are
The conflict between primary and secondary workers should make it difficult for blacks to obtain job leads from white blue collar workers who feel threatened by the former. Aside from having poor access to the information resources of more advantaged groups, it is reasonable to suspect that blacks possess less useful information themselves. Thus, one might predict that blacks rely less often on informal networks in their job search efforts. Some economists have indeed asserted that blacks find their jobs through formal intermediaries or direct application more often than do whites because they possess weaker and less informed social networks. This conclusion seemed to be substantiated by the research of Reynolds and Hilaski.16

But this view of the job search problems faced by blacks is not entirely accurate. Reynolds's study was limited by its narrow focus on certain manufacturing industries and applies only to various blue-collar occupations. Although Reynolds's work is quite relevant to an analysis of segmentation it is useful to examine a mix of occupations in developing a model of inter-racial differences in job search behavior.

Hilaski's survey was conducted in depressed urban areas where a large fraction of his white sample were Hispanic. Since many immigrants' job search strategies conform to the "chain migration" intermediation model described by the MacDonalds, Hilaski's estimate of whites' relative dependance on informal intermediaries was biased upwards.17

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used as an example of a group who are concentrated in the secondary sector. However, I do not mean to suggest that all blacks are members of the secondary sector, or that whites and other racial groups are confined to the primary sector, an assertion which is obviously false.
Notwithstanding the validity of these two authors' work, recent research drawing on a large longitudinal survey has indicated that blacks are more likely to draw on informal networks, with only part of the differential being attributable to the divergent occupational distributions of the two races.18

However, a rather confusing pattern emerges, when one examines how the use of informal intermediaries varies by race and occupation: while blacks in the professions and in service occupations rely more often on informal networks, black managers and laborers are less likely than whites to find their jobs in this manner.

One way of sorting out this perplexing picture is to distinguish between a group's need for information or sponsorship and their access to such resources. Both ultimately depend upon the group's social position. A group's access to information depends primarily on the occupations and industries in which they are employed, the stability of their employment, and their labor force participation. As argued above, a disadvantaged group peripherally employed in menial occupations will have less access to valuable labor market information. If the group has no access to a piece of information, then its cost can be conceived as being infinite.

If access is an extension of the concept of the cost of information, need can be interpreted as a modification of the idea of a return. A central hypothesis generated by Rees' analysis is that information at the intensive margin is more valuable when one is qualified for jobs whose benefits and working conditions are complex and varied. In this case the job seeker requires more information to get an accurate description
of the job. Similarly, Stevens argues, an employer only needs intensive information when he is seeking employees for jobs that have complex qualifications, demanding workers with a subtle mix of characteristics. Stevens concludes that the marginal return for information acquisition at the intensive margin is low in certain unskilled and semi-skilled labor markets in which workers and jobs are fairly standardized.

But a group's socioeconomic position may be related in the opposite manner to their need for informally provided information and sponsorship. Employers are more likely to demand intensive and experiential information about candidates whose social status is viewed as inappropriate for a position. Some groups are excessively vulnerable to screening procedures used by employers to reduce the burden of application processing. An informal sponsor can compensate for such vulnerability, and thus may be exceptionally useful to those groups who do not possess attractive inspectional qualifications: blacks, women, the elderly, etc. In other words, some groups may have a relatively high need for sponsorship because they do not have characteristics which frequently substitute for having a sponsor in the labor market.

Job seekers need intensive labor market information both to obtain and evaluate job offers. To obtain a job offer, it is often useful to receive detailed information about the firm's structure and goals, the tasks performed by incumbents of the position for which one is applying and/or the personality, interests, and biases of the personnel with hiring power. This information can be utilized in writing a resume, responding to questions in an interview, or simply deciding how to dress and present
oneself when submitting an application. A group's need for this information is a function of many of the same socio-economic variables discussed above under sponsorship needs, in addition to the group's familiarity with job application procedures. Again, an ability to perform well in a job interview may substitute for other qualifications which are highly correlated with the group's social status.

Finally, information relating to the personnel in a firm is also helpful in deciding whether to accept a job offer, particularly for minority groups who must assess the biases of potential co-workers, trainers, and supervisors (though, obviously, disadvantaged minorities have the least discretion about which jobs to select). As will be discussed in depth in the next section on the internal labor market, a job-seeker who can look forward to establishing positive bonds with his co-workers is most likely to be retained and promoted.

Returning to the analysis of black job-finders, one can offer some very tentative hypotheses concerning the differential use of informal intermediaries. To recapitulate, black professionals and service workers rely more often on informal networks than whites in the same occupation; black managers and laborers use such job-finding techniques less often than their white counterparts.

One might assert that blacks who seek professional jobs have a significantly greater need for personal intermediation than do whites because they do not possess the qualifications, interviewing skills, and/or social status which substitutes for sponsorship and application preparation information. This greater need may be partially offset—but not outweighed—by their
poor access to information and sponsorship. Conversely, blacks seeking jobs in service occupations may have a relatively small need for personal intermediation because they are widely viewed as suitable candidates for a variety of menial service jobs. However, blacks may have greater access to informal networks associated with these occupations since they are disproportionately concentrated in these fields--a factor which may overwhelm their lack of need for information and sponsorship.

In contrast, black managers may have poor access to corporate social networks which circulate information regarding managerial job openings, a weakness which more than offsets their greater need for personal intermediation. Moreover, one might suspect that if the occupational data were disaggregated further, the inter-racial differentials among both managers and laborers would be reduced. Black managers are relatively concentrated in the public sector where personal contacts may be somewhat less crucial for job hunting because government agencies often must use civil service exams as screening devices. Similarly, black laborers may have a relatively low need for informal ties with employers, since the former are concentrated in the more casual sectors of industry where direct application techniques prevail.  

There are several lessons to be learned from this model of inter-racial differences in the use of informal intermediaries. First, informal intermediaries are a key element of any group's job search strategies, as reflected in the continued use of social networks by both races. The fact that blacks hold inferior positions in the economy despite their greater
reliance on informal intermediaries should not be interpreted as proof that their networks are worthless.

It is true that black networks carry less valuable job information. However, for workers who must overcome barriers such as discrimination, informal intermediaries play a critical role. Many blacks may not have an accurate conception of the content of the jobs they are qualified to fill. Even those who do may need intensive information about the employer's personality and the firm's productive and organizational structure in order to perform well in an interview. Information on the prejudices of a firm's employees may also be useful in determining whether to accept such an offer once it has been advanced. Finally, to compensate for their social stigma and lack of inspectional qualifications, members of disadvantaged groups require good sponsors who are trusted by employers.

Most of the studies on intermediation focus on workers who actually obtain jobs. Thus the greater utilization of intermediaries by blacks is somewhat misleading. Many blacks simply can not obtain any job because of their poor access to information networks. As noted above, black's access to job information is truncated because the other members of their social networks experience a high degree of unemployment and low labor force participation rates. Thus unemployment breeds more joblessness within the group.

In addition blacks who are employed possess more unstable jobs with fewer supervisory responsibilities, diminishing further the groups' collective ability to identify job openings. Lastly, the sponsorship powers of these black employees are likely to be negligible, given their
ephemeral attachment to the firm and superficial relationships with staff who do possess hiring powers.

Thus, the problems of helping blacks obtain a larger number of jobs is inextricably connected with the goal of improving the quality of jobs they hold. Were a greater number of black workers employed in stable jobs, with some oversize responsibilities they would be more likely to quickly learn about job openings. As Osterman notes, the ability to obtain a job is partially a function of the speed with which job vacancy information is obtained.\(^{22}\) Secondly, if blacks held jobs with a greater degree of authority they could also exercise more influence over key decision makers in the firm.

A third and closely related connection between the status of employed members and the amount of job information flowing through social networks relates to the internal labor market, the focus of the next part of this section. Groups who hold jobs in enterprises that provide some on-the-job training can play a very supportive role to friends or relatives hired by the firm. These workers can function as informal supervisors and trainers to their colleagues. It is precisely this role which makes them such attractive employment recruiters from an employer's perspective, as they ensure that a new worker will adjust to the demands of the workplace fairly rapidly.

If manpower planners are going to attempt to improve the employment status of disadvantaged groups like blacks they should ultimately attempt to improve the strength of their informal recruitment networks. Blacks must be placed in higher quality jobs where they can collect more
job information, function as a better sponsor, and provide training and supervision to members of their social networks. However, in the first phase of this strategy, some black workers must retain jobs in firms where they will have few sources of informal support. To understand the problems they will confront in this situation one must analyze extensively the functions performed by social networks within the firm. Only with a full understanding of what blacks will have to forego can one hope to assist them in the adjustment process. Thus we now turn to a description of labor market intermediation in the internal labor market.

**Informal Intermediation in the Internal Labor Market**

Manpower analysts have noted that many blacks participating in subsidized on-the-job training programs are fired soon after they are placed in a primary sector firm. Other trainees leave of their own accord. Still others are never promoted because they never secure the respect of their supervisors.

Historically, during periods in which blacks penetrated industries for the first time, managers frequently complained about these new workers' performance. For instance, Haynes interviewed a Detroit manager who during World War I hired blacks to meet his burgeoning production demands. This manager asserted:

"...[T]he Negro is ... too slow. He does not make the speed that the routine of efficient industry demands. He is lacking in the regularity demanded by the routine of industry day by day." 24

David Brody, commenting on a concurrent move by blacks into the steel industry notes:
they...appeared poorly suited to the job demands in steel, had a very high turnover rate, and frequently clashed with whites in the mills." 25

Some of the perceptions regarding blacks' "suitability" to industry may have had some basis in fact. Blacks migrating from the South had not yet grown accustomed to the rhythm or ambience of the industrial work place. 26 Moreover, today some secondary workers may be so accustomed to an unstable economic existence that they find it difficult to adjust to the rigors of a full time job. But as noted above, Valentine and others have provided fairly compelling critiques of sociological analyses that attribute secondary workers' difficulties to their unique cultural background.

These comments undoubtably reflect a great deal of racism on the employers' part. Moreover, the categorical eligibility requirements of on-the-job training programs continue to stigmatize their participants. As Hammermesh notes, the very stipulations which ensure an effective targeting of these programs serve to degrade the training participants in the eyes of the employer. 27

However, the pervasiveness of the comments on blacks' high turnover, slow learning and inability to get along with their peers requires a broader answer, one that can serve to explain how employers' biases might be confirmed by their own experiences.

This is the critical reason for turning to social networks in the internal labor market. If it is possible that these networks are responsible for blacks' difficulty in adjusting to the productive and social demands of the firm, then one must assess their structure and malleability.
Very little theoretical or empirical research has been explicitly focused on the issue of how informal networks affect the training, supervision, or integration of new workers into the social structure of the firm. By extrapolating on the findings of Piore, Kornbum, and a number of other economists and social scientists, one can see why informal worker associations play such a crucial role. Social networks help new employees acquire the interpersonal, productive, and organizational skills they require in order to improve their social and economic standing within an enterprise. Only by understanding the extensive influence of employee networks, can manpower analysts begin to develop strategies for assisting workers who lack such elaborate forms of social support.

One indication of the efficacy of employee networks is the negative correlation between the use of employees as recruiters and the turnover rate within a firm. This correlation has been documented by Bailey and Freedman, Ullman and Gannon.28

There are two major ways one can account for the low turnover rates generated when employers use their current employees as informal labor market intermediaries. First, as noted above, both job seekers and employers are able to obtain more intensive, experiential and reliable information through such networks, before either of them make a final decision to accept a job or job-seeker respectively. Moreover, if an employee is sponsored by a dependable figure in the firm, the employer is likely to have more faith in the new worker. Managers will be less prone to dismissing him if a supervisor complains about his behavior; if the new
recruit is sponsored by an influential figure within the firm the employer may even be afraid to dismiss him.

However, there are more basic forces operating in the workplace which increase the retention rates of informally recruited employees, particularly in primary sector jobs where workers are required to develop productive and organizational skills which are firm-specific. New employees who have a rudimentary bond with experienced workers in the firm—a bond based on common social or economic heritage—adjust to the workplace fairly effortlessly. To see why this occurs it is useful to examine how a supportive network helps a new worker realize his or her basic social and economic objectives.

Among primary sector workers' ultimate goals, three economic pursuits and one non-economic aim stand out. Workers hope to improve their employment security, upgrade their working conditions, and expand their promotional opportunities. (Conversely, they try to avoid demotion or the degradation of the terms of their employment.) In addition, most workers try to obtain some kind of emotional support from their co-workers.

In the remainder of this section I will elaborate why workers in primary sector firms need to obtain information and training to achieve their goals and how social networks facilitate their education. First I will look at the issue of productive training narrowly defined; indicating how skill development relates to primary sector workers' personal, social and economic goals and why a close relationship with one's coworkers expedites this process. Then I will turn to the significance of broader forms of training: organizational and political learning. In each of
these cases I will draw on the economic and sociological literature to highlight the importance of informal intermediation.

Acquiring skills is a prerequisite for many of the goals pursued by primary sector workers. Clearly an employer will try to avoid dismissing a productive worker. More importantly, when production or social problems arise in the work place, employers are less likely to perceive them as emanating from the behavior of a productive employee, and thus less likely to sanction him.

Workers who are able to acquire skills quickly will gain an understanding of the firm's technology. This understanding can be helpful in many ways. If an employee is familiar with the production process, he is more likely to be able to convince his supervisor to allow him to revise his working conditions in minor but personally attractive ways, justifying such changes on the grounds that they are efficient and more consistent with management's overall productive strategy. Conversely, he is more likely to be able to argue against any proposals which affect him adversely. Finally, workers who are skilled typically command the respect of their peers, as long as they do not violate informal production quotas or other group norms.29

Proximity enhances on-the-job training significantly. If a supervisor expects a seasoned worker to informally assist a new recruit, then the degree to which the training is carried out quickly and effectively is largely a function of the amount of time that the two workers spend together, and how much energy both put into the relationship. Since a
great deal of training occurs during periods that are often perceived as work breaks, it is particularly important that the two workers are compatible. They must make an effort to stay together at those times when they have the most discretion over whom they chose to be with. A British study of work relations substantiated the somewhat obvious hypothesis that work breaks are less likely to be spent together when the two workers have different social and racial backgrounds.

If the new employee must work very closely with other members of a team, then it is even more essential that he forms positive bonds with his co-workers. Kornblum notes how work teams using large or dangerous equipment must learn to interpret each other's cues, and anticipate each other's movements. Such coordination is most effectively developed when workers form enduring relationships, and is almost impossible to achieve when there is a high degree of conflict within a team. Reading subtle verbal or physical cues is very difficult for members of different ethnic groups who do not share a common language or gestural repertoire.

A great deal of valuable on-the-job training occurs when workers fill in for an employee who is ill. The sponsorship of a co-worker who agrees to watch out for a new recruit may be helpful in convincing a supervisor to allow the latter to temporarily try out interesting and challenging tasks.

A friend who informally assists in on-the-job training is more likely to be sensitive to the trainee's pedagogical needs. The friend is more likely to use terminology and metaphors that are familiar to the trainee.

Training typically involves the transfer of responsibilities from trainer to trainee. It is quite helpful if the former selects the tasks
he assigns to the latter not simply on the basis of which duties he would prefer not to perform on a given day, but rather in a logical sequential manner which conforms to the worker's true training needs. Any training involving the demonstration of manual techniques should ideally be carried out slowly so that the new worker understands what physical manipulations are required.

The argument presented above is not intended to imply that primary sector workers need extremely accommodating teachers in order to learn how to carry out their assignments. On the contrary, the internal labor market is usually structured to ensure that workers will eventually learn what is required of them, even if no seasoned "mentor" makes an effort to train them. However, workers are frequently tested by their supervisors and co-workers soon after they are hired. The new recruit acquires an image which is not easily shed. Unless a worker can prove himself fairly quickly he is liable to face such problems as lack of promotional opportunities, frequent disciplinary action or social exclusion from the work group. These problems can be aggravated if a worker's class, ethnic or racial background is different from that of others in his occupation. Blacks participating in on-the-job training programs are particularly vulnerable to these difficulties.

Davidson notes that white lower level supervisors encountering black workers for the first time form judgments regarding the latter's ability fairly quickly. In his empirical research, Davidson found that supervisors often rewarded blacks whose performance initially appeared to be above average. The supervisors gave these black workers more interesting tasks,
increasing the flexibility of their hours, and generally enhanced their autonomy, while articulating approval of their behavior. The reverse occurred when supervisors were displeased by the new worker's performance. Those blacks who received positive feedback developed an affirmative attitude toward their job; conversely, negative supervisory "signals" led to a belligerent posture towards the firm and deterioration in the performance of these employees.

For blacks in primary sector firms who are often received with a certain amount of suspicion by lower level white supervisors and who initially adopt a somewhat hesitant if not defensive attitude toward white personnel, it is of paramount importance that this process of interactive signaling starts off in a constructive direction; negative cues can quickly degenerate into explosive relations which make it impossible for the new recruit to ever accept or be accepted by the work group.

Hence, unless a worker receives fairly extensive on-the-job training and is able to quickly fulfill the minimum expectations of his supervisors and co-workers, he is likely to be trapped in a self-reinforcing cycle of negative interactions.

However, as was argued above, the degree to which he can be trained quickly and effectively hinges largely on his social relations with his teammates or co-workers. If a worker's racial or social background precludes immediate social acceptance by the work group, then his training will not proceed in an optimal manner. Ineffective on-the-job training, in turn, will heighten the tensions between the new recruit and his supervisors and co-workers.
Aside from developing production skills, a worker needs to acquire an understanding of the firm's administrative and political structure, and the roles, interest, and personalities of significant actors who inhabit the enterprise. First a worker must learn which workers, managers, and union officials possess formal and informal decision making authority. The new worker must discover how he can impress such persons, given the latters' conception of what constitutes a productive worker and their cultural or political biases. He must learn how far he can deviate from the formal rules of the enterprise in the presence of various individuals, how he can exploit the rules to his own advantage, and how he might go about changing some of the less durable rules.

Along the same lines, the neophyte worker who hopes to obtain a promotion should be sufficiently familiar with the organizations to develop specific occupational targets. As noted above, workers with these aspirations need to be warned in advance when a vacancy occurs, before a position is posted. Ideally, he or she becomes cognizant of the firm's growth pattern, in order to guess when and where vacancies will occur. Moreover, the employee seeking advancement should know how to "cut a deal" with his supervisor. Davidson notes that supervisors frequently engage in implicit contracts* with employees interested in obtaining a recommendation for a promotion; new workers may not initially be aware of the terms of such contracts and how to enter into them.

*The use of the term "contract" in this context is not meant to refer to the literature on wage stability but rather to an informal procedure whereby workers take on additional responsibilities in exchange for a recommendation for promotion.
A knowledge of organizational norms is just as valuable as formal production skills when debates arise over restructuring the production process and the reallocation of tasks. The worker must learn how to evoke these norms. He must demonstrate how past practice, if followed accurately, would compell a supervisor or co-worker to accept an arrangement which is personally rewarding.

Eventually the worker must also become familiar with the history of union negotiations, so that when a new collective bargaining issue arises, he can convince the union steward to adopt a particular platform, appealing to the latter's commitment to precedent.

Kornblum has demonstrated that new employees need to develop positive relations with seasoned workers in order to become familiar with the political and organizational structure of the firm, its physical layout, and the personalities of key actors. Moreover access to these workers often hinges on one's racial background.

Kornblum notes how workers who formed bonds with more experienced personnel in the Chicago steel mill learned what to expect from individual supervisors and where to hide in the plant during unauthorized work breaks. Such information was commonly available to both black and white work groups in the firm, since even the lower level blacks with seniority were knowledgable about these issues.

However, more sophisticated information about management and union officials was frequently denied black workers. In the Chicago steel mill this collective knowledge was transmitted by disabled "light duty" white workers:
For the most part they are older steelworkers, usually over the age of thirty-five, who have suffered disabilities either through injury or ill health and have too many years of seniority to seek more suitable employment in another plant but too little seniority to take their pensions. Light duty men are scattered through No. 3 Mill's labor force because of the benevolence of management and often at the insistence of local union officers. Deprived of their full physical capacities, as well as their job security, the light duty men ... make up for their loss of status by becoming carriers of gossip and rumour between work groups. Unfortunately their excellent knowledge of No. 3 Mill's "ropes" and of the personalities of the plant's managerial personnel is available only to men of similar communal backgrounds. 39

Valuable political and organizational information in the work place is more likely to be allocated selectively within social networks than is information relating strictly to productive techniques. Aronowitz argues that it is usually possessed by elite craftsmen whose work takes them into many different departments of a firm. 40 He notes that it is usually only shared with higher status groups within an enterprise. The example of the light duty men illustrates that such information is not always the exclusive preserve of highly skilled craftsmen, although it is rationed through informal social networks nonetheless.

It should be noted that lateral mobility within the firm, although useful for experienced workmen in acquiring valuable information, can also be a hindrance in forming alliances with other workers when an employee is initially hired. Kornblum notes that those new workers with the most constructive relations with their peers, tended to be assigned to a fairly stable work team, regardless of the work group's racial composition. 41

Aside from providing skill and organizational training, friends on the job can defend one's interests in strategic situations. If a supervisor
is willing to accept advice pertaining to a proposed reorganization of production, a seasoned influential worker can often ensure that the new employee is not burdened with the bulk of the unattractive tasks. Furthermore, friends can take on one's work load, if one is unable to come in on time.

When there exists some kind of solidarity among employees who are required to meet production quotas or are paid by the piece, the more prolific workers are likely to restrain their efforts. This occurs not simply because the group has an interest in minimizing the quota (increasing the piece rate), but also because the collectivity is sometimes sensitive to the problems faced by less productive individuals. Work groups in which solidarity is absent will tend to make the jobs of untrained, slow or disabled workers considerably more difficult. An even more striking social pattern associated with production quotas occurs when employees complete the work assignments of their less productive co-workers. Barbara Garson interviewed tuna fish workers who periodically assisted their peers in completing their production quotas:

> It wasn't hard for me to do a little extra. And I always felt when I get older, then let someone else help me out. These patterns of assistance are most likely to arise among workers who have established positive ties with one another and who share a common social background. In these cases, workers are able to understand, identify, and sympathize with each other's predicament.

In sum, just as social groups help their members to find jobs they also assist them in adjusting to the productive and organizational life of the firm. The fact that seasoned employees provide valuable supervision,
emotional support and training to their friends, may be one reason that both employers and job seekers find informal intermediaries in the external market so attractive. Even if workers failed to provide intensive and reliable information about the qualifications of their unemployed friends, the former might still be optimal recruiters if they offer extensive social and pedagogical support to the workers they recommend to an employer.

Using the terminology introduced in the preceding section one can describe the predicament of new black primary sector workers as one of having both the greatest need and the lowest access to internal labor market information and sponsorship. Moreover, their lack of access is likely to be self-perpetuating: the social distance between the new black employees and the more established white work group prevents the former from acquiring essential productive skills. Without these skills, black workers cannot gain the respect of either their supervisors or co-workers. This will increase their turnover rate and further reduce their access to more stable informational networks. This "Catch 22" explains a substantial amount about the problems faced by blacks upon entering an all white primary sector firm. In particular, it explains why many on-the-job training manpower programs have fairly low retention rates.
Summary and Policy Recommendations

In developing a strategy to ameliorate segmentation one must scrutinize the "intermediation" and demand forces which contribute to the bifurcation of labor markets. On the demand side, these forces include the technological, organizational and market phenomena which determine whether a firm provides on-the-job training and promotes from within. With regards to intermediation, one must recognize the dynamics of informal labor market networks: how groups of workers assist one another in finding jobs and adjusting to the demands of the workplace.

A variety of issues arise in formulating policies to reduce segmentation. I will focus on the problems that are confronted in one of the most common types of programs used in assisting disadvantaged workers: an on-the-job training project in which a public formal labor market intermediary (LI) provides wage subsidies to an employer in exchange for which the latter agrees to hire low-income workers selected by the LI.

The most important decisions and tasks an LI must make in such a project are:

- Which firms are suitable candidates for such a program?
- Which workers should be referred to the employer?
- In what way, if at all, should the employer be asked to change his management plan to improve the training program? ...
- How should the LI deal with the fears that training programs arouse in the firm's current work force?

The institutional audience for this discussion includes all public or private not-for-profit LI's that offer firms wage subsidies. However
there is a broader application of these strategies. Any development agency that has financial resources at its disposal—resources that can be used as levers to shape the recruitment and training policies of private enterprises—can contribute to such an effort. The applicability of the following recommendations to this type of institution will be touched on briefly below. However the viability and importance of the link between manpower and development finance agencies will be explored in much more depth in the conclusion of this essay.

The task of selecting appropriate firms to participate in an on-the-job training program is very complex and must take into account a wide range of factors. The public labor intermediary's "firm-screening" strategy should acknowledge all of the forces which bifurcate the labor market, and particularly those operating on the demand side.

As noted in the last two sections, these forces relate to many economic features of a firm. The relevant considerations include the following:

- the firm's technology and organizational structure;
- the firm's market;
- the firm's "corporate culture";
- the age and expansion potential of the firm; and
- the tightness of the occupational labor markets from which the firm recruits its work force.

The types of firms which provide good on-the-job training tend to have work stations close to one another both physically and functionally. New trainees must be assigned to positions that are
proximate to those of more established employees and these senior workers should possess skills and perform tasks that are just slightly more sophisticated than those of their junior colleagues. If new workers function either in isolation or interact with workers whose skill levels are extremely high, the probability of acquiring skills on the job declines.

The degree to which such a spatial ordering of the firm is possible hinges on both its technology and organizational structure. The technology will determine to a large extent whether a continuity in skill levels is required to produce the firm's output. The organizational structure partially shapes the spatial ordering of work within the enterprise.44

Secondly the firm's product market must be fairly stable. If the level of output in the firm varies widely either in a cyclical or a sporadic manner, the employment tenure of workers is likely to be reduced.

If a firm requires workers with skills that are unique it is less likely that managers will be able to recruit from vocational or educational institutions. Even when the skills demanded are fairly general, however, if they are in short supply then an employer will have more incentive to provide training. This is not only due to the downtime and recruitment problems posed by the scarcity of labor but also because a firm can gain more control over the rate of wage increases if it trains in-house and does not have to bid on workers in the external labor market.45

Thus even if a firm has unstable employment it may be suitable for an on-the-job training program if its technology and organizational structure permit a sequential skill ordering of work stations and if the business confronts bottlenecks in its labor markets. Hence some small
dynamic firms, particularly in growing sectors, may be suitable candidates for such a strategy despite their high degree of volatility.

Notwithstanding the importance of the above considerations, there are groups of businesses in the same industries, using the same technologies, and serving similar markets with the same degree of stability that provide different levels of on-the-job training. Osterman has attempted to explain this phenomenon by turning to the concept of corporate culture. Presumably, the history of firms and the background of their top executives affect the latter's choice of training strategies in unique ways.46

Indeed the culture of an organization can determine many features of employees' behavior including their willingness to take risks, the value they place on dialogue or conformity, and the posture they adopt vis-a-vis external threats.47 However such a cultural analysis of training patterns is less susceptible to empirical verification and is often a less useful predictive tool. The problem is that the main way Osterman and other analysts determine when a corporate culture is conducive to on-the-job training is simply on the basis of its training and promotion policies. This transforms the concept of culture from an explanatory device to a circular self-referential term.

Nonetheless, if a training analyst can discern in personal interviews the degree to which a firm's management places a value on in-house skill development, a value that derives from the managers' educational background, ethical framework, or the history of the firm, then culture can serve as a valuable conceptual organizing device to explain these phenomena.

Finally a firm should be given special consideration in an on-the-job
training strategy if it is fairly new and expected to grow. This preference is deserved because the management's recruitment strategy is undeveloped and thus more susceptible to manipulation by public agencies. It may be easier to place an initial group of trainees in such a firm because its recruitment structure is not yet defined.

But even more importantly, it is possible that the firm can be a source of future jobs if its manager's hiring policies can be shaped in one of two ways. Assuming that the first group of referrals become well respected employees, the employer might be convinced to use these workers as informal recruiters.

In this case it is critical that these first workers not only become productive but that they gain some of the supervisory and pedagogical skills that would make them good informal intermediaries in the internal labor market. If they do not obtain these skills an employer is less likely to select them as informal recruiters. They will also be less effective as a supportive intermediary in assisting new trainees to adjust to the demands of the work place.

Alternatively, or possibly in addition, the employer might be convinced to recruit from the public labor market intermediary itself on an ongoing basis. In either of these cases it is likely that the workers who are selected to fill future vacancies will have the same social and economic characteristics as that of the initial trainees. However, these two recruitment options are often blocked in older firms where vacancies are only created through turnover and where management already has a set of workers on whom he relies for recruitment.
Workers with a great deal of tenure will suffer when an employer stops utilizing their recruitment services, particularly if they have family and friends who are attracted to the jobs in the firm. If the employer is moderately satisfied with his existing recruitment strategy he may not want to risk trying an alternative technique. Although he may be willing to hire a few workers referred to him through a public intermediary in exchange for some substantial public subsidies, he is unlikely to consider a major restructuring of his hiring policies.

Short of a new growing firm, the next most attractive opportunity for creating new recruitment networks is in a firm undergoing a major expansion. If the expansion is large enough it is possible that the manager's most trusted employees will be unable to supply him with a sufficient number of qualified candidates. In addition the expansion might represent a discrete juncture in the development of the firm when its management is willing to re-examine its hiring policies and consider either using different employees as recruiters or tapping a public labor market intermediary. However the threat to the firm's existing employees and the risk borne by the manager in changing recruitment sources must still be recognized.

The best strategy for dealing with expansions is one adopted by the Bedford Stuyvesant Restoration Corp., the development agency whose history is examined in the case study. If a business can be convinced to hire some disadvantaged employees prior to the expansion phase, then these workers can serve as informal intermediaries when the firm is augmented. The problems confronted by a development agency when it implements such
a strategy will be analyzed in the case study.

After selecting the firm that should participate in an on-the-job training project a number of other policy decisions must be made. The manpower agency must determine in what manner the management plan should be revised to improve the training process, which workers should be selected to participate in the program, and how management or the public intermediary can address the fears of the firm's current work force.

The first task, revising a management plan after a venture has been tentatively selected for an on-the-job training program, is quite difficult, and rarely attempted. Such revisions could involve a restructuring of any of the factors addressed above as screening criteria, but particularly the firm's technology, organizational structure, and market niche.

There is often some flexibility in the way in which a firm organizes production or the markets it decides to enter. Unfortunately it is extremely difficult for public manpower agencies to convince the firms they subsidize to consider such changes either before or after start-up.

The two principal stumbling blocks for a public LI interested in such reforms are: (a) securing enough information about the industry to develop a reasonable recommendation; and (b) marshalling sufficient economic leverage to obtain an agreement from management. Information is particularly critical. Unless one is very familiar with the firm (i.e., its history, competitive advantages, and overall strategic goals), as well as the industry (i.e., the sector's market segments, feasible technologies and organizational options), there is no way to identify the more flexible parameters in the venture's management plan.
A great deal of financial leverage is also necessary to gain compliance with the public manpower agency's recommendations. Internal issues are largely perceived as the perogative of management. This perception is attributable to the lack of precedents for such intervention. However the lack of precedents itself reflects an ideological bias against public intrusions into a firm's operations.50

Finally, such recommendations are likely to draw criticism from some of the more powerful actors both within and outside of the manpower agency. The criticism is driven in part by earnest fears that the agency ruins its chance of securing opportunities to place disadvantaged workers when it confronts management in this fashion.51 This perspective is substantiated by manpower agencies' mixed track records and poor reputation among private businesses.52 In fact the trend of the last four years in many manpower agencies is to devote all of the organization's resources toward improving these negative perceptions.53

The two principle obstacles which prevent training agencies from intervening in a firm's affairs--poor information and lack of leverage--can both be overcome through a linkage of intermediation institutions. As will be seen in Chapter Six, scarce information and financial leverage can be provided by development finance organizations working in concert with labor market intermediaries.

The selection of trainees to participate in an on-the-job training programs is another problematic issue confronting a labor market intermediary. As noted above, many formal LI's have tended to "cream" the applicant pools because: (a) they are judged on their placement rates;
(b) they believe that most employer's hiring criteria require the use of narrow screening criteria; and (c) they believe those criteria are legitimate and efficient.

If carried out on a sustained basis, creaming can vitiate the goals of reducing segmentation. Creaming often generates the same allocation of labor to jobs as the private market and thus does not achieve such public objectives as ameliorating labor bottlenecks, reducing dependence on welfare, or generating a more equitable distribution of jobs.

Finally, creaming might prevent a public LI from placing workers who have social ties with truly disadvantaged groups. The other members of the "creamed" workers' social networks--persons whose access to job vacancy information, on-the-job training and sponsorship is improved by the latter's placement--are not likely to be secondary employees. Unless an employee has ties with secondary workers, he cannot serve as a useful informal intermediary to them in either the external or internal labor markets.

On the other hand creaming can sometimes increase the chances that the workers referred by a public LI will be accepted by the firm. It may also enhance the workers ability to be retained. Even when it does not succeed in selecting workers who are more productive or better prepared for a specific job it might screen-in workers who believe they are qualified: these workers are likely to be more confident and less likely to blame themselves if they are unable to meet the productive demands of the firm. Finally if the workforce is split along racial rather than class lines, refering higher skilled blacks might provide disadvantaged minority trainees with a sympathetic sponsor.
It is difficult to weigh these different considerations. Even if creaming selects workers who can adapt to the social organization of a firm, this very process of adaptation will reduce their ties to the target group the LI is trying to assist. Thus an LI should be very careful before it adopts a creaming strategy. Although it may be legitimate in selecting the initial referrals to a firm, it is unlikely to be justifiable on an ongoing basis.

A third and last issue that the public LI must address is how to deal with the fears of a firm's existing employees. It was argued above that any attempt to intervene in the internal labor markets of large primary sector firms should be founded on an understanding of the threat disadvantaged workers pose to other majority workers. Aside from displacing the friends and relatives of white workers, new black trainees are frequently perceived as degrading the status of any occupation they enter. This status degradation is not only a function of these workers' social stigma but is also attributable to the fact that disadvantaged groups are used to de-skill and casualize a firm's labor force.

Thus the recruitment of black workers is often perceived as the first step in the economic deterioration of white workers in a firm. Since blacks must frequently rely on the existing work force to teach them productive and organizational skills and orient them to the social structure of the firm, it is crucial that the antagonism between the new recruits and older coworkers is minimized. Although this dilemma cannot be fully resolved, there do exist techniques that can be employed to ameliorate the threat blacks pose to the dominant groups.
If management's decision to participate in an on-the-job training manpower program, involving the subsidization of blacks in previously all-white positions, is not based on a desire to convert the firm's production process into one that can employ unskilled, less stable, or lower paid labor, this intention—or rather lack of intentions—should be made clear to the current work force. Such a declaration, if believed, will reduce the perceived threat to white workers encountering substantial numbers of blacks in their occupation for the first time.

If there exists a union, the strategy used in training the new workers should be a focus of collective bargaining, so that the white workers feel that they have been able to affect the outcome of the program. These actions may help convince the white employees that management is not purposefully attempting to degrade their occupation.

More importantly, negotiations prior to start-up may reduce the chances that a union will try to block a training program at the last moment, using its political or economic strength to ensure that the employer does not hire the LI's referrals. (This problem will be re-examined in the conclusion of the essay.)

Thus, before initiating a training effort, a manpower agency must give thought to how the firm's current work force will respond to the project. Even after start-up, however, various interventions by management and the public training agency might be necessary to ensure the older workers do not frustrate the program's aims. Although this issue is even more difficult to address, I will outline a few rough hypotheses based on the literature and the model of intermediation presented above. The hypotheses receive some support from the case
study presented in Chapter V. (Again these postulations will relate to inter-racial conflicts, however, one can extend their underlying logic to other sorts of social divisions, including those based on ethnicity, sex and age.)

White workers should be coaxed into assisting new black trainees, but if possible, this assistance should not be the result of an inflexible command imposed from above. Those whites who demonstrate an exceptional ability to train and supervise blacks should be rewarded both through the relaxation of their production quotas and by promotion.

In order to develop a positive view of their relationships with blacks the older white workers must perceive them as ones which they can enter into and withdraw from freely in conformance with changes in the collective norms and felt needs of the group. Kornblum reports that the occupations in which blacks and whites worked most cooperatively in Mill No. 3 were those where a certain degree of teamwork was called for, but also where whites could avoid intimate interaction with blacks if they chose to do so. The option to disengage themselves from a personal relationship seemed to make the possibility of a willfully established friendship a real one.

Group counseling can be useful if it helps prevent black workers from blaming themselves for their failure to become quickly integrated into the work environment. Only if they discuss the social barriers they mutually face are they likely to understand and be able to surmount them. However, the manpower agency should avoid extending excessive support to the trainees when the provision of such support alienates the white workers
appreciably.

In addition, management should avoid supervisory techniques which act to fragment and retard the formation of black work groups. Hughes notes that black workers hired by an all white firm were splintered when supervisors repeatedly warned them to be careful because their performance was being monitored individually.\textsuperscript{53} The new workers interpreted this warning as a demand to perform better than their peers. The resulting competitive and individualistic orientation made it difficult for the black employees to provide emotional, pedagogical or organizational support to one another.

Black workers who succeed in establishing supportive networks are more likely to improve their conduct and attitude towards supervisors, avoiding the degenerative cycles of interaction described by Davidson. The stability of work groups coupled with group counseling is likely to enhance such networks.

Although all of these measures may ease the integration of black workers into a firm, white employees are still likely to fear a loss of prestige and economic power accompanying the introduction of groups with lower socio-economic status. The more established white workers are capable of imposing sanctions on management in the firm of slowdowns, sabotage, strike threats or simply the obstruction of the OJT process.

As Marshall argues, it is sometimes necessary to reduce the potency of these threats by initiating counter-balancing coercive measures to penalize employers who capitulate to their white worker's demands: e.g., withholding public support from such discriminating firms.\textsuperscript{54} Public
agencies should insist that managers dismiss workers exhibiting blatantly racist behavior.

In sum, only by simultaneously attempting to ameliorate some of the worst fears of more privileged workers, while mobilizing sufficient political and economic strength to ensure that they do not dominate the recruitment and training process, can manpower planners hope to assist disadvantaged groups in their attempts to secure a more stable and rewarding position in the internal labor market.

In conclusion, secondary workers' economic problems stem in large part from the relatively uninformed and powerless social networks in which they are embedded. Although they are cut off from the more valuable sources of information, sponsorship, and training, they are still forced to rely heavily on informal intermediaries. Their dependence on such networks is attributable to two factors: (1) They do not have the credentials that substitute for personal intermediation in the external labor market. (2) They must learn how to transcend employers' racial (or sexual) biases when they engage in job search. If they are lucky enough to land a good job, they usually do not have access to the critical sources of instruction, organizational training and social support which ensure retention and promotion.

To address these problems manpower analysts first learn to identify firms capable of providing on-the-job training—e.g., those with the appropriate technology, organizational structure, markets and corporate culture.
They must also attempt to modify any one of these structural elements which is incompatible with their clients' training needs. Selecting the optimal group of secondary sector workers is difficult since creaming has both its strengths and weaknesses. However, in the final analysis, any recruitment method which screens out workers with poor educational and occupational achievements will have little effect on segmentation.

Finally, perhaps the most problematic issue confronted by a public LI is how to deal with white workers' response to the introduction of disadvantaged trainees. A variety of eclectic suggestions have been offered here—encouraging open discussion of a training program with white employees and union officials, and attempting to dispell unwarranted fears; ensuring that junior and senior workers are stationed close enough to learn from one another but not so close that white workers feel they cannot withdraw freely; rewarding white workers who provide good training but not issuing an unenforceable rule that all others must follow suit; providing enough counseling and support to ease the transition of the new trainees while attempting to avoid raising the ire of more established workers; and generally allowing the black workers to collectively support one another while imposing the harshest discipline on blatantly racist behavior. Some of these recommendations are confirmed in the case study but most of them require additional substantiation.
The problems faced by secondary workers are analogous in many respects to those experienced by small new firms seeking capital. These businesses' difficulties also stem from narrow information dissemination systems. Additionally, both factor markets are bifurcated by the attempts of powerful corporations (financial and non-financial) to shield themselves from the effects of economic instability.

There exists a growing body of literature that suggests that the financing problems faced by these small, young firms may hinder the job generation process. To develop a coherent economic development program, development officials must discern how the goals of generating employment and reducing labor market segmentation inter-relate.

The evidence that capital markets are segmented is quite fragmented. Although most of it is inconclusive there do exist some compelling indications of substantial market failures posing special problems for small new firms. However fragmented the work on capital market segmentation, the empirical literature on small firms' contribution to the economy is much weaker. Nonetheless, the balance of evidence suggests that small firms may facilitate job and income growth, and technological innovations. All of these issues will be reviewed in the next chapter.
CHAPTER III

CAPITAL MARKET SEGMENTATION

AND THE ROLE OF SMALL BUSINESSES
Introduction

Like the labor market, the market for capital is segmented. Segmentation of financial markets occurs when issuers and/or investors develop inflexible preferences relating to the characteristics of the assets they choose to buy or sell, preferences which do not change even in the face of substantial discrepancies in the rates of return and/or riskiness of the securities in the different segments.

Capital market segmentation is comparable to that obtaining in labor markets. It is characterized by two similar phenomena: a bimodality in the sources, availability and cost of capital and some degree of immobility between an "undeveloped" segment in which capital is scarce to a "developed" segment where access to capital is plentiful and cheap. The main difference between the immobility concerns of the two segmentation theories is that while the labor framework focuses on the barriers facing specific suppliers of the factor--e.g., workers who cannot secure good jobs--the issue emerging in the financial literature is the peculiar problems experienced by certain demanders of the factor--e.g., firms with poor access to capital.

The composition of the two segments of the financial market are said to be distinguished largely on the basis of scale: the "under-developed" sector is inhabited by a subset of the economy's new small firms--firms which rely principally on personal capital or the short term loans offered by commercial banks. Long term financing is more difficult for these young enterprises to secure, unless they are in one of the most well studied industrial sectors, and then only at excessive
capitalization rates. This scale issue has its parallel in the labor market literature since the ideal types of the two principal job segments are differentiated by size of firm.

The reason financial segmentation has become a focus of public policy stems from the belief that small businesses generate a great many social benefits. It is asserted that small businesses produce a disproportionate number of jobs, profits and new technologies. If one or more of these claims are valid then it is necessary to try to determine why these firms experience problems raising capital, and how the most destructive financing barriers can be addressed. Another related "targeting" objective is to identify the small firms that generate the greatest number of these social benefits without exacerbating labor market segmentation. This policy trade-off highlights implicitly the first reason that capital and labor market segmentation must be analyzed in tandem: Public development agencies must determine when the policy goals of job generation and job mobility are in conflict.

To fully understand why financial segmentation occurs and how it relates to labor market segmentation it is first necessary to describe the orthodox conceptual framework and its empirical assumptions and predictions. It is then useful to see how investment patterns actually diverge from this model. I will outline in this chapter some of the empirical evidence that has been marshalled to demonstrate that small firms are systematically excluded from the capital markets. Much of this evidence is anecdotal or inconclusive, but certain pieces of data are suggestive of fairly significant violations of the orthodox framework. This chapter will conclude with a brief review of studies
purporting to demonstrate that small firms generate a disproportionate number of jobs, profits and technologies.

Chapter IV will offer some causal explanations for financial segmentation. I will try to examine why financial intermediaries do not succeed in allocating capital efficiently in our economy, focusing on the issue of information dissemination and risk aversion failures. That chapter will conclude with a comparison of the job generation and segmentation roles of small firms. An attempt will be made to describe which small firms might produce the largest social gains without generating excessive social costs.

The Neoclassical Framework and the Capital Asset Pricing Model (CAPM)

Orthodox theory dictates that in a market economy capital will be allocated to the most profitable investments. In effect this means that capital will continue to flow into any new firm until its return on investment, when adjusted for risk, is equivalent to all others in the economy. After a certain scale of operations is reached, there are decreasing returns to investment in any given venture. Thus, to equilibrate the capital market, capital must continue to be injected into a business until it is no more profitable than other enterprises.

The only problematic issue is how to define risk. It is fairly simple to establish the meaning of "risk" in relation to an entire portfolio, the mix of investments which comprises the wealth of one individual. A risky portfolio is one which does not generate a secure well defined return, but rather offers the possibility of reaping very high yields while simultaneously posing the threat of substantial
losses. In statistical terms the variance of potential returns in a risky portfolio is quite high because the probability distribution of possible outcomes is flat: large probability weights are applied to both very pessimistic and optimistic outcomes. Thus variance is used as the measure of portfolio risk.

The riskiness of an individual asset is quite different from that of an entire portfolio. As long as the asset is not the only form of wealth possessed by an individual, the variance of its return does not reflect the risk it imposes on the investor. Rather one must identify the marginal risk the asset contributes to the investor's portfolio: e.g., the increase or decrease in the portfolio's variance caused by adding this security to the individual's other assets.

A security with a high variance can actually decrease the risk of a portfolio if the asset's return has a low correlation with those of the other securities in the portfolio. In other words, if the asset tends to generate high returns when the other securities are doing badly (and vice versa), then holding that asset tends to stabilize the total return of the portfolio, ensuring a more well defined outcome in each period. This distinction between portfolio and asset risk is the basis of the concept of diversification.

The most elaborate and up-to-date neoclassical theory of financial decision making is the capital asset pricing model (CAPM) developed by Sharpe and Lintner. CAPM assumes that capital markets are perfectly efficient, though efficiency has a fairly narrow meaning in the context of the model.* Efficient capital markets are said to exist when

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*This is not equivalent to the pareto optimal definition of efficiency, but it does preclude the type of information problems that give rise to segmentation (see below).
information about firms flows easily, and is quickly impounded in the pricing of securities. If the stock market is efficient in this sense then investors will hold a similar mix of risky assets. All of the issues sold on the New York Stock Exchange would be held in identical proportions by investors because the latter are assumed to have the same information about all firms. If they would like to hold a riskier portfolio individuals can "leverage themselves"—borrow funds and expand their equity investments. Alternatively they can invest in U.S. Treasury Securities if they want to minimize their exposure to risk. But in any case, the risky securities they do hold (i.e., all equity stocks) will be held in the same proportions. Essentially this means that the portfolio held by all investors is one in which the dollar amount invested in each firm is proportional to the total market value of that firm's outstanding stock.*

CAPM draws on this notion of efficiency, and applies it to the concept of diversification to develop a rigorous definition of risk, and a predictive theory which describes how much investors will be compensated for bearing risk. CAPM predicts that the only kind of risk for which investors are compensated is "systematic risk." Systematic risk is that portion of the variability in an asset's return which is correlated with the performance of the stock market as a whole (this

*A number of other conditions must be met to fulfill the requirements of the main version of CAPM including: 1) investors must be perfectly rational; 2) marginal transactions cost must be infinitessimal; 3) investors must be solely concerned with maximizing their expected, mean future wealth and minimizing the dispersion or riskiness around this central tendency; and 4) the returns to all stocks must be symmetric (if not normally distributed).
type of risk is captured by the statistic "beta" \(^*\). Since the stock market's performance is usually thought to reflect the health of the economy, systematic risk reflects the covariation of one firm's achievements with those of all other firms. Hence firms with the lowest systematic risks (e.g., negative beta's) are those which tend to do best when the rest of the economy is doing poorly and, conversely, run into troubles when most other businesses are highly profitable.

**Statistical Evidence of Capital Market Segmentation**

There exists a few forms of evidence that contradict CAPM's empirical assumptions and predictions. In particular there are indications that a large amount of wealth—particularly that possessed by owner/managers of small businesses—is undiversified, and that dissemination of information about small new firms is far from perfect. The implication of both of these phenomena is that small new firms have limited access to capital markets.

The following analysis focuses on two specific types of evidence relating to small firms' problems in obtaining financing: (a) small young firms are often capitalized by the personal savings of owner/managers and their families; and (b) the only small firms that succeed in obtaining external financing are those that can provide excessive returns to investors.

\[ \text{beta} = \frac{\text{Cov}(R_m, R_x)}{\text{Var}(R_m)} \]

This formulation only applies to stocks. The price of risky debt is a function of the firm's beta and variance of returns. Thus an analysis of lending institutions' risk avoidance behavior is more complex.
Daniels and Kieschnick have generated and interpreted a great deal of evidence pertaining to these two empirical phenomena. These authors' work represents a seminal contribution to the literature on capital market imperfections. However, their research does possess a few theoretical and methodological deficiencies which are worthy of note. Many of these deficiencies were simply a product of the poor data that is available on small firms. Fortunately, there exist some very recent empirical work which offers a somewhat more robust foundation for the development of a model of capital market segmentation.

Using a small sample from the Dun and Bradstreet files, Kiechnick has shown that many small enterprises are capitalized almost entirely with personal savings. Of the capital invested in the fifty two firms Kiechnick examined, 81% came from their managers. Although the size of the sample population does not seem to be statistically significant, this phenomenon is suggestive of a very important market failure.

When small firms are owned entirely by their managers, then the orthodox analysis of risk breaks down. If an owner/manager has a large proportion of his wealth invested in the firm then he is not holding the perfectly balanced portfolio envisioned by orthodox theory. Instead he is bearing a great deal of unsystematic risk—risk that would normally be diversified away if he held the optimal mix of financial assets. Holding such a lopsided portfolio forces him to be concerned with the variance rather than the beta of the firm's earnings; the former not the latter will determine the variability of his future wealth.
Since small businessmen tend to have an extremely high exposure to the unsystematic risks embedded in their firms' earning streams, they are likely to have mixed feelings about their investments in these firms. This increases the chances that they will foresake their efforts to establish their own concern and seek a job in a larger firm, investing their personal savings in assets with a better risk/return trade-off.

Moreover, the reliance on entrepreneurial capital violates the so-called "separation theory" of neoclassical theory.\(^5\) This theorem purports to demonstrate how a market economy efficiently channels financial resources from owners of capital to the most profitable firms, avoiding any dependence upon the coincidence of management abilities, technological creativity, and wealth. But the reality of the history of many small businesses demonstrates that personal wealth is, in fact, essential to this sector. The autarchic character of the "secondary" financial sector radically reduces the chances that viable ideas will be nurtured and turned into profitable enterprises.

However it is important to note that some small firms are starved of capital because their owners prefer to retain complete control. Rather than issue stock, placing legal control in the hands of others, these managers choose to forego the flexibility of equity financing. Even debt financing is shunned by some small business owners because bond covenants and loan agreements constrain a manager's hand in a way that can be distasteful. In these cases, financial segmentation is self-imposed.\(^6\)
Regardless of its causes, the poor diversification of small business owners' wealth violates CAPM. But a theory of capital market segmentation hinges largely on the supposition that small firms can not obtain financing in sufficient quantity or at a fair price.

It is difficult to determine how much of this imperfect diversification is attributable to poor access to capital markets rather than a taste for control. However, small businessmens' desire to maintain control over their operations can not account entirely for the second type of empirical deviation from CAPM: the excessive returns reaped by small businesses.

The data on small firms' high returns constitutes one of the most compelling bodies of evidence demonstrating the inadequacy of the orthodox model of financial markets. However, discussions of capital market imperfections often confuse the significance of various types of evidence on returns, each of which relates differently to a critique of the neo-classical framework.

The review of the literature on excessive small firm returns will proceed in the following manner. First I will examine the problems with studies that focus purely on the issue of accounting profits. Next I will analyze the data on stock returns of different sized firms. In each case, I will attempt to highlight the strengths and weaknesses of the research indicating how its findings relate to a model of capital market segmentation.

The first and less compelling form of evidence of capital market segmentation pertains to small firms' overall profit levels.
Daniels and Kieschnick, drawing on data assembled by the FTC analyze a short term accounting measure of small firms' after-tax return on equity (ROE), e.g., accounting profits during one fiscal year divided by the book value of stockholders' equity. For the period 1965-1976, the authors find that the smallest size class of firms outperformed all of the other classes by an appreciable margin: the small firms earned an average real rate of return on their investments of 13.84% compared to an average of 12.05% for the entire universe and 12.91% for the size class with the next best performance (firms with total assets exceeding one billion dollars).

The fact that small firms earn super-normal real profits would seem to violate the so-called separation theorem which dictates that all firms will continue to obtain financing until their real marginal return on investment is equal to that of all others.

However there are a variety of problems with Daniels and Kieschnick's analysis. The first difficulty pertains to their measure of real profits, return on book equity (ROE). This measure does not take into account equity holders' capital gains, the real rate of depreciation, or various cash flow distortions generated by standard accounting practices. The bulk of these effects may work in favor of the hypothesis that small firms generate high profits. This is because these enterprises may reap relatively higher capital gains, a type of return not captured by their income statements. Additionally small firms understate their profits for tax purposes. However, the study does not demonstrate that this is the direction of bias so its findings are inconclusive.
A more significant problem with this study is the inadequate treatment of risk. The authors did not have sufficient data to divide risk into its systematic and unsystematic components. Kieschnick and Daniels do, however, measure the variance of returns provided by different portfolios of securities. Each of the portfolios is distinguished by the size of issuing firms. They find that the portfolio consisting of small firms' securities does indeed have a higher year-to-year variance of returns. However, they assert that this higher variance could be diversified away if the small firms' stock were mixed with other securities.\textsuperscript{9}

Unfortunately, the authors do not present any empirical evidence that would allow one to assess the validity of this assertion. Unless one determines how much of the higher variance risk consists of systematic uncertainty—uncertainty that correlates with the performance of all other stocks—one can not judge the significance of their data.

In fact there is evidence that small concerns have a somewhat higher systematic risk. Basu shows that small firms have not only a higher variance risk, but substantially larger betas.\textsuperscript{10} Hence the critical question is whether small businesses' high profits can be explained away by their higher systematic risks.

A third problem with the use of profits as an indicator of under-financing of small firms, is that average returns on investment may be quite different from marginal returns. The fact that smaller enterprises realize higher profits on average does not mean that the return on an additional investment in these businesses is higher than that realized by larger firms on the margin.
Finally, even if the studies reviewed above dealt with the issues of (a) risk assessment, (b) accounting distortions, and (c) marginal vs. average returns, a super-normal small business profit rate would not prove that these firms have poor access to capital. The persistence of high profits could still be explained by the phenomenon of a taste for control. If small businessmen insist on retaining their autonomy, rejecting all types of capital that have any strings attached, they will prevent their firms from expanding to the point where profits are equilibrated with those of other firms. Although the separation theorem (which dictates that real returns are equalized across all firms) would be violated, this evidence could not serve to demonstrate that small firms are excluded from capital markets.

Most of these problems are circumvented by examining small firms' stock returns. Stock returns are quite different from profits. Below I will first draw a few theoretical distinctions between these two measures and then present the empirical evidence on returns. This evidence does reveal that the returns reaped on the equity of small businesses are super-normal, indicating the existence of a pervasive capital market failure.

If CAPM is correct, there should not be any systematic differences among the stock performance of different classes of firms. If information flows freely in the public and private stock markets then prices of equity will equilibrate: all types of stock should provide the same average returns after controlling for systematic risk. If instead, certain types of enterprises—e.g., small firms—have excessive stock returns over a sustained period then one can conclude that information
barriers exist in the market.

Secondly, the issue of control does not relate to small firms' stock returns over time. Even if small businessmen's concern for control results in excessive profits, small firms' stock returns should be normal. Once a stock issue is in the market its performance hinges solely on the expectations of investors. When market participants anticipate excessive profits in the issuing firm, the firm's stock price should be higher initially, reflecting the discounted value of larger expected cash flows; but in a CAPM world, the subsequent price appreciation should be normal. If investors knew that returns would be abnormally high for any class of stock, they would immediately bid up the price of those securities until the expected future price appreciation (after controlling for risk) was the same as that of all other securities: thus the expectation of future super-normal returns is a self-defeating prophecy.

Hence high profits should not generate sustained excess stock returns. However the converse does not hold. High returns may lead to higher profits. It is reasonable to believe that differentials among stock returns will ultimately result in discrepancies in the marginal returns on real investment, thereby violating the separation theorem.

The connection between high returns and profits is somewhat indirect and must be specified with care. 10 Super-normal returns are often achieved in the absence of high profits. For instance, the Chrysler Corporation in 1982 had fairly low earnings but its stock outperformed all other firms in the Fortune 500. This occurred because the financial
community expected Chrysler's earnings to be even poorer than they actually were.

It is conceivable that this asymmetric relation between profits and returns could be sustained. If investors initially wildly underestimate a firm's earnings stream, and only slowly acknowledge that business' viability, returns on the firm's stock will exceed the norm for an extended period of time.

But there does exist a connection between underpricing of equity and high profits, particularly for new firms. If small firms' equity is systematically undervalued when it is first issued and the market only gradually comes to this realization, stockholders of small enterprises with achieve excessive returns over a discrete time interval. However, if owner/managers and venture capitalists must continually sell equity to a public market which undervalues their investments, they will be less willing to undertake new projects. Since unseasoned issues are under-priced, the original financiers of the venture reap sub-normal returns when they liquidate their own investments. This means that the project on the margin--e.g., the new venture providing a real return on investment that is just equal to that provided by all financial securities in the stock market--will no longer be attractive. Entrepreneurs would do better by buying stock in the secondary market rather than providing start-up capital to such a project. Were they to invest in the start-up they would not be fully compensated for the opportunity cost of capital.

This argument is made somewhat clearer by an illustration. Assume all new small business stock must reap a 20% return annually while all
other stock provides a 10% return. Second, assume a venture financed entirely with equity will provide cash flows of $100,000 each year and one million dollars upon liquidation in ten years. Its initial net present value discounted at the large venture rate is exactly one million, but if it were forced to achieve the small venture hurdle rate of 20% its value would be only $580,000. Now assume an owner/manager invested $909,000 in the venture last year and had hoped to sell it for one million, believing that investors would discount his firm's earnings stream at the rate of 10%. Instead of earning a 10% rate of return on his own investment, this owner/manager must sustain a loss of 38%. This demonstrates why small ventures with average rates of profit will become unattractive.

Hence it is likely that small business ventures that surpass only the average hurdle rate will receive much less personal financing from owner/managers and venture capitalists.* If capital no longer flows into the marginal small business ventures, by definition only projects providing excessive real profits will be financed. The separation theorem which demands that all marginal returns are equilibrated would be violated. Thus, in sum, excessive stock returns for one class of ventures will ultimately foster super-normal profits.

Some of the empirical evidence on small firms' stock returns is not very compelling. One of the sources of data which Daniels uses to demonstrate that small firms have high stock returns are some older studies on publicly held equity. One study demonstrates that a portfolio of all the equity in the New York Stock Exchange (NYSE) has lower returns than that of a portfolio consisting of stocks listed on the American

* Some owners of small businesses may not care about the price of their firms' equity. Those who do not intend to sell any part of their enterprises will not need to worry about underpricing. Others may not mind earning less than the opportunity cost of capital if they enjoy the "management experience" or if their occupational alternatives are seriously constrained.
Exchange (AMEX).\textsuperscript{12} It is a well-established fact that the average size of firms with stock traded on the AMEX is considerably smaller than that of firms listed in NYSE.\textsuperscript{13} Daniels also cites a number of other studies which demonstrate that small firm stocks have average returns that are higher than that of larger enterprises.

Again, the deficiency with almost all of this data is that there is no control for risk.\textsuperscript{14} As argued above, one would expect small firms' equity to realize higher than average returns since their stock is riskier, e.g., possesses a higher beta. The real issue is whether the differential in small and large firms' stock returns can be explained away by their disparate betas.

Some very recent work on small firms' stock does offer support for Daniels' basic thesis: the stock returns of smaller enterprises are larger than those of large concerns even after investors are compensated for bearing higher systematic risks. Reinganum has demonstrated that, after controlling for beta, small firms' stock achieves excess returns.\textsuperscript{15}

This finding was initially dismissed because it was believed the author relied on a statistical artifact associated with the thin volume of trading in small firm securities (which is itself a theoretical anomaly).\textsuperscript{16} Other analyses traced the "scale effect" to tax shelter behavior, because much of the residual in small firms' abnormally high returns was found to occur in January.\textsuperscript{17}

However, in a series of recent articles the generality and robustness of Reiganum's findings have been corroborated, illustrating that one cannot attribute small firms' high returns entirely to thin trading,\textsuperscript{18} tax
shelter behavior, high earnings/price ratios, or even higher transaction costs. Thus Reiganum's results constitute one of the most clearcut indications that financial markets systematically under-invest in small firms.

Although these studies focus solely on stocks that are publicly traded, the findings point to the existence of more pervasive imperfections that cut across many sectors of the financial market. The fact that some small firms continue to seek financing in public capital markets despite the systematic under-pricing of new issues means that there do not exist other financial institutions which assess their values accurately. If there did exist such institutions, small firms would turn to them for financing rather than the public markets where their equity is under-valued. Financial intermediaries must be either underpricing all firms' securities or rationing their resources so that not all viable small firms have access to capital. Either phenomenon contributes to segmentation.

Hence some small businesses with real rates of return that are equivalent to those of other enterprises will go unfinanced. These businesses will be passed over either because the hurdle rate for new small ventures is artificially high or because some new projects are just excluded altogether from capital markets.

In the next chapter I will examine several theoretical reasons which might account for these phenomena. I will focus on two issues: (a) why information on small new projects might be imperfectly disseminated; and (b) why excessive risk aversion develops within the financial
plac[ing] a disproportionate burden on smaller firms with a higher variance of earnings.

Before this is done it is useful to provide some background on the social benefits generated by small businesses. The relevance of this whole analysis hinges on the belief that public development agencies should be concerned about the problems experienced by small firms. It is necessary to assess the claims that these enterprises generate a disproportionate amount of social good.

Small Firms' Contribution to Growth

The three claims usually made with regards to small firms are that they generate (a) higher profits, (b) a larger number of net new jobs, and (c) a wider array of innovative technologies. Clearly one cannot assess the value of addressing capital market segmentation until one has analyzed small firm's contribution to growth. I will briefly review the literature on these issues.

The research on the social benefits generated by small firms is still quite impressionistic and inconclusive. Although the public concern about small firms has roots in the progressive anti-trust movement and the late New Deal, the research on this sector's economic role is only now producing interesting results. Most of the current research is focused on the formidable methodological issues associated with conducting longitudinal studies based on somewhat biased and incomplete data files. However, few empirical analysts have made a concerted effort to measure the interconnection between small and large firms' growth. Without such a measure it is quite difficult to estimate small firms' impact on the economy.
The first claim made on behalf of smaller firms—that they realize high profits—has just been tentatively confirmed above. Thus I will not re-examine this issue. However, it is important to note that profits are not the best measure of the income generated by a firm since they do not include the returns to other factors of production, most notably labor. Before one could assert that small firms actually make a greater contribution to national income it would be necessary to assess small firms' value added vis-a-vis that of larger enterprises.

David Birch has undertaken the most exhaustive empirical investigation of small firms' job generation behavior. Birch found that three-quarters of the net new jobs created between 1969 and 1976 were generated by firms with less than 100 employees. Only about a third of the work force were employed in small firms in 1969, so these enterprises made a disproportionate contribution to employment growth.

A number of critiques of Birch's findings have emerged. Ledebur argues that the 1969-1976 period studied by Birch may be unique: Birch's findings could be attributed to an unusual resurgence of small firms during the '75-'76 recovery.

Another extensive critique was developed by Odle and Armington at Brookings using more recent data from Dunn and Bradstreet. Odle and Armington initially found that only 37% of net new jobs were created by small firms between 1978 and 1980, a percentage comparable to the share of the labor force that these businesses employed in the base year. But when the authors examined a somewhat longer period, 1976-1980, their
estimate of small firms' contribution to job growth rose somewhat to 51%. Odle and Armington have attributed part of the remaining discrepancy between their findings and those of Birch to the latter's confusion of establishments and firms. Birch has asserted that this was not the case and has responded with his own criticisms of Brookings methodology.

The Brookings/Birch debate currently is focused on the fairly narrow methodological issues of how to compensate for inadequacies in D & B's file management procedures, including its: (a) poor coverage, (b) lags in acknowledging births, and (c) tendency to drop records capriciously. Although this controversy will undoubtedly contribute to the sharpening of longitudinal measurement tools it may not add clarity or depth to the conceptual frameworks used to analyze the employment growth process.

There are two important qualifications that should be made regarding the significance of Birch's findings. The first point made by Harrison is that small firms may appear to have done well in the last decade not because they are a vital source of new employment, but simply because larger firms were doing so poorly. With the saturation of their domestic markets and the maturation of their technologies, most of the job creation undertaken by larger firms was overseas. The question arises whether public policy should be directed toward heightening the shift of employment toward smaller firms or attempting to re-structure larger enterprises so that they can once again serve as sources of job and income growth. Clearly this complex issue cannot be answered simply on the basis of small businesses' historical share of net job creation.
Second, using any of the evidence cited above to speculate about the effects of allocating investment to small firms, begs the most important questions. An issue that has not been addressed by Birch is whether small business growth contributes to or inhibits the job generation potential of other firms. Before one can assess small firms' economic contributions, one must determine the extent to which the growth of these enterprises has come at the expense of larger concerns.

The Brookings study provides some means of dealing with this issue. Odle and Armington identify the sectors in which small firms are growing most rapidly relative to their larger competitors. They find that small businesses have the highest relative growth rate in declining industries and regions. This fact is somewhat surprising given the prevalent view that the growth of smaller firms is concentrated in leading edge technologically progressive sectors.

The Brookings authors interpret this sectoral specialization of small firms as follows:

The tendency of small firms to enter and expand into relatively weak areas of production provides an important moderating influence that can slow or interrupt the decline of weakening regions and industries.  

Another somewhat more pessimistic though not inconsistent conclusion might be drawn as well: the expansion of small firms with informal labor relations systems, lower wages and less employment security may have accelerated the decline of larger businesses in mature regions and industries. The legitimacy of either hypothesis points to the weakness of the empirical data.
Clearly, to come to grips with the interactive relationship between small and larger firms more empirical and theoretical research must be conducted. It would be useful to obtain micro studies that tracked the transfer of markets from failing large firms to newer and smaller businesses in a specific sector. However, it is also necessary to develop a conceptual framework which specifies what type of evidence is indicative of pejorative inter-firm displacement rather than positive re-structuring within an industry.

The third claim made on behalf of small businesses is that they generate new technologies. This issue is inextricably tied to the job generation debate in that new technologies often create jobs. Even labor-saving technologies can increase employment when the product demand is sufficiently elastic to raise the derived demand for labor. Labor saving innovations can also increase employment in other industries when the former reduce the cost of inputs and the quantity of output demanded. Most importantly, but least understood, new technologies can serve as a catalyst for a series of other compatible technological innovations which collectively generate new employment. Aside from generating jobs, new technologies can also increase wages or the amount of leisure consumed by society. None of these predictions, however, speak to the issue of the distributional consequences of technology.

There is some evidence that small firms generate more technological innovations than do larger firms. However, again there are both methodological and conceptual problems with most of these studies.

The first conceptual issue is the distinction between the absolute number of innovations generated by size of firm, and some measure of
innovative efficiency. To demonstrate small firms' innovative behavior, the Commerce Department's Panel on Innovation simply counted the number of innovations made by different sized firms. They found that about 50% of new technical breakthroughs were attributable to the efforts of smaller enterprises. A slightly more sophisticated analysis was done by Scheirer who compared the ratio of innovations to sales, finding that small firms performed well along this dimension. Robert Samuelson has recently criticized these studies for misspecifying the measure of innovativeness. He notes that a large firm, which is involved not only in the conception but also in the application, distribution and marketing of new technologies, is likely to have a high overhead, a large number of non-technical employees, and a low rate of innovation to sales.

Samuelson argues that small firms are not more necessarily better at creating innovations simply because they concentrate their efforts more on product development activities. Presumably Samuelson would prefer assessments which weigh the innovations achieved by smaller firms against the inputs used in this process.

There do exist a variety of other studies which have demonstrated that smaller enterprises produce an exceptionally large number of innovations per research and development dollar expended. This input/output measure of efficiency would seem to address Samuelson's criticisms of the small business advocates.

However, input/output efficiency in R & D is certainly not only relevant measure of innovativeness. A central issue is whether large firms have the inclination to innovate as reflected in their willingness to commit resources to research.
It is dangerous to simply compare the number of technologies generated by different sized firms.* These gross aggregates do not specify the incentives to innovate associated with different industrial organizational structures. Even if small firms produced few innovations, one might argue that their presence is needed to compel larger industries to innovate.

Clinton Bourdon notes that when a firm is in little danger of losing its market share to other enterprises, the incentive to pursue technological innovation declines.36 Thus in industries characterized by a stable oligopoly with fairly fixed market shares there is little compulsion to innovate. But where there exist threats from smaller firms, the larger concerns will respond by investing in R & D.

Bourdon argues that after World War II, for instance, the industry leader in the communications sector, AT&T, perceived threats to its market domination of certain market segments (i.e., common carrier systems). Consequently, the firm allocated more resources and increased the pressure on its R & D division, Bell Labs, to develop promising innovations.

Clearly, if one simply counted the number of innovations generated by small and large firms in the communications industry, it is unlikely that one would ascribe an important innovative role to small firms. But

*An obvious criticism of the Commerce study that Samuelson does not make is the somewhat arbitrary nature of any operational definition of innovation. New technologies can be embodied in new products, new equipment, new ways of manipulating tools, or simply new ways of organizing production (e.g. the assembly line). The last two forms of innovation are particularly difficult to identify. Finally, even if the Panel on Innovation succeeded in identifying all of these types of new technologies, it was unable to develop coherent criteria for assessing which innovations were most significant.
according to Bourdon the small firms' incentive function was pivotal. Thus one must analyze the role small businesses perform in defining the market strategies of other firms before assessing their contributions to innovation.

However it is useful to add two words of caution here. The argument offered above was not directed toward demonstrating that competitive industrial structures are optimal with regard to the maximization of innovation. In fact, this fairly conventional model of the positive association between competition and technological innovation has been reassessed by many social scientists recently. This reappraisal is largely due to the current interest in Japanese industrial policy. There appears to be somewhat less competition both within and between firms in Japan and yet the incentive to innovate remains strong. The synergistic benefits associated with noncompetitive cooperation, combining the technical knowledge of many different economic agents, seem to be appreciable in Japan.

Whether Japan's innovative strategies have any applicability to American economic institutions is very difficult to determine. The point is simply that one must account for the interactive relationship between firms.

Secondly, one should not assume that an industry in which both small and large firms play a vital role is necessarily one in which the larger players perceive a need to innovate. The classic segmented structure identified by Piore and Chandler involves larger oligopolistic firms that are quite content to relinquish the variable component of demand to their smaller competitors. Thus it is critical to differentiate this
type of symbiotic rapport between different sized firms and the more dynamic competitive relationship described by Bourdon.

Finally, one cannot judge small firms' contribution to the economy without assessing the extent to which they exacerbate labor market segmentation. As noted in Chapter I, the evidence regarding the correlation between the secondary labor market and the small business sector has not been well documented. Many large firms provide unstable dead end jobs and quite a few small firms provide high quality employment opportunities.

But the evidence that does exist suggests that small firms' jobs are on the average poorer paying even after one controls for industry and occupation. Moreover, Birch's finding that small firms' employment levels are more volatile is consistent with Brookings' recent studies if one takes into account the latter's unique measures of volatility (see Chapter I). Thus the correlation between the secondary labor market and the small business sector may be positive. Clearly one must disaggregate the universe of small firms to get a better sense as to which sectors—high tech, personal service, or mature manufacturing industries—are responsible for lowering the quality of small firm jobs.

Like the research on job and technology generation, the empirical work on quality of small firms' jobs has not succeeded in estimating the effects of public policies aimed at assisting small firms. It is unknown how the birth of additional small enterprises effects the job creation potential, technologies, or instability of larger firms. Hence, it is critical to determine how public assistance to small firms affects the economy in the aggregate.
Before one can assess this impact one must specify clearly what type of assistance needs to be provided to small enterprises. The type of assistance one provides to these firms hinges, in turn, on the causal framework one adopts regarding the genesis of capital market segmentation. The two principal causes that will be examined in Chapter Four are quite similar to those pertaining to labor market discontinuities: risk aversion and imperfect information dissemination systems.

Policies that ameliorate capital market segmentation will have slightly different impacts depending upon which of these two problems are addressed. Although many small new firms are impaired by both of these obstacles, some are affected more by one than the other. Thus to discern the effects of public interventions one must specify more clearly the causes and solutions to capital market discontinuities. This is the topic of the following chapter.

Summary

In sum, small new firms do seem to have poor access to capital markets. This is evidenced by the fact that many of these enterprises rely heavily on the personal wealth of their managers for financing. Unfortunately the data on this pattern is somewhat sketchy. However a more robust indication of the barriers small firms face is the excessive returns they provide in the stock market.

Investors systematically underprice unseasoned small business securities. This seems to reflect a problem in information dissemination systems: if investors knew that such firms generated excessive
returns they would pay a much higher price for them. In fact, the realization that small firms' stocks generated these high returns would itself be self-defeating in the sense that funds would continue to flow into this segment of the market until the differentials were wiped out.

The high returns provided by small firm stocks suggests that only those firms with excessive profits (after controlling for risk) are receiving capital. Although one must be very careful in distinguishing between stock returns and profits, it is reasonable to believe that these imperfections will make managers of small businesses and venture capitalists more hesitant to invest in new ventures. Only more lucrative projects will be financed both because: (a) owner/managers are undiversified so they need to receive additional compensation for bearing unsystematic risks; and (b) if they do want to liquify their wealth or expand their businesses, entrepreneurs must obtain capital from sources that underprice their firms' equity. Together these two effects will constrain the flow of personal and venture capital into small firms.

The evidence on small firms' job and technology generation capabilities is still somewhat sketchy. The balance of research does seem to suggest that smaller firms play a critical role in these two respects. In much of the rest of this essay it will be taken for granted that capital market segmentation may hinder aggregate employment growth and technological innovation.

However, the central question pertaining to these two issues has not been addressed: i.e., the relationship between employment and innovations
created by smaller enterprises and the performance of large firms. Until this question is answered, the analytic and empirical foundation for development finance policies will be insecure.

Finally, to assess the effects of financial segmentation on labor market discontinuities one must first identify why small firms have difficulty raising capital. A causal model of capital market segmentation will clarify the connection between the flaws in the two factor markets. Such a framework will also indicate the types of mitigating measures that are required to ameliorate financial segmentation. These are the foci of Chapter IV.
CHAPTER IV

FINANCIAL INTERMEDIARIES:

RISK AVERSION, INFORMATION DISSEMINATION

AND CAPITAL MARKET SEGMENTATION
Intermediaries in both labor and capital markets contribute to segmentation. Limited information, social prejudice, and the ability to maintain a dominant economic position are the major forces which lead intermediaries to reinforce the discontinuities in input markets.

There are many parallels in the behavior of labor and capital market intermediaries. Both types of institutions are embedded in an economic nexus that limits their range of information and the breadth of their social ties. Social networks play a greater role in labor market intermediation than they do in facilitating financial transactions. But both types of intermediaries rely on personal, social, and geographic bonds to supplement or fortify their exchange relationship.

The agents inhabiting the lowest tier of the two factor markets—disadvantaged workers and small firms—are not only rejected by most intermediaries but also have the greatest need for their assistance. Secondary workers who do not have the credentials that often substitute for sponsorship have poor access to the most effective informal labor intermediaries (LI's). Similarly, small new firms that have neither retained earnings nor direct access to the public exchanges are shunned by many of the major financial intermediaries (FI's). Thus FI's and LI's often exclude the economic agents who would receive the greatest benefits from their services.

Chapter III described some of the empirical evidence that financial markets do not succeed in allocating capital efficiently. In particular, small firms are provided insufficient amounts of capital from external
sources. They seem to be constrained from expanding to the point where their marginal real returns on investment are comparable to larger enterprises. These phenomena violate both the separation theorem and the diversification predictions of CAPM.

This chapter will attempt to provide some explanations for the underfinancings of small firms. The principal foci will be the problems associated with FI's information collection activities and the way they assess risk. First the orthodox justification for FI's existence will be described. Then I will outline three different kinds of segmenting forces: (a) those arising from the market, (b) imperfections created by public regulations, and (c) rigidities associated with institutional and social biases. Finally the relationship between labor and capital market segmentation will be re-examined and some initial policy recommendations will be offered.

The Orthodox Framework

Financial intermediaries (FI's) facilitate the transfer of loanable funds from borrowers to the portfolio of lenders. Some FI's, like stock brokers, never take title to these assets, acting only as representatives of the buyers or sellers of financial securities. But the most common type of FI stockpiles the "direct" securities sold by "ultimate borrowers" (i.e. mortgages) and sells their own "indirect" assets (i.e. savings accounts). These FI's transform the assets they buy before they re-issue them as indirect securities. This type of FI includes almost all of the other categories of financial institutions including commercial banks, savings institutions, mutual funds, insurance companies, pension funds, finance companies, and credit unions.
Although almost all orthodox economists contend that FI's heighten economic efficiency, there is no monolithic doctrine as to how this goal is achieved. In fact, as the Capital Asset Pricing Model was being elaborated during the last decade, the "raison d'être" for FI's became a more troubling and controversial issue. Many financial economists are currently attempting to apply CAPM to an analysis of the structure and function of financial institutions; however, the synthesis is far from accomplished. ¹ One of the reasons for this controversy is the ambitious assumptions of the model.

Notwithstanding this debate there does exist a dominant orthodox argument regarding the functions performed by FI's. In his primer on capital markets, Lester Chandler argues that FI's increase the efficiency of capital markets by taking advantage of several different types of economies of scale. These scale economies are quite similar to those achieved by formal labor market intermediaries.²

Through economic expansion FI's gain the capacity to transform financial assets to better conform with the preferences of ultimate borrowers. In particular, they are able to reduce the risk*, increase the liquidity of assets, or raise the expected return in a manner that could not be achieved independently by those who purchase their financial claims. FI's achieve this goal by reaping four distinct advantages associated

*Risk here refers to total variance (systematic and unsystematic risk) which is the measure of portfolio risk not security risk. The assertion that FI's can assist investors' diversify hinges on the assumption that many desirable financial assets are indivisible or offered in fixed quanta.
with their size:

1) By purchasing assets in large denominations and issuing smaller indirect securities, they reduce transaction costs;

2) Through more extensive diversification, they can improve the risk/return trade-off for ultimate lenders;

3) By applying knowledge gained through economic research to a broad range of large investments, they reduce the "per unit" cost of the information acquisition function; and finally,

4) By taking advantage of partially offsetting inflows and outflows of their "depositors" they are able to increase the liquidity of the securities they issue.

The following critique of orthodox theory of financial intermediaries will focus on three types of market imperfections. The first are market failures in the traditional sense in that they arise as a result of unregulated market forces operating in an economy consisting of income maximizing agents. The classic market imperfection of this type is fostered by concentrated markets. Two features of overconcentration in financial markets will be examined below: its impact on the price of information and the risk aversion of intermediaries. Another set of classic imperfections arise from financial regulation; I will focus principally on public controls over the liability and asset structure of financial institutions. (However, regulatory constraints on market entry are also an important focus of the literature and relate directly to anti-trust policy objections.) Finally, the third type of imperfection explored below are the institutional and social constraints on FI behavior. This issue will be analyzed in the most depth, the two former problems being touched on only briefly.

The central purpose of this section is to outline theoretical reasons to explain (a) why small firms have been forced to rely on personal capital
and (b) why, when they do obtain external financing, these businesses are compelled to provide such high returns to investors. Two central themes will be developed. One pertains to the high cost and inherent ambiguities involved in acquiring, analyzing, and disseminating information about small, younger firms. The other theme relates to the perceived risks involved in investing in these firms.

**Segmentation Caused by Market Forces**

The Capital Asset Pricing Model (CAPM) is founded on the assumption that all investors share the same portfolio of risky assets. Usually the standardization of investors' portfolios is said to be achieved via the quick and efficient transmission of information. This ensures that every investor shares the same forecast of firms' future earnings potential. Thus the efficiency of information transmission makes possible the consistency of security selection procedures, pricing and risk assessment.  

Actually quite a bit of information about a firm must be collected in order for investors to arrive at a proper assessment of its stock value. Not only the probability distribution of earnings in each period must be calibrated, but the expected correlation of future earnings with the market must be known by all market participants.*

*In fact another even more complex characteristic of firms' earnings must be universally known for investors to share an assessment of stock value: the so-called "up-date risk." Aside from the systematic risk generated when the firm's actual stream of earnings is correlated with the market, there is a risk borne by investors when expectations change regarding future earnings of the firm. If these expectations of future earnings tend to themselves shift in tandem with the market then the investor is said to incur an up-date risk. This heightens the complexity of the information that must be shared by all investors. 4
The orthodox model posits the existence of agents who perfect the market by producing and disseminating information about firms' future earnings streams: the security analysts or loan officers employed by financial institutions. The expertise of these individuals can be tapped in framing the portfolio of any investor who does not have the time or inclination to carry out his or her own analysis of economic phenomena.

There is reason to question CAPM's presumption that portfolios are tailored to incorporate the best information available. First, information gathering and analysis carries a cost. Following the neoclassical logic one would surmise that some public information will be ignored if the cost of acquiring and analyzing that data exceeds the return generated by re-structuring a portfolio.

Small new firms are likely to be the most difficult to analyze. When a firm attempts to penetrate the financial market for the first time there exist few if any sources of secondary data that describe the firm. Moreover, having had fewer credit checks or market studies performed by suppliers, customers, landlords, and creditors each new investor will have to bear the burden of developing a new assessment of the firm's operations and/or compell the firm's managers to develop intricate financial statements or business plans to their own specifications.

Thus the fact that information on small firms is relatively expensive is one explanation for the fact that investors demand a higher rate of return on investments in these enterprises. The excess rates of return on small firm's stock may reflect this hidden cost of data collection.
Simply the existence of information costs might be viewed as an indication that markets are imperfect. Indeed the classic version of CAPM assumes that information costs are infinitessimal. However, if the market investors assess information costs accurately then the financial market might still be efficient in the sense that no actor can do better without incurring information costs that are larger than the gains realized through trade.

Neoclassical search theory dictates that economic agents equate the marginal cost and return of new data. In other words, an investor must continue to collect more information until the return on the last bit of data exceeds this cost. Since information about small businesses is relatively expensive (see below), investments in this sector absorb large amounts of social resources in the form of data collection. One could assert that the higher cost of funds to the business sector are appropriate given the higher information costs generated by such investments.

It is true that if small firms generate externalities in the form of reducing unemployment (and concomitantly, social welfare costs) and stimulating economic growth through technological innovation then the information biases against small firms will be more costly to the society as a whole. However these problems might be more properly viewed as the consequences of (a) the labor market's failure to clear, or (b) defects in the patent laws or innovation process which prevent firms from appropriating all the gains from technological breakthroughs.

But the high cost of small firm information, in conjunction with other flaws in information systems do add up to a capital market failure.
One of these flaws, the resemblance of information to a public good was touched on in Chapter II.

As argued above, information has many similarities to a public good. Unless the cost of its dissemination is subsidized by a collective authority it is likely that it will be under-produced or imperfectly disseminated. This is because the marginal cost function of information dissemination, like that of many infrastructure goods, is likely to be constantly declining rather than U-shaped, and its marginal cost will always lie below its average cost. This means that any producer operating at the so-called efficient level of production--where price is equal to marginal cost--will sustain a loss.

This market failure is closely related to the economies of scale reaped by formal financial intermediaries (FI's). One reason these large FI's exist is that they can apply the same piece of information to larger security transactions and a variety of financial decisions. But the falling marginal cost of information indicates, nonetheless, that some useful information will be offered to investors at a price that exceeds its marginal cost.

One deficiency in the above argument is that it only applies directly to the transmission of existing information, not to its production. It is possible that after a certain scale of production there are marginally increasing costs for generating new financial information. The declining cost function of information dissemination may not affect new small firms since there is less data that has already been produced about these enterprises.
However, it is very difficult to draw a clear distinction between information production and dissemination. Information is "spontaneously" generated about almost all firms, but most of it is not systematically compiled, analyzed, or transmitted to interested users. Suppliers learn about firms' creditworthiness in an informal manner. Few communicate their assessments of their customers to credit rating agencies in a systematic manner. Reporters of trade journals, and magazines like Inc. and Venture collect additional information, much of which does not appear in any issue for lack of space, or due to an insufficiently small group of interested readers. The information no doubt, if priced at its marginal cost of dissemination, would find a somewhat larger market. Thus to say that there are market failures in information transmission systems is very similar to saying that information production is itself flawed.

Thus, it is likely that this market failure in information dissemination will have a great impact on small new firms. Data about these firms is relatively scarce and expensive. The market's failure to price information at its marginal cost will force FI's to demand a higher rate of return on their investments in smaller enterprises. This is one explanation of the stock return findings discussed in Chapter III.

Another of the market failures identified by Daniels and Litvak which inhibits the performance of FI's is the geographic and economic concentration of the financial industry. 6

In their analysis of this phenomenon the authors draw on the work of Heggstad and Edwards who found that the most concentrated financial markets are dominated by relatively risk averse FI's. 7 Heggstad and
Edwards focused on commercial banks and the short term debt market. Although risky debt cannot be diversified in the same fashion as stocks, the authors' findings on risk aversion are still relevant to the issue of small business financings.

The risk carried by debt is a function of both the variance and the systematic risk (beta) of a firm's rate of return. Monopolistic banks are able to minimize the risk they bear below the level achieved by competitive banks. Since small firms' debts carry a great deal of variance risk, they find it more difficult to obtain loans from concentrated banks.8 Heggstad and Edwards following Galbraith and Caves attributed this risk avoidance behavior in part to the desire of the managers of large corporations to stabilize their own jobs.9 Alternatively one could see these actions as improving the portfolios of the owners or depositors of the bank, since the unsystematic variation in a borrower's earnings increases the value of the bank's equity and debt.

There is some question as to the current validity of Heggstad and Edwards' proposition that small banks are willing to carry riskier portfolios.10 However, their work did posit a credit rationing device that may affect the small business community. Any market imperfection which increases FI's variance risk aversion is likely to have its greatest impact on small firms since they have the largest perturbations in earnings.

Geographic concentration can also be detrimental to small firms. Regional brokerage houses used to disseminate information about firms whose scope of operations was circumscribed. The decline of these local houses has made it even more difficult to obtain useful data on
smaller enterprises.  

Regulatory Imperfections

The second type of financial market failure described in the literature is that associated with public intervention. Litvak argues, for example, that the fiduciary laws which bind institutional investors exacerbate small firms' financial difficulties.

Fiduciary laws are frequently interpreted in such a way as to force fund managers to assess each investment in isolation rather than as a constituent component of a diversified portfolio. This has the effect of highlighting a security's total variance risk rather than its systematic risk (the beta risk which is actually borne by the investor when he adds the security to his portfolio). These fiduciary laws often prevent the inclusion of small firm's securities in a pension fund because the latter have a high variance of returns.

Another type of law that may heighten FI's risk aversion are ceilings on the interest rates of bank loans. If the risk premium on a loan is insufficient to compensate a financial institution for the actual risk associated with a firm's debt, the former will refuse to make the loan. The macro result of these laws are to reduce the amount of financing that is available to new ventures. With the relaxation of the lending regulations for depository institutions this market failure will presumably be ameliorated.

A third regulatory failure examined by Daniels and Litvak are government laws which force firms issuing securities in the public exchanges to
write detailed prospectuses and annual reports. They point out that the cost of generating these reports does not rise proportionately with a firm's size, thereby raising small firms' cost of information dissemination per dollar of invested capital. The authors commend the SEC for relaxing its registration requirements in the last five years, reducing the information costs imposed on small firms.

In fact the SEC laws were created to deal with the information market failures that plague the financial industries. However, since information is a public good, an insufficient amount of data transmission will take place as long as its dispersal is not subsidized.* Newer more anonymous enterprises will bear the brunt of this market failure.

Institutional Failures

There are several institutional patterns that might account for the financing problems experienced by small new firms. This section will offer a few hypotheses about institutional structures that bias the investment decisions of financial intermediaries against small firms and firms owned by minorities. The principal phenomenon to be explored are the following:

- the difficulty of equating the marginal cost and return of information due to irregularities in return patterns and the need for meta-information;
- the difficulty of assessing a firm's systematic risk particularly when it is in a new industry and the resulting confusion of variance and beta risks;
- the sunk personal investments that FI's have in their relationship with larger business customers;
- the importance of social networks and communication patterns in financial intermediation.

*James Landis, the brilliant regulatory strategist of the SEC, did succeed in addressing the "lemon" market failure described by Ackerloff.
As noted above neoclassical theory dictates that any economic agent who engages in an information search must equate the marginal cost and return of new data. Thus any worker seeking a job, employer seeking an employee, buyer seeking merchandise, or investor seeking an investment must continue to collect more information until the return on the last bit of data exceeds its cost. Presumably one would collect the cheapest and most informative data first and then accept information that is increasingly less attractive in quality and price. Eventually the cost of information will exceed the discounted value of the heightened expected returns it generates. This is the rational stopping point for any search agent. 17

The problem with the neoclassical approach is that it tries to fit information acquisition behavior into a narrow atomistic maximizing model which is inappropriate. The fact is that decisions regarding whether or not to collect additional information about a security or firm are so complex that the actors are compelled to resort to rules of thumb, organizational regulations, or traditions which frequently do not conform to the maximizing prism through which the orthodox analysis views economic behavior. 18

It is almost impossible for a stock analyst or loan officer to compare the marginal cost and benefit of collecting more information. One way of seeing why this is the case is to look at the infinite regress problem involved in such decisions: before an investor can accurately compare the cost and return of information about a firm that is seeking capital, he or she must collect some sort of "meta information" about this

The registration edicts he designed prevented the degenerative cycles which reduce the quality of financial information.16
information. This meta-information, in fact, must be very sophisticated, for it must include some kind of probability distribution of the risk and return payoffs associated with "investing in information" (a peculiar type of investment, because the asset purchased is simply data that describes other potential financial investments). Clearly this leads to an infinite regression of investments for it would also be necessary to collect meta-meta-information etc.

There is a way that one might try to escape this conceptual trap, but it poses its own peculiar problems. One might assume that the marginal cost (MC) and return functions for producing new bits of information are nicely sloped: a U-shaped MC curve and a return function that intersects it at one identifiable point.* In this case one might try to continue collecting information until one found that the return on that information no longer exceeded its cost.

Even if the curve had this convenient contour the question would arise as to how one determines when the return on information has begun to be exceeded by its cost. For some types of information this is unproblematic. For instance, if one is forced to buy a book with financial data without getting an opportunity to look at it carefully first, it may become clear upon reading it that it was not worth the investment. However, many types of information have no discernable payoff until after

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*Here I am referring to a different type of information cost function than that cited above in the discussion of information as a public good. The horizontal "quantity" axis (independent variable) is not the number of people consuming the same bit of information collected, but rather the number of pieces of information collected about a single potential investment.
one has synthesized them, obtained additional data and made some initial investment plans. For these types of information the stopping point of information acquisition is more ambiguous.

Moreover there is no reason to suspect that the cost and return curves are shaped in this fashion. Many types of data collection may have costs and returns that vary sporadically as the course of the research proceeds. The somewhat random nature of any literature search can foster a very unpredictable and volatile pattern of returns. Regardless of the efficiency of the analysts, information collected toward the end of a research effort can be either the most trivial or the most critical inputs to an analysis.

The most attractive strategy for an employee of an FI in dealing with the inherent ambiguity of information decision-making is to examine only those investments where the data collection costs are well defined, discrete, easily assessed and low. Since the cost of information is generally easier to determine ex-ante than its "payoff," it is likely that investment analysts will economize by analyzing only those assets for which these costs are inconsiderable. 19

Not having recourse to a truly rational decision rule, FI's are unable to establish whether they are ignoring projects for which information returns and costs are high. They feel compelled to minimize their apparent losses by economizing on information expenditures. Without access to excellent meta-information, they must rely on this somewhat arbitrary schema.
This strategy will tend to make it more difficult for smaller, younger, less well-known and more dynamic firms to obtain capital. Few secondary sources of data exist regarding these types of enterprises. Secondary information has the attraction of not only being cheaper in many cases than first hand research but its cost is well defined. Primary research about a firm or industry does not always have a discrete time frame and thus may vary widely in cost. Moreover, it is not apparent ex-ante whether any worthwhile information will be available if no one has examined the industry yet.

This is not to suggest that all small new industries will be ignored by financial institutions. If one examines current investment trends it is clear how FI's interest in a particular industry is sparked. If a specific sector is able to achieve extraordinary returns on a sustained basis without the assistance of the organized financial markets then it is likely that some FI's, if only venture capitalists, will be tempted to make a few investments in that industry. Once the initial investments are made, some FI's will have access to a storehouse of information about the firms in that sector: a description of their management structure, resource constraints, markets, and cash flow needs. Additional investments in the industry can then be made quite easily without confronting difficult information decisions. FIs which were not involved in the original investments can purchase secondary sources of information at low and discrete costs.

This scenario describes the recent experience of certain high tech industries, particularly the electronics, computer, and bio-engineering
sectors. Although some economists argue that government should direct more financial resources into these "sunrise" industries, firms in these sectors do have access to substantial amounts of capital drawn from both the public exchanges, private placement, and other financial markets.

But the electronic and bio-engineering industries are exceptional in this respect. As noted above, many small firms must rely entirely on the savings of their manager. Kiechnick has asserted that close to 80% of all small businesses are financed principally by owner/managers. Until a new industry passes a difficult threshold where its ability to generate large profits is no longer questioned it cannot obtain external financing. Thus, innovative firms must sometimes prove themselves on the basis of entrepreneurial capital.

Another reason small firms have difficulty raising capital may relate to the ambiguity in risk assessments. Investors find it very difficult to measure the systematic risk of a firm's equity. They quite naturally conflate the idea of systematic contribution to portfolio risk (beta) with that of variance in the earnings of an isolated security (sigma). To derive beta, one must know the future covariation of a firm's earnings with those of all other enterprises, a very abstruse concept that is unintelligible to most financial analysts.

It is difficult enough to try to determine how a generic type of venture or industry has performed vis-a-vis the market in the past. Although the large brokerage houses are beginning to report historical betas by firm, these are typically derived only for large conglomerates with many lines of businesses and thus are not industry specific. Without industry specific betas investors and corporate managers cannot
assess the systematic risk of a new venture in an existing industry. Ventures in entirely new industries are even more difficult to assess because few if any relevant historical betas are available.

Even if one could obtain industry specific historical betas it is extremely hard to project how the correlation of an industry's earnings with the market will change over time given possible shifts in resources, tastes, technologies, and political or institutional forces.

In contrast, it is somewhat easier to get a sense of the variance of a firm's future income. If a firm's market is expanding rapidly, its technology rapidly changing, or its resource base somewhat precarious, the probability distribution of the enterprise's earnings over the next ten years is likely to be flatter: e.g., there is a greater likelihood that the firm's income will be substantially different (either higher or lower) from the "expected" or mean outcome.

Investors continue to confound this notion of variability of earnings with the risk that they bear when they purchase a security. Aside from being easier to measure, variance conforms with an intuitive conception of risk. The continuing use of sensitivity analysis among financial analysts, and the practice of identifying pessimistic and optimistic scenario$^2$ for a venture reflects the prevailing concern for variance.

Since small firms tend to have a greater variability of earnings, as manifested in their higher growth and failure rates, adopting sigma (variance) as a measure of risk, instead of beta tends to disproportionately heighten the hurdle rates of these firms. By raising the hurdle rate used to discount the future earning streams of small businesses, investors underestimate the latter's financial viability.
Because inexpensive trustworthy information about a firm or investment is difficult to secure, informal flows of information are valued quite highly by FI's. This is one reason why international financial centers like Manhattan evolve and are maintained. The face-to-face contact and random but sustained flows of financial news which are available in the world's financial headquarters reduce the expense of informational acquisition and dissemination.23

Aside from this special type of agglomeration, there are other ways that informal informational flows are cultivated in the financial world. Shepherd argues that the "banking relationships" that exist between large financial and corporate executives are among the most personal and intimate in the business world.24 He notes that the relations between bankers and their larger customers are characterized by a social bond that is supportive of both actors' economic interests. (Here "bankers" is used to refer to any personnel employed by an FI who are responsible for purchasing financial assets).

Bankers benefit from their intimacy with corporate executives because they obtain extensive information about the operations of their clients' firms and industries, thereby improving the soundness of their lending decisions. Presumably the relationship must retain enough formality to allow the banker to turn down his client's requests when they violate the interests of the bank. Shepherd does not comment on whether bankers feel personally obligated to bail out their corporate friends when they experience financial crises. But in any case the clients benefit by cultivating a rapport with their bankers if only because of the financial
advice they receive. Undoubtedly their access to credit is enhanced in this manner as well.

Shepherd argues that it is very difficult for a small new firm to approach a bank to compete for its funds, in an environment dominated by these strong personalistic ties. Since the banker has already invested in his relationship with the older larger firms, the costs of gaining a thorough knowledge of the latter's operations are already sunk. Assuming the bank has no excess loanable funds,* it is unlikely that the banker will attempt to replicate this social/informational investment without a very strong monetary incentive. In addition, if the small firm is in the same industry as the larger firm, the former represents a threat to the bank's large investment in the latter. In this case the bank's managers would want to ensure that the small firm does not succeed in displacing its larger competitors. Thus the bank may have an interest in cutting off sources of capital to the smaller firm.

It would seem that Shepherd's analysis relates most directly to FIs' relationships with firms in the same industries as their current clients, and to short run, rather than long run, strategic decisions.

Shepherd's point about intra-industry competition takes on added importance in light of the information hypotheses offered in this essay. As argued above, it is precisely the firms in industries that have received financing in the past which are the easiest to evaluate because
the FI's staff are already familiar with the key economic issues relating to that sector. But if Shepherd is right, it is these firms which pose the greatest threat to the FI, for they could reduce the value of the FI's portfolio by endangering its existing loan clients. If the young firms that are easiest to evaluate are viewed as dangerous competitors and all other new firms are too difficult to analyze, then FI's will concentrate all of their capital in more established enterprises.

In sum, smaller young firms may have difficulty raising capital. FI's do not have recourse to any perfectly rational decisions rules for making informational investments and therefore rely on somewhat arbitrary strategies which economize on information expenditures. Systematic risk is also extremely difficult to assess. Information is much cheaper and more elaborate when it is secured in informal settings or through personal relationships. These relationships must be cultivated over a long period of time and are easier to maintain when a business' earnings pattern and management structure are stable. Small dynamic firms are more difficult to analyze. Their managers are frequently engaged in resolving crises, and may not have the time to ensure that their relations with FI's have the depth and continuity required to maintain a banker's trust and understanding.
Intermediation and Discrimination

The kind of social intimacy sought by bankers with their larger customers has broader implications for the functioning of financial institutions. In particular this personalistic strategy relates directly to the last market failure identified by Daniels and Litvak: discrimination. Information flows are facilitated—or will appear to be facilitated—when executives deal with firms managed by people they can trust and identify with, whose behavior they can understand and predict and with whom they can easily communicate. All of these constraints make it more likely that FI's will discriminate on the basis of class, race, sex and ideology when they select firms to finance. J. P. Morgan revealed how subjective most financial decisions are when he responded to a question regarding the criteria he applied in determining the credit-worthiness of loan applicants. He was asked whether commercial credit was based "primarily on money or property." He answered, "No sir. The first thing is character . . . because a man I do not trust could not get money from me on all the bonds in Christendom." Bates and Bradford have demonstrated that lack of access to the financial community forced black entrepreneurs to concentrate in labor intensive sectors requiring small amounts of start-up capital. Consumer industries like personal services and retail were the only fields in which black businessmen were successful until government agencies like the Office for Minority Business Enterprises made financing available during the sixties.
Undoubtedly this sectoral concentration is fostered by discrimination practiced by customers as well as financial institutions. Until recently black entrepeneurs could rarely depend on selling goods to white firms or consumers, and thus could only depend on black final goods markets as a source of revenue. (Even these markets were difficult to secure because of the widespread perception that white merchants could offer better or cheaper goods to the black community.)

Discriminatory lending practices contribute to segmentation by cutting off financial resources to large segments of the business community. Carol Greenwald argues that discriminatory behavior among FI's could be ameliorated if financial institutions adopted more rigorous affirmative action programs. Indeed, if there were more blacks and women working in FI's both blatant social discrimination and prejudicial actions caused by poor information flows would be reduced. However, there is still the possibility that the communication problem has been institutionalized in FI's investment assessment criteria and the culture of the organization.

On the other hand, when FI's deny financing to businesses managed by minorities they are often correctly assessing problems faced by these firms. Their reticence to finance a minority enterprise may reflect their recognition of discrimination practiced by other groups in the firm's immediate economic environment: the enterprise's other creditors, customers, skilled employees, suppliers, or the owners of a franchise or licensing company. In a sense these different types of discrimination reinforce one another since they all contribute to a perception that the
firm is bound to fail because it cannot establish a positive rapport with the other critical actors impinging on its productive viability.

One way that various ethnic groups have dealt with FI's discriminatory behavior is to try to establish informal financial institutions of their own. The groups who have had the greatest success with this strategy tend to be those who have experienced an appreciable but not insurmountable amount of discrimination. These were ethnic groups who could obtain the patronage of white customers but who, nonetheless, were viewed as inferior by most of white society, including the managers of FI's.

For example, immigrant groups such as the Japanese and Chinese have strengthened their commercial economic base by organizing provincial associations which performed an array of social and economic functions. Most notably, these associations developed informal credit unions in which a small group of shopkeepers, restaurant owners, small manufacturers and other petty bourgeois entrepreneurs provided financing to one another.

Both the Chinese and Japanese financial institutions involved a rotating loan service. Each month at a ceremonial dinner a shopkeeper would receive a small sum from each of the other members. Since no interest was charged, the members who received the first loans would benefit most. The host of the dinners typically did not have to contribute any capital.

Like credit unions, the rotating loan clubs exploited the peculiar comparative advantages intrinsic to informally organized intermediaries. The social intimacy that exists among the membership of these groups radically reduces the cost of information acquisition and loan evaluation.
It is much easier to assess the viability of a business when it is in the same neighborhood and industry as one's own firm and when its manager is well known and trusted in the community. Secondly the group's members are less likely to borrow funds simply to forestall a business failure if this will damage the economic status of the other members. If there is some degree of mutual social obligation and a commitment to the financial interests of the entire group, then members will refrain from borrowing funds that they can never repay. Clearly this requires some kind of collective identification.

The ability of the...ko (or tanomoshi) routinely to provide credit without requiring collateral depended...on the strong, informal and moralistic social relations of lenders and borrowers. These...social relations served as an alternative form of security against the pure risks of lending. Building and maintaining (social trust) required more or less continuous attention to the punctilio of decorum, honor, and especially family reputation.

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The problem confronted by any informal credit association is to avoid the type of negative vicious circles described by Akerlof.33 If the association reduces its monitoring efforts or the intra-group identification declines, some poor loans will be granted, triggering a spiral of decline for the association. After some poor loans are granted, the members will feel compelled to charge a higher (or positive) interest rate on the loans to compensate for the risk of default. But once the interest rate rises, those who have the best firms and somewhat better access to conventional sources of capital will begin to leave the association seeking better terms of financing. This in turn will increase the proportion of poor loans that are made, forcing the interest rate even higher, and leading other credit-worthy borrowers to look elsewhere for capital, etc.
This cycle can only be broken if the membership's commitment to the group, and the groups' control over its membership is heightened. The esprit de corps which must be cultivated is enhanced if the group members cut themselves off from or are shunned by the dominant culture. However, the members must have sufficient economic opportunities, access to product markets, and accumulation of capital to make each of the firms potentially viable.

This analysis of the relative success of Japanese and Chinese loan clubs contrasts sharply with that of Ivan Light. Light attributes blacks' difficulties in setting up informal FIs to the experience of slavery which narrowed their "cultural repertoire." Light notes that these institutions existed in Nigeria, and argues that blacks' collective memory of them was destroyed.  

My interpretation, in contrast, relies on scattered evidence that Japanese and Chinese immigrants experienced somewhat less discrimination than blacks.  Thus entrepreneurs could secure a portion of the white market and obtain supplies on reasonable terms from white firms. One reason that these groups may have experienced less prejudice than blacks is that they were numerically smaller and thus did not pose as great a threat to the vast majority of the white working class.  

The problem faced by minority groups who attempt to develop informal loan clubs is analogous to the difficulties faced by minority workers in the labor market. Unless these minority petty entrepreneurs can accumulate (either in the labor market or through private FIs) a small amount of capital, they will have few resources to establish a rotating lending
institution. They must either develop positive relations with white suppliers and customers or create their own distribution network and market. The former objective is considerably more difficult than the latter. Since many minority groups are residentially segregated they can often secure a retail and personal service market in their own communities. But a wholesaling operation requires considerably more capital, personal connections and expertise. Thus unless minority entrepreneurs can transcend some initial discriminatory barriers they will have difficulty insulating themselves from FIs' social prejudices. This is one reason these loan clubs are rather rare.

Similarly, as argued above, unless a few minority workers succeed in penetrating primary sector firms, obtaining on-the-job training from their white peers, the disadvantaged group as a whole will have difficulty in developing informal networks that transmit information about valuable employment opportunities.

This analogy in the barriers faced by black entrepreneurs and black workers highlights the fairly robust parallels in labor and capital market segmentation. Both factor markets are characterized by flawed communication channels through which only selected information passes to a narrow set of individuals. In the labor market, these informal networks determine which workers learn about job openings and have access to on-
the-job training.

Similarly, informal networks determine which firms are able to form lasting relationships with financial intermediaries. Many firms already have a head start in establishing this rapport: the FIs have a "sunk" investment in their affiliation with these enterprises. Since it is inherently difficult to assess the value of new informational investments, many FIs will over-economize on the resources they commit to this effort.

This brief description of the analogy in the causes of segmentation in the factor markets is insufficient. One of the principal aims of this essay is to discern the logical relationship between these two markets' discontinuities. Having fully elaborated the two models of segmentation it is now possible to address this question in earnest.

The Theoretical Link Between Capital and Labor Market Segmentation

One cannot assess the social value of reducing financial segmentation until one has determined the structural relationship between the discontinuities in the capital and labor markets. How does assistance to small firms who have poor access to capital affect labor market segmentation? As noted above, the empirical evidence seems to suggest that small firms do in fact generate larger numbers of jobs, technologies and profits, but that the employment they provide may be less stable and is lower paying. However, the statistical data is weak or inconsistent. Additionally, the theoretical framework used to develop the empirical models are relatively crude, largely because they do not specify the interactive
relationship between firms of different sizes.

The weakness of the empirical literature makes it very useful to try to sort out the logical relationship between the two models of segmentation. Only in this manner can one start to determine whether both factor markets' imperfections can be dealt with in tandem. Since the model of financial imperfections presented above is so complex it is necessary to focus separately on two types of capital market segmentation: those pertaining to (a) risk aversion and (b) information imperfections.

I will first analyze extensively the connection between the capital market imperfections fostered by excessive risk aversion and labor market segmentation. Two main points will be made:

(a) The labor market segmentation model developed by Piore is logically distinct from the financial framework pertaining to risk aversion developed above.

(b) On the other hand the two forms of segmentation are functionally related in the sense that addressing this particular type of capital market failure is likely to exacerbate the discontinuities in the labor market.

Before elaborating the first point it is necessary to note an important assumption that is required. (The second point is more robust and does not rely on the following supposition.) I will accept Piore's most general description of the primary sector: e.g., a sector consisting of firms that exploit the economies of scale associated with the division of labor, and the related investments in human and/or physical capital. This does not mean that all secondary employment is in small firms, since larger enterprises may contain labor intensive divisions that absorb product market instability. Moreover this assumption allows for
the existence of some small firms with higher paying skilled employees
who are protected by licensing measures or craft unions. However, in the
main, it presumes that primary sector employment is concentrated in
large units of production, and particularly in oligopolistic enterprises.

The dualist model developed by Piore suggests that managers of large enterprises try to insulate themselves from market instability. In a similar fashion, the capital market segmentation model traces many of the financing problems of small businesses to a perverse aversion to variance risk among financial intermediaries. This concern violates CAPM's neo-classical efficiency standards because in theory much of variance risk can be diversified away. Thus, one might conclude that the phenomenon responsible for segmented labor markets has also narrowed small firms' access to capital: namely an excessive variance risk aversion among the corporate sector and its financiers.

The critical distinction in refuting this generalization and demonstrating the logical independent of the two frameworks is the difference between the stability of product markets and that pertaining to rates of return.

Even if a manager or financier of a large primary sector firm was completely indifferent towards variance risk, accepting CAPM's dictum that unsystematic fluctuations in returns are irrelevant, they may still go to great lengths to minimize unsystematic variations in product markets.

If a firm is trying to reap economies of scale through investments in machinery and human capital and a more extensive division of labor
then it must minimize downtime. During periods when the firm is operating
below full capacity, valuable capital and specialized personnel investments
are lying idle. If there were no transaction costs, equipment inventories
and workers could be easily sold/dismissed and repurchased/rehired, making
fluctuations in demand less problematic. But in the real world transaction
costs are substantial. This is due in part to the fact that many firms
in the primary sector employ machinery and workers that are unique,
reducing their "salvage value" and increasing the costs associated with
re-employment of factors. Finally, even in a plant operating below
capacity, many types of equipment and personnel cannot be relinquished
because they are still used sporadically. Thus reductions in output can
be very costly.

Hence, downtime and unstable markets not only increase the variance
of returns of large oligopolitic firms but they also decrease their
expected mean return. A large firm which has a stable demand is likely
to do better on average than one with a turbulent market. Any force which
reduces the mean return on investment is clearly one which even orthodox
financial managers must worry about. Thus, when the dualists assert that
large firms try to minimize the variance in their markets, the former
do not have to presuppose that these firms are also concerned about
variance of returns. Investors may or may not recognize that the
variance of returns is an inappropriate criteria for measuring asset
risk, even when they use variance of markets as an indicator of larger
firms' profitability. In other words, it is possible for labor
markets to be segmented and yet have perfectly efficient
capital markets. * 

The second proposition regarding the relationship between labor and capital segmentation is somewhat more robust, and does not rely on the economy of scale assumption posited above. This proposition is as follows: if one ameliorates those financial difficulties small businesses experience as a result of excessive risk aversion, one will increase the instability of employment and heighten labor market segmentation.

It is actually possible to develop a coherent case on both sides of this issue: a "pro" and a "con." The weaker "con" position will be described first. Drawing on a simplified version of Piore's model, one might contend that markets have a certain amount of instability that cannot be eliminated. Certain perturbations in demand over the daily, seasonal and business cycles are uncontrollable. Although counter-cyclical macro-economic policies and the restructuring of consumption patterns might dampen these cycles somewhat, the economy will still be left with a measure of instability.

Thus, as argued in Chapter III, attempts to reduce the amount of production carried out in firms which currently absorb a great deal of

*As noted above this argument relies on the assumption that extensive economies of scale exist in most industries and that the bulk of the primary sector is located within rather large units of production. There exist extensive critiques of this assumption both from a theoretical and empirical perspective. Some advocates of industrial policy assert that the U.S. is losing its competitive advantages in sectors of long run standardized product markets—the sphere in which economies of scale are critical—and must now shift to unstandardized industries which require small units of production. If this is the case, and America responds to the challenge, the dualist literature will have to be massively revised. No longer will our industries consist of a few large players and many secondary satellites. I will not attempt to trace the full theoretical ramifications of this shift in U.S. economic structure on dualist theory.
these oscillations may simply force other enterprises to accommodate a larger fraction of the economic instability. Hence ameliorating FIs' risk aversion will not change the aggregate number of unstable jobs but only the locus of these secondary sector opportunities.

One might even argue that the financing difficulties faced by small unstable firms actually increases the number of secondary jobs. Many small firms are actually discontinued because they cannot raise a sufficient amount of working capital in a timely manner. (Although working capital is somewhat more accessible to small firms than long term financing, both can be hard to obtain. Entrepreneurs' dependence on personal savings reflects the general lack of external capital sources from which smaller businesses can tap.) If entrepreneurs had access to public financing and these growth crises became less numerous then employment stability might be enhanced.

Finally, to the extent that small firms generate a larger number of net new jobs, they may serve to ameliorate labor market segmentation. When the labor market is tighter and workers have a larger number of employment opportunities they may have somewhat greater leverage over their employers. Intuitively it seems clear a wider opportunity set should improve the quality of employment since workers are likely to select the best job first.

However, there are major objections one can raise to each of these arguments, particularly when the strategy used to reduce capital segmentation involves reducing FIs' excessive risk aversion. As noted above, some of small firms' financing problems derive from their fluctuating returns.
Investors conflate variance and systematic risk either because it is inherently difficult to measure the latter or because their portfolios are insufficiently diversified. Concentrated financial markets may reduce risk-bearing to suboptimal levels. Finally some public regulations like asset limitations, interest ceilings, and fiduciary rules deny funds to riskier enterprises.

The aggregate effects of these market failures is to either (a) increase the hurdle rate for unstable business activity above what it would be in the absence of segmented capital markets; or (b) simply deny funds altogether to risky firms. Any policy intervention designed to increase FIs' inclination to bear variance risks will necessarily result in a greater volatility of economic activity. It is true that small firms do not always displace larger enterprises, particularly when they enter new markets. But precisely because these firms have the option of creating new markets based on new technologies and products, one cannot view the economy as possessing a fixed amount of instability that must be distributed among various firms.

To the degree that capital markets encourage firms to penetrate markets where the variance risks are greater, one must anticipate that contractions and failures will become more common. Increasing investors' ability to bear variance risk will also strengthen and expand those mature industries which have the greatest instability of employment and earnings. Currently these firms cannot obtain funds as easily or as cheaply because of the confusion of variance and systematic risks. Reducing the cost of capital and improving its accessibility will allow
these firms to expand to the point where their marginal systematic risk/return payoff is equivalent to other industries. Heightening the instability of profits will increase employment turnover unless managers of these dynamic enterprises happen to be committed to protecting their employees from economic instability.

Although Berger and others have suggested that the small business community is committed to retaining employees during downturns, the evidence to date is rather sketchy. The notable feature of the above argument is that it transcends the debate over whether or not small firms provide jobs that are relatively insecure. Regardless of the instability of smaller enterprises currently or even in the future, decreasing the hurdle rate of high variance firms will increase the volatility of earnings. As more firms experience wider swings in their profitability they will be forced to contract or terminate operations more frequently, thus giving rise to more employment turnover.

Hence, the fact that many FIs mistakenly conflate variance with systematic risk might be welcomed by those who want to stabilize employment. Although the stockholders can diversify unsystematic risks of a firm it is much more difficult for employees to do so.*

*To diversify the risks associated with a firm's operations, workers could actually "sell short" some equity in the business. These short sales would appreciate in value if the firm collapsed. However, at a time when managers, policy analysts, and some unions are conceiving of ways to tie employees' interests more closely with their firms' profitability through such techniques as employee stock ownership, short sales are not likely to be well received, regardless of their attraction as risk diversification devices.
On the other hand, even if one believed that small firms' financing problems simply shifted economic instability from smaller to larger enterprises, this phenomenon might be viewed as constructive. Larger firms are more capable of allocating the risk associated with market instability in an equitable manner: output contractions can be accommodated by spreading the reduction in production man-hours over a larger number of workers. Thus work-sharing arrangements can be initiated more easily. 33

The second point in favor of small business assistance—the need to ameliorate financial growth crises—is also problematic. One must discriminate between two different types of growth crises experienced by small firms. If capital is withheld from these firms because they have excessive variance risks, then the critique presented above is applicable. Providing financing to such firms will increase employment instability, not reduce it. However, if the lack of access to working capital is attributable to other factors then assistance is easier to justify (see below).

Finally the third argument linking segmentation reduction to job stability goals has some problems as well. First, as noted above, small firms' job generation capabilities have only been documented in a narrow fashion, if at all. No one has determined the amount of displacement that occurs when small businesses are born or expand. To the extent that small firm growth comes at the expense of larger firms, there is no reduction in unemployment, and thus no broadening of secondary workers' "opportunity set."
Even if the number of jobs created by small firms is much larger than those displaced in larger firms, a question remains regarding the quality of this new set of opportunities. The fact that workers have a larger number of options does not mean they have a better array of opportunities.34

Finally, if the involuntary unemployment rate among secondary workers actually does decline through small firm job growth, and workers initially gain some added leverage and choice, secondary employers still have at their disposal relatively costless recruitment devices for securing personnel who were formerly outside of the labor force, e.g., the elderly, young, discouraged workers, migrants, housewives, etc.35 Once these workers are brought into the labor force they are likely to remain there, enlarging the number of workers competing for jobs and decreasing secondary workers' leverage.

The above arguments did not rely on the assumption that primary sector jobs can only be found in large firms. However, there is an important premise that was implicitly taken for granted: the view that heightening employment instability will increase the number of secondary jobs. Short job tenure does reduce the incentive to provide on-the-job training (OJT) and opportunities for promotion. Employers providing OJT need to be assured that their workers will remain employed in the firm long enough to pay back the former's investment in human capital.36 Moreover, the type of "training through osmosis" described by Piore is dependent on a gradual skill development process and slow movements up tall career ladders occurring over an extended period of time.
As noted in Chapter I, it is possible that there are some major exceptions to this association between job stability and OJT. Osterman has identified occupations with short tenure where OJT was considerable. However the goal of employers in providing this training was to reduce instability. In addition the high rate of turnover in the cases examined by Osterman was caused by workers seeking better opportunities, not by the perturbations in demand.

In sum, it is possible that some dynamic sectors that are growing rapidly might provide OJT if they cannot recruit trained workers from educational institutions. Nonetheless, demand instability (as opposed to turnover caused by tight labor markets) does serve as a disincentive to train workers. Thus financing high variance firms is likely to reduce the incentives to provide on-the-job training.

One way to reconcile the two factor market-public agendas is to focus on the information failures rather than the excessive risk aversion in the capital market. To the extent that small firms' financing problems stem from imperfect information collection and dissemination processes the goals of reducing financial and labor market segmentation might be pursued in tandem. Assistance should be provided to small enterprises whose earnings are no more volatile than those of larger firms, but whose anonymity cuts them off from established capital markets. Financing can be provided to these firms without aggravating labor market instability.
Assuming these anonymous small firms are net job generators to the economy, this strategy might succeed in increasing aggregate employment without heightening labor market segmentation.

Thus it is necessary to distinguish between the market failures that arise due to information failures and those that derive from excessive risk aversion.

The following is a summary listing of the two types of market failures.

Factors Which Impede the Production and Dissemination of Financial Information:

1. The inherent ambiguity of information investment decisions (e.g., the meta-information problem) which leads FI's to economize on data production costs.
2. The declining marginal cost of information dissemination which fosters a sub-optimal amount of data dispersion.
3. The over-dependence on social networks and discriminatory investment screening procedures.
4. The institutional and geographic remoteness of over-concentrated financial markets.
5. The fact that larger FIs have sunk information investments in fully developed relationships with larger corporations, investments which would become less valuable if smaller more efficient firms in the same industries were financed.

Factors Which Heighten Risk Aversion:

1. Certain investors, like small business owners themselves, are insufficiently diversified.
2. Larger banks use monopoly power to reduce the variance risk of debt.
3. FIs, investors and corporate managers confuse variance and systematic risk.
4. Laws which limit the unsystematic risks borne by FIs or impose a ceiling on their interest rates.
It is important to realize that the most dynamic unstable firms suffer from both types of capital market failures. Their volatility makes it difficult to collect accurate information about them. Their executives are likely to be experts at crisis management, but not very effective at building stable coherent relationships with suppliers, credit-rating agencies, or FIs. Any information that is assembled about these firms is likely to be out of date before it is usable. Thus one must be careful in dealing with the information market failure if one wants to avoid helping high variance firms.

Although excessive risk aversion can reduce the number of unstable jobs, development agents should still be concerned about its influence on the aggregate employment level. If Birch is right, the innovation and job generating abilities of small dynamic firms are considerable. It is possible (though not inevitable) that the creation of employment opportunities will give secondary workers a wider choice of jobs and thereby improve their status. Both primary and secondary workers are in a weak position when high rates of unemployment raise fears of economic deprivation. Finally, even if the quality and stability of work is reduced by assisting under-financed small firms, helping the unemployed obtain some kind of job should be an economic priority, particularly for distressed urban regions.

Whichever firms are provided assistance, the process of targeting and delivering resources to small firms that generate large social benefits is itself an information-intensive activity. It is first necessary to screen firms that are both financially viable in terms of some type of risk/return framework.
There must be some way to trade off uncertainty (variance and/or systematic) against expected private and social returns. In any case the traditional measures of risk and return will enter the social calculus. If the excessive risk aversion of private capital markets are being addressed then the public FI should target resources to firms with high variance risk (though not necessarily higher systematic risk than would be borne by private FIs). If a firm creates social benefits in the form of training disadvantaged workers or creating a particularly large number of jobs then a lower financial expected return might be accepted. If information failures are the focus of public policy then the risk/return calculus should not be any different from that of a private FI but the development agency should subsidize the production, analysis and dissemination of information.

All of these assessments require a great deal of data. To assess the risks and expected return of a firm one must obtain a vast amount of information on its technology, input requirements, production plan, competition, and market strategy. To determine whether the firm is likely to provide on-the-job training, data on the proximity of work stations, organizational structure and tightness of labor markets are needed. Finally, to establish whether the firm will be a net job generator it is necessary to assess both its positive contribution to employment (direct, indirect, and induced) and its negative impact on other firms through displacement.

Clearly there is a great deal of overlap in the data required to make each of these assessments: in each case, information on markets,
technology and organizational structure are quite important. The institutional compatibility of these three missions is explored in Chapter VI, and in the appendix.

Summary

In conclusion, the reticence of financial intermediaries and corporate managers to invest in relatively anonymous small projects forces private individuals to be their sole financiers, a group who are ill-suited to bear the type of risk generated by these projects. Instead of financing these ventures indirectly through corporate earnings and intermediaries, thereby ensuring that unsystematic risks are largely diversified away, our financial system gives the responsibility of bearing the total variance risk of these projects to owner/managers. These individuals must not only be risk-lovers and wealthy, but they must also have management skills. The autarchic character of the secondary financial sector reduces the chances that viable ideas will be nurtured and transformed into profitable enterprises.

Social ties are critical to the functioning of both formal and informal financial intermediaries. Formal FIs like banks depend on a close rapport between loan officers and the managers of the borrowing firms. Informal credit unions exploit the social nexus existing among their members which facilitates the exchange of information, the maintenance of trust, and the conservation of a collective identity. Without this social foundation
the association could enter a negative cycle of decline.

The social basis of lending practices is the manifestation of critical informational problems experienced by FIs—problems that are not entirely accounted for by the orthodox theory. The market does not generate financial information in adequate quantities or at a reasonable cost. Moreover, decisions about whether to invest in information are inherently ambiguous. FIs institutionalize certain responses to these problems in order to minimize debate about informational issues and to establish some stability in banking practice.

The labor and capital market segmentation models are logically distinct. However, it is likely that any attempt to address the financial market failures through reducing or compensating for private FIs' risk aversion is likely to exacerbate the discontinuities in labor markets. Reducing the hurdle rate or improving the access to capital of high variance firms will heighten the instabilities of employment. Dealing with the imperfections in information dissemination, on the other hand, will not necessarily increase labor market segmentation. In any case, whichever capital market deficiency is addressed, it is necessary to compile a great deal of data on the firms that are believed to be deserving of assistance. This data is quite similar to that required to assess the firm's on-the-job training capacity. The similarity in public intermediaries data needs provides another synergistic rational for linkage.

Labor market intermediation is characterized by an even greater dominance of informal social ties which facilitate and channel information required by employers and workers. Again, there are winners and losers
in the world of labor intermediation. Disadvantaged minorities with few economic resources are shut out of many labor intermediary networks just as small firms are excluded from certain key financial markets.

The informal social processes that constrain and bind group networks are critical to the functioning of intermediaries. Thus they must be acknowledged in developing alternative mechanisms for channeling capital or allocating jobs. In order to deal with the problems caused by segmentation one must fully understand how these networks are maintained and the purposes they serve. Sections IV and V will examine these issues in more depth.

The information collection function is critical to any segmentation reduction strategy. This has important ramifications for the optimal institutional structure and political environment of public intermediation. Development institutions must have the means to assemble and analyze detailed data on firms. The organization's resources should include both money and time.

Given the political constraints under which development institutions function, only one of these two resources is usually available. Even when a development agency has the financial resources and political consent to address capital and labor market failures it rarely has the time to achieve this goal. Conversely, when time is in abundance, financial resources tend to be scarce. This pattern will be examined in detail in the following case study on Bedford Stuyvesant Restoration Corporation.
CHAPTER V

BEDFORD STUYVESANT RESTORATION CORPORATION:

THE HISTORY OF A LINKAGE EFFORT
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Introduction

To understand the nature of the comparative advantages and disadvantages of coupling labor and financial intermediation one must examine the history of development agencies which have struggled to pursue this goal. The Bedford Stuyvesant Restoration Corporation in Brooklyn, New York, is an example of a prominent development agency that has made several attempts to link these two functions. Given the fact that Restoration is one of the oldest Community Development Corporations (CDCs) and thus has served as a model for many other neighborhood-based economic development entities, the history of its training and investment programs is particularly noteworthy.

Notwithstanding the fact that Restoration's programs have on occasion been viewed as paradigms of the "CDC strategy," one must recognize that the historical development of the corporation is somewhat unique. Thus, before examining Restoration's attempts to coordinate financial and labor market intermediation, it is necessary to briefly describe the agency's origins and programmatic structure.

An overview of the evolution of the economic development investment programs will follow. The periods 1967–1972, 1974–1978, and 1978–1983 will be examined separately since Restoration's development goals were substantially different during these three intervals.

The chapter will conclude with a discussion of the strengths and weaknesses of Restoration's attempts to marry investment and training programs. I will examine the political and financial obstacles that
impaired the agency's ability to ameliorate labor and financial segmentation and hindered its innovative plans to coordinate intermediation in the two factor markets.

**History and Programmatic Description**

Restoration was founded in 1967 as the nation's first Community Development Corporation (CDC). New York's two U.S. Senators, Jacob Javits and Robert Kennedy, both played leading roles in conceiving and funding the organization. The purpose of the corporation was to "promote urban revitalization" by involving local leaders and residents in the "simultaneous economic, physical and social redevelopment of the Bedford-Stuyvesant community." ¹

In 1969 the CDC project was transformed in 1972 from a temporary demonstration program to an ongoing federal endeavor funded through Title VII of the Economic Opportunity Act.

Although some federal monies are still available today, the Reagan Administration has dismantled the program's major funding agency (the Community Service Administration) and cut back the grants to Title VII CDCs. Thus most CDCs, including Restoration, have been forced to contract their operations appreciably in the last three years.

Restoration, since its inception, has had a tri-partite structure, with all of its major programs falling into one of three major divisions: Physical Development, Economic Development and Nonprofit Community Programs. ²

The nonprofit division has jurisdiction over all of Restoration's
manpower programs. The Comprehensive Manpower subsidiary has administered the following programs:

- the Job TAP Center which refers unemployed workers to jobs and training programs;

- various work experience programs, many of them tied to other Restoration projects, particularly the beautification and rehabilitation efforts undertaken by the Physical Development division; and

- the Payment Credits program which provides credits against the loans issued by the Economic Development division, in exchange for on-the-job training of a firms' employees.

The nonprofit division used to administer a variety of other social and cultural programs, via a network of community centers located throughout Bedford Stuyvesant. Most of these centers were dissolved after the recent funding reductions. The programmatic agenda of these centers included youth development, sanitation, sponsorship of local artists, and health-related matters.

The Physical Development division administers a variety of programs aimed at improving local housing and developing sites for commercial and industrial users. Among the most prominent programs in this division are the following:

- the HIP program, which focuses on the external renovation of owner occupied homes;

- the Commercial Center and the commercial revitalization programs which attempt to strengthen Bedford Stuyvesant's retail and service sectors;

- the construction and rehabilitation of individual industrial facilities; the most ambitious endeavor was the refurbishment of an electronics assembly plant for IBM and the subsequent construction of a new plant for the firm.
As of 1981, the Physical Development division was the largest department in terms of level of funding and expenditures (see chart). It is also the division that has experienced the largest budget deficit. Hence it has received a great deal of attention from Restoration's executive staff.

Restoration's Economic Development Programs: The Early Years (1967-1972)

One of Restoration's original funding proposals, written in 1968, states that the Economic Development Department has the following five objectives:

1. to create a large number of jobs;
2. to target jobs to those residents who are unemployed or underemployed;
3. to help local residents create or expand their own businesses;
4. to create jobs as quickly as possible;
5. to facilitate the upward mobility and training of local workers.

These goals were assigned different weights at different points in Restoration's history in response to changing political conditions and shifts in the priorities and economic strategies of Restoration's leaders.

In the earliest period when Restoration's staff wrote the document from which the above list of goals was abstracted, the organization's leadership attempted to realize each of these objectives. A relatively high local unemployment rate, low rate of business expansion, and the outmigrations of a few large firms led local leaders to be very concerned
FIGURE A: SOURCES OF FUNDS
1967 - 1981

FIGURE B: USES OF FUNDS
1967 - 1981
about the lack of jobs and its effect on the welfare and social stability of the neighborhood. Historically, many of the best local jobs, e.g. in construction) had been taken by non-residents. This reinforced the agency's concern about targeting jobs to members of the community. There seems to have been some sense of the problems stemming from labor market segmentation, e.g., that many of the jobs that residents did obtain were in low skill occupations with little opportunity for advancement.

Restoration's attempt to promote minority ownership was another goal that was pursued particularly vigorously during the first few years of its existence. The adoption of this development strategy can be attributed to many factors.

First, black ownership of businesses is, in part, an extension of the fifth goal, e.g., facilitating the upward mobility of local workers. However, since it was recognized that business owners represent only a small proportion of the local work force, this was not the primary justification for giving special treatment to minority owner/managers. Another motivating factor for pursuing this goal was that white non-resident ownership of local businesses represents a significant income drain on the community's economy. Owners' wages are brought home, and their consumption expenditures and savings are received by stores and banks located outside of the neighborhood. To the extent that profits are reinvested in new business ventures, this too is often done outside the community.

Third, most of the local minority owned businesses were locked out of the private capital markets, being unable to obtain funds from
traditional financial intermediaries. Because of the discrimination, defective communication, and closed social network dilemmas discussed in Chapter IV, local minority entrepreneurs had poor access to private capital markets. Thus by aiding viable minority firms, Restoration increased the probability that its loans were being granted to businesses which would be unable to function in the absence of the special treatment afforded them by the corporation.

But perhaps the primary reason that this goal was felt to be so important during the early years of Restoration's history was the emergence of a political and social ideology formulated by the leaders of the black liberation movement. Many spokesmen during this period, including Roy Innes and Floyd M. Kissick of CORE, attributed the absence of political strength among minorities to their lack of economic power, particularly their lack of power over businesses. Moreover, black ownership of business was seen as a primary means of enhancing black pride and achieving black self-determination.\(^7\) There was a fairly active and radical chapter of CORE in Bedford Stuyvesant in the late sixties, which contributed to the popularization of these concepts among neighborhood residents and leaders.\(^8\)

Finally, the goal of black ownership was also adopted, in a somewhat diluted form, by the Nixon Administration when it developed its Black Capitalism program.\(^9\) Therefore, Restoration could expect to gain support for their programs within the community and to some extent in Washington by targeting financial resources to firms owned and managed by black residents.\(^10\)

The fifth goal, to create jobs quickly, was another objective given priority status primarily during the first chapter of Restoration's
existence. Throughout Restoration's history, the leaders of the Corporation have recognized the severity of the economic problems facing local residents. However, in 1968, the director of Restoration and those federal officials responsible for evaluating the agency's administrative effectiveness had recently witnessed several racial riots; in the summer of 1967, major disruptions had taken place in Roxbury, Newark and Detroit, as well as in 23 other cities. 11 Although minor riots had already occurred in Bedford Stuyvesant and East Harlem by 1968, many government officials and neighborhood leaders were afraid that New York would soon experience a larger, full blown uprising. 12 Thus, there was considerable pressure on Restoration to make some quick job-creating investments that would ameliorate these tensions. 13

Another factor contributing to the pressure to develop jobs quickly was the receipt of a very large amount of funds which Restoration needed to disburse fairly expeditiously if the program was to survive. Like many government "demonstration programs," the rate of expenditure of Restoration's funds was closely monitored by federal decision makers and partially determined: (a) the level of Restoration's bi-annual allocation two years hence; (b) the national program's annual appropriation granted by Congress; (c) the overall appraisal of the CDC concept; and (d) the decision to reclassify the program from a R & D project to full operational status. Hence, the heads of both Restoration and their federal funding agency applied a substantial amount of pressure on the program administrators to spend the funds quickly.
Although Restoration's Economic Development division had a wide variety of separate programs, most of its activities fell into one of three general categories:

1. Providing debt or equity financing to new or existing firms in the area. Most of the early loans were for five to ten years at no interest.

2. Providing a wide range of technical assistance: developing financial applications, accounting services, management assistance, etc.

3. Assistance in obtaining services from one of the other two divisions of the corporation: e.g., either land assembly, rehabilitation and construction services from the Physical Development division or employee referral and training credits from the Comprehensive Manpower subsidiary of the Nonprofit division.

In order to quickly create a large number of jobs, give a few entrepreneurial residents an opportunity for mobility, and help black owned businesses obtain financing, Restoration initially invested in a wide variety of primarily small, high risk minority firms. 14

Birch has found that minority owned firms are, in the aggregate, considerably different from other businesses. 15 They are disproportionately concentrated in the service sector, underrepresented in manufacturing, and considerably smaller than their white owned counterparts. Thus, by limiting investments to minority owned firms Restoration was to some extent targeting its investments to smaller personal service and retail sector firms, most of which provide little training, have weak internal labor markets, and pay low wages.

However, Restoration also wanted to create a large number of higher quality jobs. According to some Restoration officials, this could best be
achieved by assisting firms in the manufacturing sector. The conflict among Restoration's goals was heightened by the perceived necessity of making several quick investments, which precluded an extended search for the exceptional ventures which were minority owned, providing good jobs and were viable businesses.

Consequently, Restoration was driven to make a large number of quick loans to firms in both the manufacturing and retail sectors, most of which soon after failed. Of the approximately 49 investments made between the years of 1967 and 1972 (for which data was available) 36 of them (73.5%) were unable to pay back their loans. In 1977 Restoration had classified all of these loans as "in litigation or losses." This typically meant the owner had declared bankruptcy and the venture had been dissolved or reorganized. Another 9 firms (18%) were over six months late in making their loan repayments. These default and failure rates are very high relative to those of comparable loan programs; approximately 40-50% of the minority recipients of other programs tend to pay back their loans on time according to Edelstein and Bates. (See chart on next page.)

However, one must take care in comparing default rates among minority loan programs because some loan officers may tend to "cream" the applicant pool. In addition, they may have a better pool from which to select debtors, depending on the local and national economic environments at the time when the firms received and paid back their loans. Moreover, if a particular study measures the default rate shortly after the loans are granted, the repayment will be substantially lower than if it was calculated after all of the installments fall due. All three problems are confronted in comparing the default rates of Restoration's early loans to
<table>
<thead>
<tr>
<th></th>
<th>Growth Corp.</th>
<th>JLC</th>
<th>Black</th>
<th>White</th>
<th>Total</th>
<th>Black</th>
<th>White</th>
<th>Total</th>
<th>Total SBA</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Number of Businesses</strong></td>
<td>65</td>
<td>290</td>
<td>300</td>
<td>146</td>
<td>446</td>
<td>255</td>
<td>32</td>
<td>287</td>
<td>733</td>
<td>1,088</td>
</tr>
<tr>
<td><strong>Defaults %</strong></td>
<td>56.9%</td>
<td>58%</td>
<td>64%</td>
<td>39%</td>
<td>55.8%</td>
<td>42.4%</td>
<td>21.9%</td>
<td>40.1%</td>
<td>49.7%</td>
<td>52.3%</td>
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<tr>
<td>(%)</td>
<td>(37)</td>
<td>(168)</td>
<td>(192)</td>
<td>(57)</td>
<td>(249)</td>
<td>(108)</td>
<td>(7)</td>
<td>(115)</td>
<td>(364)</td>
<td>(569)</td>
</tr>
<tr>
<td><strong>Failures %</strong></td>
<td>N.A.</td>
<td>14.2%</td>
<td>54.7%</td>
<td>35.6%</td>
<td>48%</td>
<td>36.9%</td>
<td>21.9%</td>
<td>35.2%</td>
<td>442</td>
<td>51.5%</td>
</tr>
<tr>
<td>(%)</td>
<td>(41)</td>
<td>(166)</td>
<td>(52)</td>
<td>(216)</td>
<td>(94)</td>
<td>(7)</td>
<td>(101)</td>
<td>(317)</td>
<td>(358)</td>
<td></td>
</tr>
<tr>
<td><strong>Average Loan Amount</strong></td>
<td>$20,870</td>
<td>$10,000</td>
<td>$25,000 maximum</td>
<td>$25,000 maximum</td>
<td>$25,000 maximum</td>
<td>$25,000 maximum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Maturity</strong></td>
<td>49 months</td>
<td>N.A.</td>
<td>15 years maximum</td>
<td>15 years max.</td>
<td>15 years max.</td>
<td>15 years max.</td>
<td></td>
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</tr>
<tr>
<td><strong>Def. of Default</strong></td>
<td>Neither paid off nor current</td>
<td>Not current</td>
<td>Neither paid off nor current</td>
<td>Neither paid off nor current</td>
<td>Neither paid off nor current</td>
<td>Neither paid off nor current</td>
<td></td>
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<tr>
<td><strong>Def. of Failure</strong></td>
<td>N.A.</td>
<td>Write-off</td>
<td>In liquidation or written off</td>
<td>In liquidation or written off</td>
<td>In liquidation or written off</td>
<td>In liquidation or written off</td>
<td></td>
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**Growth Corp.** = Greater Cleveland Growth Corporation, an affiliate of the Office of Minority Business Enterprise (see Page)

**JLC** = Job Loan and Urban Venture Corporation, Philadelphia, a consortium of eight Philadelphia banks (see Edelstein)

**EOL** = Equal Opportunity Loan, (SBA) programs in Boston, Chicago and New York (see Bates)
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Pages 1-75
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those of the other programs, each of which were evaluated under more favorable conditions. However, one might still argue that the discrepancy between Restoration's default rate, which approached 92% in the early years, and that of the other programs, which never exceeded 64%, is too large to be attributed to these three factors. In any case, the high rate of default was perceived as reflecting an excessively permissive loan screening methodology.

It seems that these loans, most of which were granted during the first two years of the program's existence, were made somewhat hastily, on the basis of relatively little information regarding a firm's potential. The loan review analyses that were written in 1977 by the Economic Development staff, tracing the reasons for a firm's failure reveal that most of the businesses had major problems in the areas of management, product development, technology, cash flow, and/or marketing. Frequently, if any sales plan, market analysis, or operational plan had been undertaken prior to the granting of a loan, it was quite sketchy or inaccurate. 19

Although Restoration staff often attempted to put the business back on its feet by tightening up the reporting relationships among personnel or revising the firm's products, the former's recommendations were often met by resistance from management, reflecting a failure on the part of the Economic Development Department to select cooperative entrepreneurs.

The Economic Development Department's investment policies in the periods 1967-1974 defined the limits within which financial and labor market intermediation could be coupled. As we shall see, during this period, when the coordination of these functions was eagerly pursued,
in the form of the Payment Credits program, the agency's hasty investments severely constrained its ability to ameliorate labor segmentation. As a result of the Payment Credits program's failures and the decline of training as a priority relative to the agency's commercial development goals, Restoration discontinued its innovative attempt to coordinate intermediation in the two input markets.*

The Payment Credits Program**

The Payment Credits project enabled recipients of Restoration's loans to reduce their outstanding debt by providing on-the-job training to their own employees. The design of this project was quite impressive, with numerous built-in safeguards and supportive services. Unfortunately, for reasons described below, many of the procedural guidelines were virtually ignored, giving participating firms substantially more freedom than had been envisioned by the architects of the program.20

Interested firms were obligated to submit a proposal*** outlining the kinds of jobs for which training was required and the manner in which this training was to be carried out. Employers could only receive training subsidies for those workers who were certified as low-income residents of Bedford Stuyvesant (e.g., members of households with incomes

*However, after 1978, Restoration reestablished an investment/training policy which has been more successful than its earlier efforts (see below).

**Also referred to as the Training Credits Program.

***Restoration staff provided assistance in developing this proposal.
below 125% of the federal poverty guidelines). The training period was to be determined on the basis of standards developed in the Dictionary of Occupational Titles. The employer was responsible for orienting the trainees during their first two weeks of employment to the jobs, products, machinery, policies and operations of the firm.

Any employer receiving the loan credits was required to select personnel who were capable of performing three distinct training functions:

1. A supervisor/trainer, who "must possess relevant job and communication skills" and have an "ability to relate to the disadvantaged". The ratio of supervisors to trainees could not exceed 1:5.

2. A counselor, selected from the "senior levels of the Subcontractor's workforce...to provide individual assistance for in-plant job related problems and to bridge the traditional gap between supervisor and trainee."

3. An "experienced employee" in the same or similar job as the trainee who must be "an individual to whom the new trainee can relate and who will be available for advice on a regular basis."

In cases where the firm's workforce was small, the program guidelines did permit the owner/manager "to assume one or more of the aforementioned roles."

The employers were also obligated to give each trainee some medical and dental insurance, the cost of which was fully subsidized by Restoration. Moreover, whenever it was necessary, Restoration was to provide supplementary classroom training to strengthen the trainees basic or vocational skills. Finally, there was a fairly complex clearance procedure for approval of all training subsidies with several staff in Restoration signing off on a credit invoice only after verifying that the firm was in compliance with the training plan and program regulations.
Soon after the training credits program was initiated several major problems surfaced. First, many of the firms receiving credits had few if any jobs which required training. For example, a typical firm was Barnes, Cordova and Eley, a local moving, trucking and storage business employing from 18 to 24 workers on an "as needed" basis. Between 1968 and 1974 Barnes received $37,000 worth of credits against its $67,000 loan. For firms like Barnes, most of the proposed educational and counseling services which were linked to the program were of no apparent use since the trainees did not need to learn any particular skills. Nor did they need to undergo a social or emotional transition, since the jobs were much like those they had held previously.*

On the other hand, there were cases where firms did require some pre-employment skills and the managers became dissatisfied with the quality of the employees who were eligible to participate in the program. Restoration counselors initially made some attempts to mediate between employers and those workers who had difficulty performing their job duties; however, many employers continued to have no patience with their trainees.

The low quality of the jobs in the firms receiving training credits was partially the result of the hurried investment pattern that characterized the early economic development programs. The Payment Credits programs was most active during the years 1968-1973, the period in which Restoration attempted to create large numbers of jobs quickly by investing in small high risk businesses. Most of these firms either had few jobs which required training, or uncooperative managers. But another, more fundamental, though

*The program was not targeted to unemployed youth who, one might argue, could benefit from any work experience.
related defect plagued the program.

One of the most significant flaws of the Payment Credits project was that although it was originally intended as a training effort it was soon perceived by each of the relevant actors as simply a mechanism for decreasing the debt of the recipients of economic development loans. The staff in the Economic Development division was concerned about the failure rate of the firms in the loan portfolio; they viewed the granting of credits as a technique to assist firms experiencing major cash flow or other financial difficulties. One staff person noted that the program's principal function was to "pull the subcontractor out of the red." Although the personnel in the Manpower office of Restoration objected to this use of the subsidies, they were unable to convince the economic development staff that the program's original training goals should be given precedence over the default reduction objectives. The managers of assisted firms quickly learned that the corporation did not consider the program's training objectives as high priorities.

A whole series of abuses resulted from this informal shift in the program's goals. The first problem cited, namely that most of the participating firms had production processes requiring few skills, was in a sense a by-product of the transformation of the program's objectives. Training credit applications were soon evaluated largely on the basis of the seriousness of the firms' financial problems, rather than the quality of companies' jobs or their workers' training needs. Many retroactive, "rough justice" credits were granted to firms on the basis of the nominal amount of training undertaken in the recent past. Most training periods
were systematically defined as three years, even when the Dictionary of Occupational Titles indicated shorter training requirements for the firms' jobs. Ironically, the Payment Credits recipients, instead of providing better jobs and an opportunity for upward mobility, more often were dissolved soon after the credits were granted, sending their workers to look for new jobs without having acquired any new skills.

Another set of problems threatened to make the program ineffectual even for those firms which could have provided some meaningful on-the-job training. Managers typically functioned in all three of the training-related roles spelled out by the training credit contract. Although Restoration personnel attempted to perform the role of counselor, as noted above, they were not always able to resolve conflicts between managers, supervisors, coworkers and trainees. In addition, many employers convinced Restoration to allow them to select employees residing outside of Bedford Stuyvesant, often members of their family or friends. Manpower staff discovered that in many cases where the employer selected his own personnel, rather than asking for referrals from Restoration's TAP Center, employees tended to exhibit high rates of absenteeism. Finally there were indications that the employers were receiving kickbacks from their workers, paying the trainees only part of the wages agreed upon in the training contract.

As the Manpower personnel discovered the scope of the abuses described above, their criticisms of the loose structure of the program became more persuasive. Towards the end of the program's existence they succeed in winning a consensus to compel firms to accept Restoration referrals
for at least half of their training slots. In this way they were assured that a majority of the trainees would be Bedford Stuyvesant residents.

Second, starting at the point of intake, the Manpower counselors were able to develop more stable relationships with the participants, facilitating a better resolution of employer/worker conflicts and reducing the possibility of kickbacks. Although this reform improved the overall effectiveness of the program, the training credits project was soon discontinued.

Thus, ironically, Restoration's attempt to create jobs quickly for Bedford Stuyvesant residents was carried out in a self-defeating manner. Not only were most of the jobs in Restoration-financed firms confined to the secondary sector, but even after providing specific subsidies to improve the training opportunities available to local workers, many of the jobs still failed to enhance workers' skills and were held by non-residents. Firms with decent jobs which could have provided some valuable training were perceived as so close to bankruptcy that Restoration refrained from obligating them to comply with either the letter or the intent of the Payment Credits guidelines. The Payment Credits program was terminated in 1974.

Although it was one of Restoration's most innovative development initiatives, the training credits program was emasculated by the Economic Development Department's "quick results" investment policy. Contributing to the demise of the project was the need to finance small retail and service firms locating in the Corporation's commercial property. These firms had even fewer jobs that required training than those assisted during
the years 1967-1973. Thus, training became somewhat of a non-issue with respect to Corporation-financed firms, until around 1978 when Restoration began to conceive a new development strategy.

**Commercial Investment Activity: 1974-1978**

The Economic Development Loan program shifted dramatically in focus after 1973, with much less investment being made in the manufacturing sector and also a significant decline in the default rate.\(^22\) This shift occurred largely as a result of the need to assist the firms locating in Restoration's Commercial Center.\(^23\) To understand why the Commercial Center was developed and how the economic development loan program was used to address the needs of the Center and its tenants, it is necessary to digress for a moment and provide some background on this impressive project.

There were several development goals which Restoration was trying to achieve by constructing the multimillion dollar Commercial Center.\(^24\) First and foremost, Restoration hoped the Center would symbolize the "restoration of confidence" in Bedford Stuyvesant among its residents and the business community. By transforming one of the most deteriorated sites into a stunning multi-purpose commercial plaza, Restoration's leaders felt that the reputation of both the corporation and the neighborhood would be enhanced. As a hub of commercial activity, the center might stimulate new investments in the surrounding area. Secondly, Restoration staff, having undertaken some market analyses of the local retail sector concluded that there were relatively few large, competitively
priced stores in the neighborhood, and that much of residents' shopping was being carried out in other nearby communities, producing a significant income drain. Thus, the construction of a retail center could simultaneously reduce this flow of income outside the area and increase the availability of moderately priced, high quality consumer goods.

However, the concept of building a commercial "hub" was problematic in three respects. First, most of the jobs that would be generated by the retail and service firms locating in the center would be fairly unstable, low-paying, and offer little opportunity for promotion. Second, with the exception of the supermarket, the number of jobs per dollar invested in these firms was fairly low, although the administrative cost of screening each business would be comparable to that required to evaluate larger establishments. Finally, the center might compete with existing retail firms clustered along Nostrand Avenue. (Though, as indicated above, one might equally argue that the center would strengthen these firms by diverting shoppers from downtown Brooklyn to the Nostrand Avenue/Fulton Street commercial "nexus.")

The decision to build the Commercial Center had a predictable effect on the Economic Development's business investment policies, particularly given the manner in which the Plaza's construction was financed. Restoration had been unable to obtain permanent financing for the $7.5 million project because it had not succeeded in winning a letter of intent from any anchor tenant prior to construction. Having to rely on an interim construction loan in 1973, Restoration was in a vulnerable position, the threat of illiquidity being fairly significant. The
relatively short term five year loan from Chemical and Citibank would have been very difficult to repay unless longer term financing was obtained. To achieve this goal, Restoration needed to fill up the Center with tenants that had good bond ratings. To attract such tenants, Restoration made a large number of equity and debt investments in fairly well established retail and service businesses that were willing to locate in the Commercial Center or in other nearby Restoration-owned commercial space. These investments tended to be considerably more profitable than those undertaken during the first phase of Restoration's economic development loan program. However the selection of highly rated tenants deviated from Restoration's original plan to fill the Center with firms owned by local entrepreneurs who could not obtain reasonably priced financing or space.

Although no data was available on the race of the owners or managers of the firms assisted during the two phases of the Economic Development Loan program, Restoration could probably find more local minority businessmen who were willing and qualified to run firms in the retail or personal industries than in the manufacturing sector. As noted above, these industries are easier for minority entrepreneurs to penetrate, because they are less vulnerable to discrimination from suppliers or purchasers, and require a smaller amount of start-up capital. Moreover, minorities have had more experience in these lines of businesses historically. This is another possible reason the default rate declined during the second phase of development.
While 78% of the loans granted from 1967–1972 were in the "litigation or loss category," only 24% of those granted after 1972 were similarly classified.* Although not all the Economic Development loans granted after '73 went to tenants of the Commercial Center or Restoration's other commercial properties, almost all of them did go to retail or service firms employing low skilled labor with some increase in loans to construction firms doing business with Restoration. From 1967–1972 when manufacturing businesses received 24% of the loans and the retail/service and construction sectors received 60% and 15.5% respectively; after 1972 there were no loans made to manufacturing firms with 77% going to retail or service businesses, and 23% to construction.

The decline in the loan program's default rate was, in part, simply due to Restoration's growing sophistication in screening applicants. However, this improvement was also a response to the heightened pressure on Restoration staff to ensure that: (1) firms locating in the Commercial Center, many of which also received debt or equity financing, were sufficiently viable to pay their rent in a timely manner and, concommitantly, receive a decent bond rating; and (2) all new debt and equity securities purchased by the Corp. had relatively low risks of default, paying a safe and competitive rate of return.

The perceived urgency of realizing the second goal, decreasing the portfolio's default rate, was reinforced by new signals emitted from Washington.

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*This discrepancy is partially due to the fact that the firms receiving the more recent loans may not have had time to default; but there does seem to be a significant improvement in the repayment pattern, irrespective of this measurement problem.
The Community Service Administration (CSA), the principal federal funding agency of Restoration and other Title VII CDCs, began to revise its performance criteria in 1975. First it specified that CDC ventures should "attain self sufficiency over the short term." CSA also began to force the CDCs themselves to become fiscally self reliant, decreasing their overall funding levels. These funding cuts impaired the CDCs' ability to (a) finance risky (high variance) ventures, and (b) screen and refer businesses to private intermediaries. Both of these problems will be examined below.

In the summer of 1977 the Economic Development Loan Program was discontinued. Although the default rates had declined, they were still significantly higher than other private and public loan programs. Thus, Restoration's leadership continued to question the efficacy of the program. But more relevant to the demise of the program was a second revision in CSA's policies relating to the approval of CDC investments.

Since 1969, CDCs had been granted bi-annual allocations out of which they issued loans without obtaining clearance from Washington. In 1977, CSA decided that all new investments would have to be approved individually by their Office of Economic Development. In conjunction with the continued decline in Restoration's funding levels, this policy severely constrained the Economic Development Department's flexibility. Restoration decided that, henceforth, it was only worthwhile to purchase equity securities in larger denominations since so much time and energy was exhausted in obtaining approval for each investment.
Recent Attempts to Couple Financial and Labor Market Intermediation: The Cablevision Experiment

During the last five years Restoration has changed its investment policies in a way that has enhanced the potential for coordinating business development programs with the training and referral functions performed by its Comprehensive Manpower subsidiary. Concurrently, however, the corporation curtailed its efforts to ameliorate financial segmentation.

Restoration has decided that it must finance only intermediate sized firms which generate a sizeable number of jobs, provide some opportunities for promotion, and require proportionately smaller expenditures of administrative resources in originating and servicing an investment. 28 This strategy is partially the result of the radical decline in federal funding for CDC administrative budgets.* To achieve this goal it has moved back into the manufacturing and higher skilled business service sectors which have somewhat broader training needs and opportunities for promotion. In addition, new economic development personnel have been hired during the last few years, one of whom has experience administering employment and training programs. In this manner, the corporation has strengthened those projects jointly administered by the Economic Development and Manpower Departments.

The experience of the training credits program was useful in that it taught many Restoration personnel the difficulty of coupling financial

*Today Restoration's entire federal funding is in the form of individual venture grants. Since its administrative overhead is no longer funded directly, the agency is compelled to select even fewer and larger ventures to reduce information and transaction expenses.
and labor market intermediation. Manpower staff learned that care must be taken in selecting firms receiving debt or equity financing and training subsidies. The assisted businesses must be sufficiently viable and stable to afford its workers some opportunity to acquire skills during the course of the production process. Moreover, Restoration staff increased their commitment to select only income eligible residents of Bedford Stuyvesant to participate in training programs.

Cablevision is a fairly large company which operates cable systems in Long Island, New Jersey and the Midwest. In 1979, Cablevision approached Restoration to find out whether the latter was interested in investing in a Brooklyn cable subsidiary. Believing the city was about to allocate the franchises for the borough, Cablevision wanted to convince a community-based organization to become a co-owner in order to improve the company's chances of obtaining the rights to operate the Brooklyn system. Restoration, with its diverse political ties, was a particularly attractive partner.

After a prolonged negotiation and delays in receiving CSA approval, Restoration invested $150,000. In return, the CDC received 9% of the equity of the Brooklyn cable subsidiary, 2% of franchises elsewhere in the city, and a commitment to begin training 15 disadvantaged Bedford Stuyvesant residents. After working in Long Island these workers would "form a core of skilled, engineering individuals required to construct and operate the television system for Cablevision Brooklyn." The goal was to allow this first group of trained residents to supervise a much larger corps of Bedford Stuyvesant workers when the firm introduced cable TV to Brooklyn.
This was a particularly good investment for Restoration since the 9% equity interest could easily be valued at $6 million. Most important, Cablevision made an informal agreement to hire many of the Brooklyn system employees from Bedford Stuyvesant, utilizing Restoration's labor referral system.

An attraction of the firm was the promotional opportunities it offered. A majority of the executive staff in the company were said to have been promoted from entry level positions, many of them from the installation or construction departments. Although mobility to the top levels of the firm may become more difficult as the company matures, the rapid expansion of the industry should continue to provide some opportunities for promotion unless management destroys existing career ladders.

Notwithstanding the basic advantages of the Cablevision agreement, the placement and training of the first set of trainees was fraught with so many problems that soon the project was forced to come to a halt. Each of the participants resigned or was dismissed within the first few months. The following were the problems to which Restoration attributed each of the terminations:

<table>
<thead>
<tr>
<th>Number of Trainees</th>
<th>Principle Reason for Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Personal Problems (resignation)</td>
</tr>
<tr>
<td>1</td>
<td>Better Job Opportunities (resignation)</td>
</tr>
<tr>
<td>2</td>
<td>Often Late and Absent (dismissal)</td>
</tr>
<tr>
<td>2</td>
<td>No Ability to Perform Job Functions; largely a skill problem. (dismissal)</td>
</tr>
<tr>
<td>1</td>
<td>Unsuitable for Position; primarily an attitude problem. (dismissal)</td>
</tr>
<tr>
<td>3</td>
<td>Unexplained (resignation)</td>
</tr>
</tbody>
</table>
To understand these problems it is useful to examine the experience of this first group and contrast it with their successors, who to date have fared somewhat better. The first group of participants was selected by Restoration and Cablevision in a somewhat sporadic manner over a fairly prolonged period. After the company agreed to hire a participant referred by Restoration's Manpower Department, he was immediately given a job assignment and put to work without any orientation or formal training. The trainees' coworkers were supposed to simultaneously meet their own production quotas and provide OJT. This made it quite difficult for the participants to acquire the skills needed to perform their job duties efficiently. The trainees also found it difficult to travel to Long Island, becoming physically drained from the long commute.

Another serious problem was the antagonism expressed by the trainees' coworkers toward them, a particularly troublesome state of affairs given the participants' dependence on their peers for on-the-job training. The coworkers' negative attitude seems to have been motivated by several concerns. The trainees suspected that the existing work force was simply articulating their deep rooted class and racial prejudices. Indeed, Cablevision's labor force was almost entirely white, while the trainees were all Hispanic or black. Whatever the reason, the trainees found it exceedingly difficult to obtain training from their peers.

Although the precise meanings of the reasons for leaving are not clear, it is apparent that each of them, with the possible exception of "better job opportunities," could have stemmed from a difficulty in
acquiring skills and dealing with the coworkers' antagonism. The variation among the reasons may have been due more to unique individual reactions to a shared set of problems than to actual substantive differences in the difficulties faced by each of the trainees.

The Economic Development and Manpower staff persevered and made several positive revisions in the program which seem to have improved the situation substantially for the second group of participants. Restoration's leaders were quite familiar with the managers and the structure of Cablevision, having undertaken prolonged inquiries and negotiations prior to providing financing to the firm. This enabled the Corporation to perform an incisive inquiry to determine why the training program had been so unsuccessful. Even more importantly, the firm was dependent on Restoration, not only for financial assistance but for political support in obtaining the franchise. This dependence gave Restoration a substantial degree of leverage in its effort to compel the company to agree to adopt the Manpower coordinator's proposals for restructuring Cablevision's on-the-job training system.

A series of extensive meetings attended by executive staff from Restoration and Cablevision were held to decide how the program should be improved. After a large number of internal memoranda were written analyzing the program's weaknesses, letters were sent to Cablevision sharing Restoration's diagnosis of the problems. Eventually, Restoration developed a final list of recommendations which were agreed to, in full, by Cablevision:

- Participants were to be screened and began working as a group to facilitate the development of an "esprit de corps."
Cablevision was to provide an elaborate orientation for the trainees, to give the participants a sense of the opportunities for vertical and lateral movement in the firm, reinforce their esprit de corps and allow supervisors (rather than coworkers) to provide skill training in a more formal context.

The participants' coworkers were to be given an incentive to refine the trainees' skills including a reduction of former's production quotas.

Ken Diaz went out to Cablevision at least once a week to talk with the trainees and management about the training program. The discussions with trainees were held both in groups and individually. In order to minimize the adverse impact of any negative rumors on the participants' morale, Diaz tried to act quickly to either substantiate a charge, demanding that management address the matter immediately, or refute it and convince the trainees that they need not be concerned.*

The group counseling enabled the trainees to express their tensions about the job, and anger they felt both toward the older cable workers and their co-trainees.

Initially, the structural reforms in the program appeared to pay off. The rate of turnover was radically reduced and most of the trainees succeeded in meeting their production quotas. However, during the last year the trainees in Cablevision have encountered new major difficulties. First, the inter-racial conflicts have flared up again. The workers who have had the most difficulty in dealing with the prejudice of their white

*Among the false rumors that were circulated was that the trainees were about to be transferred to other jobs that were less desirable; among those having some basis in fact were that coworkers were complaining too much about the trainees' performance, the quotas were about to be increased significantly, and the trainees were to be split up and assigned to two overlapping shifts which would force all of them to stay at work much longer since they commuted together in the same Restoration-owned van.
peers are those located in work rooms where there is very little space or privacy. In contrast, the workers assigned to the construction and installation crews are measurably more independent, and have adjusted to the social organization of the firm fairly well. (This finding is consistent with Kornblum's observation regarding the types of work stations that heightened inter-racial tension in the steel mill.)

The lack of communication and poor relations between the trainees and the other workers in Cablevision has fostered a number of other problems. For instance, one of the new trainees has produced at twice the rate of his peers. He was either unaware or uninterested in the informal ceiling on daily output set by the other employees. This has exacerbated the inter-racial conflict appreciably. Second, the other workers continue to refuse to provide adequate training for the Restoration employees. Several Restoration workers were convinced by their white peers to adopt production techniques that they later found to be inefficient and rarely used by any other worker. In addition, some trainees on the construction crews have been deprived of safety equipment that is regularly issued to other workers. Finally, one trainee was convinced by his supervisor and coworkers that he should resign because of his failure to come to work. He had taken two days' leave without permission; however the absence was due to the unexpected birth of his child.

Cablevision management has refused to consider promoting any of the trainees to the supervisor vacancies that have appeared, even though, according to the Restoration training coordinator, many of them have demonstrated supervisory capabilities. This refusal violates the intent
of the original agreement which was directed toward producing some supervisors from Bedford Stuyvesant who could help manage the cable hook-ups in Brooklyn.

In addition, Cablevision has refused to replace the original crew of workers who resigned or were fired during the first months of the program. Again this is inconsistent with the terms of the original agreement which stipulated that 15 positions would be available for Restoration-referred employees.

In contrast to the first series of problems that arose during the training project, this set of difficulties has proved to be relatively intractable. The Restoration training coordinator has found it difficult to make any headway in resolving these issues largely because Restoration's leverage over Cablevision has declined. In part this is because Restoration's political influence with the municipal government has proven to be much weaker than Cablevision had envisaged. Thus Cablevision does not feel as though it has anything to lose by damaging its relationship with Restoration. In fact Cablevision is currently considering legal action to reduce Restoration's share in the limited partnership agreement from the 9% level originally assented to in the contract. Cablevision has worked out the basic terms of its franchise agreement with the city so that whatever political influence Restoration still exercises is less useful to the firm.

Restoration's leverage over Cablevision proved to be rather precarious given the agency's unstable position in local political coalitions and the
firm's limited needs for lobbying assistance. But in the end it was really the CDC's financial crisis which paralyzed the training coordinator in his attempt to address the trainee's difficulties. All of the attention of Restoration's top management is currently focused on filling the agency's large budget gap.

If the dispute only revolved around the future of the 7-15 trainees involved in the current phase of the program then the breakdown in negotiations would be less significant. However, the fate of these initial trainees may determine the rate at which Bedford Stuyvesant residents can be hired when the expansion phase occurs. The similarity in racial backgrounds between the trained Bedford Stuyvesant workers hired in phase one and the hundreds of workers needed during the Brooklyn expansion would facilitate the training process. The comparability in backgrounds would have helped the trainees hired in the second phase transcend the problems confronted by the initial crew of Bedford Stuyvesant workers. They would develop skills and acquire social support much more rapidly. In the absence of such an arrangement it is unclear whether Cablevision will be able to hire workers from the Bedford Stuyvesant community to execute this phase of the project.
Addressing Labor and Capital Segmentation: Implications of Restoration's Experience

The history of Restoration's development efforts highlights the problems CDCs face when they try to address labor and capital market segmentation. The case study reveals the formidable obstacles confronted by unskilled minority workers who attempt to penetrate a primary sector firm with an all-white labor force. The case also indicates the difficulties involved in providing financial assistance to firms whose high variance risk levels or anonymity has isolated them from private capital markets. Finally, the genesis of Restoration's development programs shed light on the strengths and weaknesses, benefits and dangers associated with linking financial and labor market intermediation.

A different set of dilemmas confronted Restoration during each of two principal chapters of its existence. During the early years, Restoration was blessed with a generous federal funding source which supported the CDC's policy of employing a broad range of criteria in assessing business ventures. Moreover, the agency was encouraged in its efforts to marry labor and financial intermediation.

However, this "reform" period was also characterized by a confluence of administrative and political pressures to spend funds quickly. In the final analysis, it was this latter objective which undermined Restoration's ability and will to use development finance resources to enhance the training opportunities available to local residents.

In contrast, during the second chapter of Restoration's existence, the CDC encountered increasingly strident demands to narrow its investment
criteria. These demands were accompanied by a radical reduction in the level of public funds granted to the Corporation. These two forces sharply constrained the agency's ability to address financial segmentation through risk taking or the subsidization of information dissemination. They also made it more difficult to develop comprehensive programs to assist secondary workers obtain primary sector jobs and thereby reduce labor market segmentation. In spite of these trends, Restoration did manage to re-establish a program that linked its development finance role in a constructive fashion with its labor intermediation functions.

During the first five years of Restoration's existence, when the Training Credits and Economic Development Loan programs were at their height, the agency was obligated to maintain a high rate of program expenditure. These pressures impaired the agency's ability to address financial market segmentation in a manner that was consistent with its labor market goals of creating higher quality employment and training opportunities for local residents.

It is true that the funds were targeted to local minority entrepreneurs, an objective which in itself tends to focus resources on firms with poor access to capital markets. As noted in Section III, minority entrepreneurs have trouble raising capital because of pure racial prejudices, narrow social networks and an inability to communicate with personnel employed by financial intermediaries.

Moreover, the liberal funding environment allowed Restoration to finance firms whose variance risk was unacceptably high as far as private
FIs are concerned. Since most individual CDCs, Restoration included, had undiversified portfolios, the only way they could bear these high variance risks was if Washington functioned as a "collective diversifying agent." By compensating the CDCs whose projects failed due to the realization of downside unsystematic risks, the federal government would serve as an insurer of portfolios. In this manner all of the CDC's portfolio would merge in effect, diversifying away the unsystematic risks embedded in each of them individually.

Thus Restoration was encouraged to deal with two important imperfections that plague financial markets: discriminatory financing criteria and excessive risk aversion. However, as argued above, to address financial market imperfections without exacerbating labor market segmentation, it is useful to acquire, analyze and disseminate detailed information on potentially viable ventures, focusing financial assistance on ventures whose anonymity rather than high variance risks or instability cuts them off from private FIs.

It is apparent, however, from both the records of the Economic Development Loan program and various interviews with Restoration personnel that Restoration's lending officers did not feel that they had time to do an extensive analysis of the operations of each of the borrowers' strengths and weaknesses.

The time constraints imposed on Restoration's loan officers and the concomitant high rate of defaults gave rise to a series of problems that put the program in grave jeopardy. The growing chorus of critics who emerged within and outside of the agency viewed the defaults as a
reflection of Restoration's lack of business acumen or of its patronistic orientation. Moreover the defaults directly undercut the flow of funds that were re-channeled into the program. Finally, staff concerned with employment stability were critical of the loan program because it created so many businesses which had very short life spans.

The Training Credits program is a good example of how coordinating training and development finance roles can result in the weakening of the former function. A defacto form of coordination was achieved which undercut the program's original linkage goals. The program's designers had viewed the financial subsidization of the firm as a means for developing a training program. Instead the training subsidies became the means to improve the financial health of the borrowers. The reversal in the program's aims resulted from the institutional power possessed by the Economic Development office and the importance the organization placed on the default reduction goals.

The fiscal and political constraints that impinged on Restoration during the development of the Commercial Center were quite different from those in force during the earliest chapter of its history, Washington was sending signals to all of the Title VII CDCs indicating that it would only approve firms which could reach break-even fairly quickly.

But the most important factor in this period that deterred the corporation from assisting firms with poor access to capital markets was the need to attract enterprises with high bond ratings to the Commercial Center. Restoration's lack of permanent construction financing compelled the agency to employ conventional criteria in selecting the Center's tenants.
Unless Restoration adopted the methodology of private financial intermediaries in its lessee selection process it was unlikely to raise funds from these sources. It is conceivable that Restoration might have developed new information on some local entrepreneurs' commercial ventures that could be used to shape the way these firms were assessed by financial institutions. But this option was foreclosed once construction was well underway. Finding it had to quickly refinance a multi-million dollar project, Restoration chose tenants that would be initially perceived as creditworthy enterprises.

Restoration was able to use its financial participation in the Cablevision project as a tool to formulate a strategy to expand training opportunities for local residents. This is a prototypical form of linkage. Although its influence over Cablevision was shortlived because of its political nature, the agency was able to use this leverage to improve its own understanding of the problems faced by the Cablevision trainees and induce the firm's management to adopt the initial recommendations for corrective action.

Restoration's analysis of the trainee's problems was very acute, reflecting a detailed understanding of the economic and social roles performed by the Cablevision coworkers. Restoration discovered how the Cablevision white workers withheld their knowledge of the production process; to employ the language introduced in Section IV, the trainees were deprived of informal intermediation in the internal labor market. The genesis of the Cablevision training program indicates how public agencies might try to address minority employees' difficulties in adapting to the productive, social, and organizational structure of a firm.
The restructuring of supervisory incentives was an important first step in improving the trainees' access to informal OJT. However, conflicts persisted even after the quota was revised. The tension between the two racial groups was deep rooted, perhaps reflecting the white workers' fears of displacement or the degradation of their occupational status. It was not enough to give the older workers the option to provide training since they perceived the Bedford Stuyvesant workers as a threat to their job security, status and the career ladders in place within the firm. Thus they had an interest in ensuring that the participants were unable to retain their jobs.

Restoration dealt with these problems by formalizing the training program and then providing counseling services to the trainees. The formal training curriculum succeeded in increasing the new participants' independence from the older workers, providing an alternative means of obtaining skills in addition to informal OJT. The counseling service allowed Diaz to identify tensions and disagreements before they manifested themselves in full blown conflicts. More importantly, it enhanced the esprit de corps among the trainees, providing a source of emotional support that was needed in the absence of positive relations between the trainees and the bulk of the Cablevision work force.
In sum, the Restoration case study demonstrates that there are a variety of ways labor and financial intermediation can be linked. From the standpoint of the segmentation theories presented in this paper some of these linkage outcomes are decidedly less attractive than others. Restoration linked the two intermediation functions during the training credits program but only in a fashion which perverted the original mobility goals of the program. During the Cablevision experiment Restoration revived its linkage efforts and succeeded in making some headway in addressing labor segmentation through a small pilot program.

Restoration's difficulty in following through with strategies to ameliorate factor market segmentation arose in the first instance from federal pressure to spend quickly and, in the second, from federal cutbacks and demands to achieve fiscal independence. Both of these environments, representing polar-opposite political configurations, proved to be counter-productive insofar as a reduction in factor market segmentation is concerned.

The lack of financial autonomy can increase the degree to which a development agency is compelled to adopt the investment criteria of private financial intermediaries. During the development of the Commercial Center this was demonstrated through Restoration's perceived obligation to cream tenants for the complex. Restoration's ability to absorb financial risks and subsidize the generation and dissemination of information about new ventures has been radically compromised by the recent funding cuts.

Screening and information dissemination services which can reduce information barriers in capital markets carry a substantial price tag.
Although there may be some room for profit-maximizing activities in a campaign to reduce financial market segmentation,\textsuperscript{32} this solution has a limited application. Given the delining marginal cost of information dissemination, this function can only be performed efficiently if it is subsidized. To the extent that CDCs find it desirable to compensate for excessive risk aversion in the private sector, they cannot afford to bear these risks themselves unless their funding source acts as a collective diversifying agent.

Lack of financial independence also prevents CDCs from addressing labor market segmentation. Clearly, if a development agency must depend entirely on project income for its future revenue stream, it will not be able to favor projects with low profits and high social returns, decrease dependence on welfare, ameliorate labor bottlenecks, or create a more equitable distribution of jobs and income. Often it is necessary to offer interest, tax, or wage subsidies as an incentive to develop employment and training opportunities that are conducive to the integration of secondary workers into the primary sector.

In addition, development agencies must collect special information to identify which ventures lend themselves to such a plan. Although some of the information required to assess private production plans or to develop alternative training proposals is collected during the course of a normal financing evaluation of a venture, other essential pieces of data require an independent effort, an effort that must be subsidized with public funds. Financial weakness also prevents a development agency from intervening after start-up to improve the OJT process, resolve inter-
racial disputes, or induce management to utilize the firm's career 
ladders.

There are many institutional, political and economic problems that a 
development agency must confront when it attempts to coordinate inter-
mediation in the two factor markets. This is clearly demonstrated by the 
history of Restoration's development programs. To convince public 
officials that coordination is a worthy objective one must develop a 
fairly compelling rationale.

Although part of this rationale has been described in the conclusion 
of Chapter IV, the argument presented there focused largely on the inter-
dependence of the ends of factor market intermediation. However, this 
linkage of policy goals does not necessarily require the actual 
institutional merging of intermediation functions.

To see why this day-to-day coordination is necessary one must also 
elaborate the relation between the means employed by labor and capital 
intermediaries in the public sector. Restoration's experience highlights 
some of the costs and benefits involved in such an effort. It is now 
necessary to outline more systematically the strengths and weaknesses, 
dangers and opportunities that derive from coupling interventions in the 
two factor markets.
CHAPTER VI

LINKING CAPITAL AND
LABOR MARKET INTERVENTIONS:
SYNERGIES AND IMPEDIMENTS
Introduction

A broad array of public officials and private researchers have urged development finance and manpower agencies to coordinate their efforts. But many of these advocates have not provided a detailed explanation of why coordination is an important goal. In part, the absence of analytical policy analysis in this area is attributable to the intuitive logic behind linking job development and training activities.

The widespread commitment to coordination also reflects the fact that it is a fairly innocuous goal: pursuing this objective does not necessarily involve the creation of whole new forms of public intervention but only the consolidation and rationalization of existing programs. Moreover, it is a goal which draws a broad mix of supporters with varying ideological commitments. Conservatives, liberals, and radicals are all critical of bureaucracies which pursue their own parochial goals in defiance of local needs, values, institutions, or the objectives of other public bureaucracies.

Finally, coordination is frequently adopted as a goal because of the perceived complexity of social problems although even this justification often conceals other hidden agendas. In the 1960's, antipoverty programs emphasized the need to address many of the physical, political, social and economic problems of low income citizens simultaneously.
Frequently this strategy was the product of a compromise among various groups and agencies which had different interests, programs, and political goals and found coordination to be an uncontroversial common ground. In other cases the goal was endorsed because it gave power to local leaders or directors of new federal agencies who found a source of legitimation in the role of coordinator.  

Although coordination of public agencies has broad support as a general goal and is nominally pursued by a large number of governmental organizations, it is a very difficult objective to realize. Thus it should not be treated casually by those who endorse it. A compelling justification for the linkage position is needed before a large amount of resources are devoted to carrying it out. Political executives can easily find all of their energies consumed trying to placate the staff of agencies who view real coordination as a threat to their autonomy. Moreover, given the pervasiveness of short term crisis management in public agencies it is very difficult to shift to the relatively lengthy planning horizon that is required when organizations try to mutually coordinate their actions. Sometimes coordination conflicts with other important goals like fostering more client participation, or making organizations more flexible and responsive to changing needs. Thus the rationale for accepting this aim must be very compelling before it is pursued actively.

Labor and financial interventions need to be coordinated for a great variety of reasons. However, the two principal rationales pertain to the ends and means of public policy: the goals of reducing segmentation
in the two factor markets are dynamically related; secondly, the strategies and institutional mechanisms in which the interventions are embodied are quite similar and complementary.

The factor market policy agenda that was examined in this thesis is the amelioration of segmentation. In the labor market this objective involves assisting disadvantaged workers obtain and retain jobs with training and promotional opportunities. It also requires public development agencies to increase the aggregate number of higher quality jobs, or, at minimum, avoid increasing the size of the secondary sector at the expense of the primary.

In the capital market, a segmentation reduction program is aimed at facilitating the flow of financial resources into small firms whose anonymity or unstable earnings prevent them from gaining access to private financial intermediaries.

These objectives are not always consistent. In particular, heightening the instability of employment by financing high risk firms may exacerbate labor market segmentation. A risky firm is likely to be one with large oscillations in its demand for labor. Perturbations in labor demand reduce firms' ability and incentive to provide meaningful training opportunities to unskilled workers.

In Chapter IV it was argued that one means of reconciling the labor and capital market agenda is to focus public assistance on those firms impeded by imperfect information dissemination systems rather than those inhibited by excessive risk aversion.

On the other hand, although excessive risk aversion does limit the number of unstable employment opportunities, development agencies
must still be concerned about its impact on the aggregate employment level. Small dynamic young firms may have considerable job and innovation generating capabilities. Though by no means inevitable, the creation of new jobs can help secondary workers by widening the array of employment options or simply reducing the length of their unemployment spells.

The need for goal linkage is clear when development agencies must choose between these competing aims. The policy mix must reflect a careful recognition of the costs and benefits associated with each segmentation reduction strategy. Policy analysts can attempt to focus their efforts on those sectors where the two sets of development goals are compatible but they will ultimately find that some prioritization of economic objectives is necessary. In the final analysis this prioritization schema can only be legitimately defined by disadvantaged workers themselves, whose unemployment and lack of access to training opportunities provide the most compelling justifications for factor market interventions.

Aside from this interdependence in the aims of public policy, there is also a close connection between the strategies and institutional mechanisms employed to reduce factor market segmentation. Both types of intermediaries must collect a vast amount of economic intelligence. Indeed one of the principal market failures they should address is the limitations in private intermediaries' collection and transmission of information.

Public finance entities must develop high quality data on relatively unknown firms, assessing their technologies, market potential, the viability of their management team, as well as all the other
conventional elements of a business plan. However, these are precisely
the types of facts that a labor market intermediary should obtain in order
to determine whether a firm can provide valuable on-the-job training.

Most intermediaries develop a special rapport with their clients
which gives the former exclusive access to valuable information as well as
a great deal of economic leverage. Sometimes neither an LI nor an FI
in isolation possess sufficient influence over a firm to convince
management to accept either of their recommendations. However, if they
work together, intermediaries can use the combined weight of financial
and training resources to compel managers to revise their production
plans in a socially beneficial manner. In this way development agents
can reduce segmentation and maximize other public goods.

Information and leverage are useful both before and after a
venture is initiated. Often a training program falters in the initial
phases of a project. In other cases a firm experiences financial
difficulties that threaten to vitiate the social and economic benefits
generated by the enterprise. Consequently, it is necessary to use
the knowledge, resources and influence of both labor and financial
intermediaries to resolve these issues.

In this chapter I will attempt to elaborate why the coordination
of development finance and labor market intermediation is a useful
objective. Throughout most of what follows I will assume that the
principal policy agenda is to reduce factor market segmentation. How-
ever, many of the arguments regarding the costs and benefits of
coordinating these two intermediation functions will apply to public agencies that have completely different policy goals.

Next I will attempt to clarify the need for linkage by focusing on the sequential stages of a development program. This analysis of the process of intermediation is useful both because it differentiates between the means/ends justifications for linkage and because it captures some of the substantive content of the actual tasks performed by intermediaries. In each case I will try to highlight not only the advantages of marrying these two functions but also the dangers and obstacles that emerge in pursuing linkages.

Finally, a very brief summary of the major rationales for coordinating labor and capital market intermediation is provided at the end of the chapter.
There are five major phases of intermediaries' involvement in any development program. During each of these phases labor and financial market intermediation should be coordinated. The exigency of a linkage policy arises out of the peculiar functions performed in each of these stages. The stages consist of the following activities:

1) Setting basic development goals.
2) Developing long term plans and targeting specific industries and firms.
3) Negotiating the terms of a venture with other participants.
4) Monitoring and exercising control over the venture.
5) Exiting from the venture and facilitating the transfer of workers and capital to other firms.

Goal Setting

The first task of a public intermediary should be to define its economic and social mission. The importance of coordinating labor and financial intermediation goals has been explored at length above and in Chapter IV. I will summarize the principal arguments and then turn to an analysis of the obstacles that impede these institutions from formulating a consistent development agenda.

Coordination of the aims of public agencies that intervene in labor and capital markets is necessary because their objectives are often in conflict. This is particularly true of development programs engaged in ameliorating factor market segmentation. Public intermediaries must
weigh the relative benefits to be reaped from reducing financial as opposed to labor market segmentation.

Where small firms financing problems stem principally from basic flaws in information dissemination mechanisms, the two objectives can be reconciled. However, when the main segmenting force in a capital market is the excessive risk aversion of investors, the tension between the two sets of goals are likely to be significant.

Using the language of the neoclassical paradigm, investment criteria should not only reflect conventional rate of return and systematic risk considerations but should also account for both the positive and negative "externalities" generated by firms. The costs of relegating a class of workers to unstable dead-end jobs, forcing them on and off public assistance programs, draining the resources of publically sponsored job referral programs and exacerbating labor bottlenecks are quite high but are not reflected in the expenses of secondary firms. On the other hand these costs must also be weighed against some secondary firm's ability to generate large numbers of jobs and develop new technologies. These social benefits are also insufficiently internalized by private investors. The fact that these two types of externalities offset each other does not vitiate the rationale behind creating a public FI since it is unlikely that the social costs and benefits are exactly equal.

It is necessary for public intermediaries to pursue a common set of goals in order to project a consistent message to the business community. Unless there exists a fairly uniform stream of signals emitted by public agencies, managers and potential entrepreneurs will be confused
as to how they can expect to obtain the most valuable forms of subsidies, loan guarantees, procurement contracts, etc.

If public FI's and LI's do not succeed in cooperating they will reduce their aggregate impact on the economy. When an LI develops counseling and OJT wage subsidy programs that are tailored to large primary sector businesses, these resources will be inefficiently utilized unless a public FI seeks to attract and retain such firms. The problems associated with integrating disadvantaged workers into these enterprises are fairly unique and call for a distinct institutional response. Counselors and labor market analysts must familiarize themselves with the recruitment and training policies of these firms as well as the referral role and perceived economic interests of their unions.*

Conversely if a public FI is committed to creating a large number of jobs by financing a variety of small unstable firms, LI's should attempt to mitigate the impact of the concomitant employment instability. As suggested above, LI's can develop a set of re-training and upgrading programs that cut across firms. By filling the gaps in career ladders erected between and among a cluster of ventures, the LI can partially compensate for the perturbations in labor demands. Hence, goal coordination is needed because FI's and LI's have resources that can be used synergistically when they formulate a consistent and coherent agenda.

Many public labor and financial intermediaries find it difficult to coordinate because their managers embrace quite distinct world views.6

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*This point will be elaborated below when the negotiation phase of a development program is examined.
Public FI's are often convinced that any major public intervention in the affairs of a business—any additional "red tape" imposed on local firms—will scare investors away from the region. As noted above in Chapter II, this is partially due to the lack of precedents for intervention among development planners. The lack of precedents, in turn, is attributable to a fairly accurate diagnosis of the fiercely self-assertive ideology of American industrial management.

As Reich points out this independent posture does not manifest itself in managers' opposition to all forms of public economic intervention: most industries are eager to obtain protection and subsidies in the form of tariff barriers, low interest loans, loan guarantees, price supports, etc. Thus the laissez-faire rhetoric of American managers is somewhat misleading. The central commitment that lies at the core of this value system is the goal of maintaining managerial discretion.

Part of the discrepancy in the world views of public FI's and LI's is simply that the former accept the legitimacy of managerial discretion while the latter do not. However, the conflict is often considerably more complex. The leadership of FI's tend to view the economy as offering little scope for public intervention. Particularly in distressed regions where there is a rapid outmigration of population and economic activity, development managers perceive only a very narrow range of options. Typically the choice is seen as simply offering a wide array of incentives that can slow the disinvestment trend or not taking any action at all. Public FI's are reticent to tie incentives to any quid pro quos relating to environmental concerns, job generation, or
recruitment and training policies. It is feared that such demands will neutralize the attraction of the public subsidies.

LI's are not always more eager to intervene in the affairs of a firm. However, most manpower agencies are principally concerned with the placement and retention of their clients, many of whom are disadvantaged workers. Many other manpower agencies seek to ensure that these workers secure relatively meaningful training and promotional opportunities. This "client-based" commitment fosters an interest in the actual internal operations of a firm. Moreover, some personnel working in manpower agencies have succeeded in negotiating a change in a firm's recruitment and training policies. This experience may lead them to adopt an economic model that offers considerably more room to maneuver. In this sense the development visions of labor and financial intermediaries are in tension.

The dissonance of the world views embraced by the leaders of financial and labor market intermediaries makes it difficult for them to communicate with one another. Subscribing to somewhat different economic frameworks, they can not always agree on the significance or ramifications of specific policy interventions.

Moreover, since the institutional cultures of the two organizations reflect these disparate "maps of the world," it is insufficient to simply secure a formal agreement that stipulates how programs will be coordinated in the future.

The literature on the linkage issue clearly shows that success in coordination requires cooperation and commitment from not only the leadership but also the staff of financial and labor intermediaries.
the staff from each organization who are "matrixed," outstationed and/or placed on joint planning committees can communicate with their counterparts, a successful linkage effort is not likely to occur.

The importance of world views is reflected in the relative success experienced by Private Industry Councils (PIC's) in establishing a rapport with public FI's. The PIC's were created in one of the final revisions of the Comprehensive Employment and Training Act (CETA). This legislation and subsequent provisions embedded in the recent Job Training Partnership Act, delegate a large measure of administrative responsibilities for local manpower programs to representatives of local firms. Thus PIC's are managed by personnel who are quite sympathetic to the autonomy concerns of private industry. Many FI's have found in their local PIC's, a corp of staff with whom they can communicate and work out a mutually agreeable development program.

One clear danger of this trend is the subordination of the recruitment and training objectives discussed in Chapters I and II, to the aims of private industry and/or public development finance agencies. Coordination is not a value neutral exercise. Fundamental social goals come into conflict in any linkage effort, particularly in this first phase when a basic agenda is being negotiated.

Ironically even when the major political actors fully endorse the goal of reducing labor market segmentation, this objective can be submerged by financial intermediaries. This was demonstrated clearly by the early history of Restoration's Training Credits program.

The importance of reaching an accord among the staff who actually carry out a development program is explored somewhat more below. One
must analyze the specific linkages that can be achieved during the implementation process to appreciate the full significance of this issue: the critical point is simply that the economic values, and models embraced by the main players in any development program can frustrate attempts to formulate a consistent agenda.

This is intuitively clear when one recognizes the range of policy goals that must be assessed. Notwithstanding the arguments presented above regarding the importance of helping secondary workers obtain and retain sector jobs, regions with a high rate of job loss should attempt to increase the sheer number of employment opportunities.

There is no objective way to assign weights to these competing objectives. In the final analysis a decision should be made that reflects the needs and desires of disadvantaged workers themselves. This is probably best achieved in some democratic fashion. The problem of defining a basic agenda is one of the most compelling justifications for creating participatory mechanisms which engage the residents of distressed communities in the affairs of development agencies. The beneficiaries of the intermediary can make the most legitimate choice between the goals of "more or better" jobs.

**Long Term Planning and Targeting**

**Specific Industries**

The second phase of a development project involves targeting resources to specific industries and firms. A sophisticated economic analysis is required to carry out this mission successfully. The
complexity of the issues involved in this screening process are often too great to obtain definitive answers regarding the economic effects of assisting a specific industry. However, public intermediaries must nevertheless attempt to operationalize their goals by making such assessments.

This essay has examined many different criteria for selecting industries to participate in a development program. Among the most important firm-screening considerations discussed above are:

1) The opportunities for training and advancement offered by a venture and the impact of the business on other firm's ability to provide stable jobs with career ladders.

2) The number of jobs and innovations that are likely to be generated by a venture, and the impact of the business on other enterprises technological initiative and employment.

3) The financial return on public capital invested in the firm.

The first criteria is one that labor market intermediaries often use in selecting firms to participate in a subsidized on-the-job training effort. The second two criteria are used by many development financial entities in selecting businesses to assist. Firms' employment levels are analyzed somewhat more frequently than their innovative potentials, but even the former assessment typically focuses on the direct, rather than the indirect or induced impacts. Few development finance entities evaluate the displacement issue.

Regardless of how sophisticated the methodology employed, these three types of evaluations share a great deal in common. Each of them require a great deal of information on a venture including its:

a) technology

b) markets and competition
c) timing of development
d) organizational structure and culture, and
e) labor force requirements.

The extent of the overlap in data needs is made clear by elaborating why each of these five features of a venture are critical determinants of the training, job growth, and financial concerns listed above. This elaboration is provided in Appendix A.

Good information on particular industries can be very expensive and difficult to obtain. Formal industry surveys can cost several thousand dollars. Individual firms are reticent to provide information on their technologies, organizational structure and investment plans because of their proprietary concerns or their conflicts with unions and public regulatory agencies. Thus it is particularly important that those public agencies who have access to any of this valuable information share it with other agencies.

Public FI's tend to have access to more industrial information than do LI's because of the former's larger resources, legal independence, and prescribed functions. 19

First and foremost, a public FI can demand a detailed business plan from all the firms involved in a development project before any final investment decision is made. This document describes each of the five critical features of a firm and industry described above. (However, sometimes it is manipulated to paint a distorted picture of a venture: e.g. larger number of jobs, lower profit rate, etc.)

Secondly, their legal autonomy and financial resources give public FI's access to the services of consultants. Many consultants are happy to
provide a great deal of free information in the hopes of securing a contract some time in the future. Since there is a low marginal cost to sharing information that they have already compiled for another client, consultants can serve as a very inexpensive source of data. FI's must, however, offer sizeable contracts to periodically sustain their interest.

Thirdly, manufacturers of machinery and equipment are often willing to provide information to public FI's when the latter are involved in the design, financing, or marketing of a major new venture. These firms are quite familiar with the layout, production techniques, staffing structures, procurement needs, inventory, control systems, packaging, and shipping process of the industries they serve. Thus access to just a bit of their time can be very instructive to FI's who carry out financial feasibility and input/output analysis and LI's who assess the training and promotional structure of an industry.

Fourthly, trade associations often serve as the link between the public and private sectors. They are aware of the industry's more global interests and usually take the lead in lobbying campaigns for public support. Public FI's frequently provide, or facilitate the provision of this support (e.g. low interest loans, inter-governmental assistance in obtaining tariff protection, infrastructure assistance, and R&D grants). Hence, public financial intermediaries requiring data on an industry can secure guidance from trade association representatives. These representatives can offer an excellent overview of the industry and refer a development agency to particular firms or consultants with expertise in special areas.
Public LI's, though considerably less well informed than FI's, do have access to a great deal of useful data. Since most manpower agencies were compelled to develop annual and master plans under the old CETA program they have a rich array of employment information. They also have special access to information systems funded through the Department of Labor which details the training and labor force needs of specific industries. Finally they are intimately familiar with the educational and training infrastructure of a region. As indicated in the Appendix these types of data are all useful in carrying out a financial feasibility analysis, technological assessment, and job generation projections.

Thus, in sum, public FI's and LI's can obtain information which is of mutual interest to both of them. FI's have access to considerably more data because of their legal autonomy and prescribed functions, so it is particularly important that they share their information base with LI's.

It is possible that the analysts employed by a public FI will analyze not only the job generation and financial sides of a venture but also its impact on labor market segmentation and local training opportunities. However, few development agencies employ staff with this array of skills or concerns. Moreover, if the FI employs any labor analysts they usually play a minor role in the agency. Concerns about labor issues are usually voiced in long term development plans or studies but are often ignored during the venture evaluation phase. Many ventures are evaluated exclusively on the basis of their financial viability.

Although widening the scope of any venture evaluation is largely a political issue, requiring the commitment of the agencies directors and
any political bodies to which they are accountable, it is also an objective which requires excellent planning and internal organizational controls. Even agencies with progressive executives find the joint evaluation of ventures on financial and social grounds an elusive goal.

Financial and marketing analysts often wield the most influence in a development agency because the organization's survival often hinges on their actions. In addition, these staff often have the most extensive contacts with powerful third parties. They have strong ties with representatives of firms or other public and private FI's interested in investing in local ventures. Without their participation it would be difficult to foster any development in an area.

As noted above, financial analysts frequently do not share the same skills or objectives as those of labor market analysts; thus conflicts between the two groups arise as a matter of course. Sometimes agency directors can manage these conflicts and can at least achieve reasonable compromises with regard to basic goals or to long term planning strategies. But it is more difficult for a director to ensure on a day-to-day basis, that reasonable agreements regarding specific ventures are worked out and vital information exchanged.

The problem is even more acute when two distinct organizations are responsible for the labor and financial functions, as is the case in most states and many cities. Frequently a department of employment is responsible for developing broad labor policies and training programs while a public financial intermediary takes the lead in designing and implementing economic development projects. In this case, the conflicts in goals,
political constituencies, and style of operation are heightened and a
good working relationship is more difficult to achieve and maintain.\textsuperscript{21}

\textbf{Negotiating With Management and Unions}

The third phase of venture development requiring coordination between LI's and FI's are the negotiations relating to the terms of public financial support, permit approvals and zoning changes. Among the issues that is likely to generate the most heated debates between public financial and labor market intermediaries is the amount of pressure that should be applied on a private firm to change its production strategy in accordance with public development goals.

To be successful in this stage of a venture the public intermediary must convince private investors and the other major participants that the former's development plan is both a) economically viable, given each of their respective interests, and b) politically necessary, given the views of the development agency's political constituency.\textsuperscript{22}

For instance, management and union heads often need to be convinced to employ more disadvantaged workers in jobs re-designed to facilitate training. The resources of both FI's and LI's must be applied to this task. An intimate knowledge of the history of the industry's labor relations, how labor has been recruited and trained in the past and the value of public permits and subsidies is required to confront these issues; thus the expertise of both financial and labor market analysts will be quite useful.

Financial analysts must demonstrate that any decline in the return
on investment fostered by a re-structuring of the venture, is small and can easily be absorbed by stockholders. The full leverage of all public financial and training resources must be applied to gain approval from the principals. Financial analysts should determine whether an expansion in public subsidies is required to compensate investors for any losses they will sustain as a result of the restructuring of the new venture. Few if any of these losses need be compensated if a) the revised project surpasses the investors true hurdle rates and b) management needs public zoning or franchise approvals to implement the venture.

It is also necessary to convince union leaders to accept the proposed recruitment and training plan of a venture. Union members and executives may be threatened by attempts to hire and train minority disadvantaged workers. As noted above, these perceived threats may reflect the older workers' overt racism or the fear that providing secondary workers with access to jobs in their industry and occupation will impair their job security and promotional opportunities or that of their family and friends. Finally union leaders sometimes must worry that a new demographic group will elect different stewards and presidents to represent them in the collective bargaining process.

To convince the union representative to accede to the training demands one must demonstrate that public approval of the venture is required to make the project viable. Again the major levers are financial subsidies, but zoning and training contracts are also useful. It may be helpful to first get management to accept the training proposals and then convince them to discuss these plans with union representatives.
An analysis of the labor history of the industry must also be completed to determine how the demands will be perceived by the union. If membership has dropped recently because of shifts in the local industrial structure the union leaders may be more amenable to the public demands. Assuming the new trainees will join the union, the leadership may be convinced that the public subsidies are required to save their industry. However, if there is an ongoing history of racial strife in the union and the current leadership represents a coalition of the most intransigent union members, then the program will be viewed as more threatening.

The timing of negotiations with both management and labor is also critical. Clearly, if any of the representatives of the development agency ever imply that the approval of the public subsidies or permits is a "fait accompli" the room for future negotiation is eliminated. This point is illustrated by the history of one recent project in New York City.

The Economic Capital Corporation, a development finance entity in New York recently provided financing for the Intrepid museum in exchange for an agreement by management that most of the museum's jobs would be filled by disadvantaged workers referred through the city's manpower agency. The Intrepid, a retired aircraft carrier permanently stationed on a New York City pier, was converted into a public museum using an Urban Development Action Grant issued by the federal government.

Unfortunately, ECC neglected to consult the ILA, the union that expected to have jurisdiction and recruitment authority over the project. When the museum began operations, a major conflict arose between the
manpower agency, local community groups and the ILA, each of which had been convinced that they had recruitment rights to the venture's jobs. The ILA eventually succeeded in gaining full authority over the recruitment process. This outcome was the result of many factors including pressures from the museum's management to minimize any delay in start-up, a fairly weak public commitment to recruitment and training of disadvantaged workers, and the extensive political clout of the union.

According to the vice president of the manpower agency, a middle ground might have been reached had ECC negotiated with the union prior to the initiation of the project. If this had been done a compromise might have been reached which allocated some of the job vacancies to the manpower referral agency and others to the union hiring hall. Alternatively the union could have been given the right to fill all of the positions, but required to give special preference to low income workers who have been unemployed for an extended period. ECC should have claimed that the public Urban Development Action Grant (UDAG), which was critical to the venture's success, was contingent upon some compromise. However, once the loan was approved there was little leverage that could be exercised by the city.

All of the participants in a project must be convinced that the public development agency is serious about its proposals for re-structuring the venture prior to the granting of any public approvals. At minimum, this will require developing a political argument and possibly a diverse coalition of supporters. In effect, the development agency must demonstrate that its political leadership and constituencies are so committed
to the public elements of the venture that the latter are willing to risk losing the entire project to ensure that these features are adopted. The private investors and union officials must be convinced that their threats to walk away from the deal will not succeed in compelling the public agency to drop all of its demands. Sometimes this can be done by mobilizing grass roots support for the development agency's recommendations. This political mobilization can occur either directly under the leadership of the public intermediary, or indirectly by inciting community leaders to organize with seemingly unintended leaks of the private firms' development plans.

Sometimes a development agency can use its own political resources as leverage to secure a favorable agreement from a venture's management. Restoration was able to exploit its city-wide political ties to secure a modest training and recruitment agreement from Cablevision. The perception of political influence is more critical than its reality. As Cablevision soon discovered, Restoration was not always a useful ally in the former's attempt to win the Brooklyn franchise.

In addition, to the residents of the communities that will be directly affected by the venture, there are other institutions to whom the intermediary may claim it is beholden. If some of the intermediaries' resources come from other levels of government or from private foundations the development officials can assert that these funding sources require certain social benefits to be generated by its projects.

Indeed, there are often statutory restrictions on the use of
development funds which provide a legal foundation for these claims.*

Local laws that codify a quid pro quo can also be useful. For instance Portland passed a landmark statute declaring that all local development subsidies are contingent on a formal agreement to use the city's manpower agency for recruitment purposes. Such a mandate simplifies the strategic bargaining problems faced by a development agency. Other cities, such as Cincinnati, Fresno and San Antonio have developed somewhat more flexible requirements.24

Post Start-Up Interventions

The fourth stage of venture development requiring some coordination between labor and financial functions takes place after start-up when the intermediation services are actually provided. Like any private venture capitalist, a public FI should monitor the project closely, provide a great deal of technical assistance and exercise an appreciable amount of control. In fact ventures conceived by private entrepreneurs should not be funded unless the latter are willing to share a great deal of information and relinquish some control over the enterprise after start-up occurs. This financing maxim is embraced by most private venture capitalists.25

*The UDAG loan issues to the Intrepid museum could have served this purpose. The authorizing legislation of this program dictates that all projects receiving UDAG funds must benefit low and moderate income residents in an area. Although this stipulation is typically ignored by federal compliance officials it still provides a political justification for development agents who wish to ameliorate labor market segmentation or create jobs for disadvantaged groups.
Problems frequently encountered by labor market intermediaries can be resolved much more quickly, judiciously, and effectively by a development agency that functions as both an FI and a LI. Firms participating in training programs often lodge complaints with an LI after a subsidized OJT project has begun. The three most common complaints are:

- workers referred by the LI are unsuitable for the jobs in their establishments;
- the supplementary classroom or vocational training received by workers before or after being assigned to their permanent work stations is inadequate, and does not relate directly enough to the firms' production process; and
- the paper work and reporting requirements required by the LI is too burdensome.26

A development agency which has provided debt or equity capital to a firm making such complaints is in a better position to evaluate the validity of each point. By evaluating financial statements, interviewing a cross-section of the firm's personnel including both financial managers and the new trainees, and analyzing the actual supervisory and productive organization of the enterprise as it evolves the development staff can identify the major reasons trainees are perceived as unproductive.

If the firm's complaints are justified the recruitment and classroom training program can be revised accordingly. In some cases these complaints have no foundation whatsoever. In other cases where older employees have attempted to prevent the disadvantaged trainees from
developing skills and retaining their jobs, special corrective actions are in order. The LI might have to recommend a revision in the firm's incentive systems, reporting relationships, layout or productive process to facilitate on-the-job training and encourage cooperation among the various factions in the work force. The last recourse should be the dismissal of intransigent workers.

Major changes in production might be necessary to resolve these conflicts. For instance, if fiscally feasible it might be useful for a firm to adopt a new technology which requires an intermediate level of cooperation between disadvantaged and majority work forces. In this case, financial analysts must demonstrate again that the firms owners will not sustain an appreciable financial loss as a result of these changes. Like in the third phase of development when the projects' original structure was negotiated, the development agency will have to use its full financial leverage to gain acceptance of these recommendations.

As witnessed in the Restoration case study, a development agency's political strength can also be useful in resolving these dilemmas. Unfortunately, Restorations political leverage was short-lived: Cablevision soon realized that the CDC could not exercise an appreciable amount of influence at the city wide level. Moreover, after Cablevision won the franchise it no longer had any use for Restoration's political ties.

Staff members of an FI are less likely to be inclined to intervene in a venture after start-up. In part this is because many of them have adopted a world view that accepts broad managerial perogatives. However, when the public development agency's own capital is invested, FI's
frequently believe that the firm should be left alone to improve its
ability to earn a profit.

The history of the Training Credits project made clear that the
officials responsible for development finance functions were reticent to
intervene when managers abused the program. They were not interested in
achieving the program's original training goals. Instead they sought to
maximize the firm's profits by giving it a great deal of discretion over
how the training project was administered. Thus, not only were subsidies
granted to firms that were unwilling and incapable of providing training,
but no effort was made to stop managers who disobeyed the formal rules
regarding hiring local workers.

However this desire to minimize the scope of intervention is often
counter-productive even from the perspective of maximizing the FI's return
on capital. First, the FI should be concerned that a borrower may liquify
the firm and reduce the value of any public investment. But more impor-
tantly, training programs can often be utilized to improve the financial
position of a firm.

Often financial problems are actually manifestations of training
needs. A public LI's ability to design and implement specially tailored
training programs is one of its greatest strengths. In addition it can
often help determine whether additional training is needed by a firm's
employees even when this need is unrecognized by management. If the FI
and LI can quickly diagnose these problems together and develop a new
training program to address them, a major financial crisis can be avoided.
The following are four examples of financial dilemmas that reflect training needs:

a) If the firm is having difficulty obtaining supplies at a specified quantity, quality, and price or if it is incurring excessive interest expenses on its inventories the public intermediary can provide training in procurement and inventory control policies.

b) If the firm is having trouble dealing with unexpected shifts in its cash flow needs, clerks can be taught how to implement new accounting and management information systems to track and forecast payables, receivables and other crucial accounting items.

c) If the demand for a firm's product is insufficient, the intermediary can teach employees how to undertake new market analyses or product surveys, and then, on the basis of the results, how to revise its advertising and sales practices.

d) If the technology of the firm is inappropriate or out-moded, the intermediary can help the firm to select new production equipment and train workers how to use it.

Although all of these programs should increase the profitability of the new venture, the intermediary may have to develop some informed arguments and apply some leverage to convince management they are necessary.

Exit: Reallocation of Factors

The last but not least important phase of venture development is the "exit stage." At some point it may be necessary to dis-invest from the project and transfer capital and labor to other enterprises. Planning for this eventuality requires all of the resources of both labor and financial intermediaries. To the extent that it can be accomplished without substantial dislocations in the local community, it is possible that segmentation in both markets can be addressed simultaneously.
As noted above, development agencies might try to invest in "clusters" of firms whose earnings and employment levels are negatively correlated. This diversification approach to development, requires "portfolio managers" who are skilled in adjusting to trends in both the capital and labor markets. If managed well this policy will a) reduce the unsystematic financial risk borne by the development agency, b) provide credit to firms with relatively high variance risks who are excluded by private capital markets, c) ensure that a stable number of jobs are available in the local labor market and d) minimize transitional or "frictional problems" associated with transferring workers and capital among enterprises.*

To achieve this broad set of goals, the public agency must monitor shifts in the economic environments of each of its ventures. The intermediary must make sure that the ventures' performance remains negatively correlated with one another. Moreover, it must try to structure the cluster so that the labor demands that covary negatively are in similar occupations. Workers displaced by one firm should be in roughly the same skill class as those in firms undergoing expansion. The development agency must track and forecast these contractions and expansions to facilitate the labor shifts and provide re-training or upgrading services to the displaced workers. It must analyze shifts in technology and product mix which might change the earnings cycle or occupational structure of the firms. If there is a change in the inter-relationships of labor demands

*The opportunities and obstacles offered by this cluster strategy are quite similar to those confronted by training programs that attempt to facilitate the transfer of labor from declining mature industries to growing sectors that require skilled personnel.28
the intermediary may need to add a new venture and/or dis-invest from an older one.

If the development strategy involves constructing career ladders across firms then the labor market analysts must take remedial actions when crucial links in a promotion sequence are eliminated by a business failure. Training and investment policies may need to be revised to reconstruct workable career paths.

This portfolio management function is perhaps the archetypical example of a development task where the coordination of labor and financial intermediation is necessary. An intricate understanding of the dynamics of firm's earnings and occupational structure is clearly essential to perform this task well. Moreover, those LI staff responsible for re-training and referral programs must work closely with the investment planners to decide how to revise the existing cluster of ventures to promote employment stability and viable career ladders while simultaneously diversifying away unsystematic financial risks.

This last phase of venture development ties back into the first one--goal setting and long term planning. As ventures fail and development officials attempt to assist displaced workers, the intermediaries and their constituencies can re-assess the value of job stabilization goals vis-a-vis employment expansion objectives. Industrial targets can be redefined to accomodate the current development priorities, the changing occupational mix of jobless workers, and any recent transformations in technologies, resource constraints and final demand. This dynamic planning process ensures that a development agency remains sensitive to both the constraints imposed by the economic environment and constantly evolving social goals.
Conclusion

Without the linkage of labor and financial intermediation, a development program is likely to be ineffectual, inequitable, and inconsistent. Although coordination of these functions is a formidable task given both the political and organizational obstacles that thwart development officials, it is a goal whose benefits far outweigh its costs.

Coordinating labor and financial intermediation is necessary in every phase of a development program: fundamental labor and capital market policy goals must be reconciled; industrial targets and specific ventures must be identified using both labor and financial analysis; the resources of both types of intermediaries must be marshalled to convince private agents to accept a socially beneficial master plan; both financial guidance and skills-development assistance must be provided to a venture after start-up; and any movement of factors of production among ventures must be carefully orchestrated by both FI's and LI's.

Labor and capital market segmentation are closely related problems. This fact must be recognized when development agents create policies and institutions to address the discontinuities in either factor market. The two types of segmentation derive from similar economic phenomena: the instability in product markets or rates of return; the scarcity and high cost of economic data that is both intricate and trustworthy; and the concomitant dependence on exclusive social networks to provide information or assistance in the two input markets.

Thus, the difficulties faced by small firms seeking financing and disadvantaged workers seeking stable jobs are analogous in many respects.
However, eliminating the discontinuities in both labor and capital markets simultaneously can be quite difficult. Weights must be placed on the competing objectives of improving the quality of jobs and increasing the number of jobs.

The need to link the two forms of intermediation arises in part because of this interconnection in the causes of capital and labor market segmentation. The institutional articulation of public policy in these two areas is made necessary by the complementarity of the information and leverage possessed by labor and financial intermediaries. By joining forces, the two intermediaries can extend their ability to formulate and realize a coherent development agenda.

Development finance as applied by local public intermediaries currently lacks an intellectual and ethical identity. Although some practitioners have attempted to inject a public purpose into their work, many others refuse to deviate from the methodology employed on Wall Street. In part this may be attributable to the current mystique surrounding private financial institutions, one of the few sectors whose growth has not been stifled by the economic decline of 1979-1982.

The financial industry of New York City recently exceeded the size of the local manufacturing sector. Aside from indicating why public financial analysis might be attracted to the techniques utilized by private FI's, this fact reflects one of the greatest unfulfilled economic development needs of the region. The raft of development agencies in the New York area have not succeeded in arresting the decline of firms that provide on-the-job training and promotional opportunities to blue collar workers. Too many young bright analysts in economic development
agencies learn only the techniques used by bankers; they do not gain, in addition, a facility for assessing the social rate of return of ventures. Broadening the financial methodologies utilized by development agencies is necessary if only to justify their existence. Intervention in the private market is hardly defensible unless public agencies offer an alternative modus operandi.

The small but growing movement to coordinate development finance and employment policies is encouraging. Although it is founded more on common sense than on any particular theoretical framework this should not deter those engaged in the effort. The intuition of practitioners is just as robust as any abstract insights that might be afforded by analytical research.

However, it is incumbent on both practitioners and researchers to help develop a coherent set of principles for this field. These principles are needed to provide guidance in the formulation of policy and the erection of new institutions. In the absence of a compelling rationale for linkage, public officials cannot be convinced to invest the political resources, time and energy required to make LI/FI coordination a reality rather than a pretense. The opportunity exists to create a more effective and equitable system of development institutions. This opportunity should not be ignored.
Chapter 1

1. This depiction of dualist theory is provided by Glen Cain, "The Challenge of Dual and Radical Theories of the Labor Market Orthodox Theory," Journal of Economic Literature Vol. 14 (1976), p. 1215. Although this essay is a critique of segmented labor market analysis, it provides a balanced description of the framework's primary tenets.


3. See footnotes 20 and 30 below.


16. Wilbur Thompson, ibid. p. 139.


27. Marcia Freedman, op. cit., pp. 126, 118.


31. Ibid., p. 7.

32. Catherine Armington, ibid.

33. Michael Piore and Suzanne Berger, Dualism and Discontinuity in Industrial Societies, esp. Chapter 4., op. cit.

34. Donald Stone, Industrial Location in Metropolitan Areas. (New York: Praeger, 1974)


Chapter II


7. See Carl Rosenfeld, *op. cit.*, and Mary Corcoran, *et al.*, *op cit.*


12. Dean Morse, *The Peripheral Worker*, *op. cit.*


14.1 William Kornblum, op. cit., p. 57.


21. The Corcoran study cited frequently above only surveys respondents who are employed, and asks them about the techniques used to find their first and current jobs. Examples of studies focused narrowly on the issue of search techniques used by unemployed workers, regardless of whether the search resulted in employment are: Harvey Hilaski, "How Poverty Area Residents Look for Work," op. cit., and U.S. Department of Labor, "The Job Search of Ghetto Workers," *Poverty Area Profiles*, Regional Report No. 21, (June 1971), Bureau of Labor Statistics, Mid-Atlantic Regional Office, New York.


30. Many of the following points regarding on-the-job training are extracted from Michael Piore and Peter Doeringer, Internal Labor Markets and Manpower Analysis, (Lexington: Heath, 1971), Chapter 2.


32. William Kornblum, op. cit.


35. Michael Piore, et al., op. cit.


38. William Kornblum, op. cit., p. 52


41. William Kornblum, op. cit., p. 48.


43. Ibid. pg. 35

44. Stanley Davis and Paul Lawrence, Matrix, (Reading: Addison Wesley, 1977); Richard Edwards, Contested Terrain, op. cit.


46. Ibid.


48. This phenomenon was confirmed in an interview with Andrew Gordon of the Economic Capital Corporation, City of New York. Mr. Gordon manages all referrals to the Private Industry Council (PIC) and was the original outstationed PIC employee funded under the Targeted Jobs Demonstration Project.

49. Ibid.


Chapter III


11. Some authors like Daniels seem to imply that super-normal returns and high profits refer to precisely the same phenomenon. This is not the case as indicated in the above discussion on why high profits should not lead to excess returns. Moreover, as argued here, high returns so not always foster excessive earnings. See Daniels, et al., Small Business and Capital Markets, op. cit., p. 4.


13. Ibid.

14. The author was unable to obtain some of the studies referred to by Daniels. However, both Daniels and Barbe assert that these studies did not control for systematic risk.


24. Harvey Garn and Larry Ledebur, "The Role of Small Business Enterprise in Economic Development," a study prepared for the use of the Joint Economic Committee, 5/14/81/


28. Ibid.


32. For an attempt to address this issue see Clinton Bourdon, "Labor Productivity and Technological Innovation: From Automation Scare to Productivity Decline," in Technological Innovation for a Dynamic Economy, Christopher Hill and James Utterback (eds.), (Cambridge: Pergamon, 1980).


36. Clinton Boundon, op. cit.

Chapter IV

1. Tim Campbell and William Kracaw, "Information Production, Market Signalling, and the Theory of Financial Intermediation," Journal of Finance (September 1980), p. 863; and H. E. Leland and D. H. Pyle, "Informational Asymmetries, Financial Structure, and Financial Intermediation," Journal of Finance, (May 1977) p. 32. Both of these articles deal with the interesting question of whether firms can be prevented from paying financial intermediaries to disseminate false information about them. Although these articles lack grounding in institutional realities, the theoretical issues they raise are quite relevant to an analysis of informational market failures. Campbell and Kracaw actually attribute the existence of financial intermediaries to the need to resolve this "moral hazard."


5. Albert Rees, op. cit.


10. Robert Zevin, Vice President of the United States Trust Company, asserts that smaller banks' portfolios are considerably safer than those of larger banks. Their loss ratios are considerably lower than that of their larger competitors and the amount of riskless investments (i.e., federal funds) they make is considerably greater. It is possible that the problematic international clients of the major money center banks have transformed the position of these larger financial intermediaries since the date of Heggestad and Edward's analysis.


19. Arthur Okun describes something akin to this process in *Prices and Quantities* (Washington, D.C.: Brookings, 1981). Okun looks at the macroeconomic ramifications of bilateral relationships in which pairs of agents are interdependent. This interdependence arises largely because of the agents' mutual familiarity: in order to economize on information collection which has an ambiguous payoff, members of these pairs attempt to retain and reinforce their current economic relationships. See also William Shepherd, "Public Enterprise in Financial Sectors," in Shepherd's *Public Enterprise* (Lexington: Heath, 1974) and Harvey Leibenstein, *op. cit.*

21. Robert Zevin of the U.S. Trust Company confirmed that few financial analysts in the investment industry rely on the notion of systematic risk; to the extent that risk is assessed it is typically variance risk that is captured.


25. Ibid., p. 190, and Arthur Okun, op. cit.


32. Ibid., pp. 59-62.


34. Ivan Light, op. cit.

36. Something akin to this view is provided by Liberson, ibid., p. 379.


40. Whether management and unions in larger firms are inclined to develop such innovative measures is a critical issue that must be assessed empirically. See Martin Carnoy and Derek Shearer, Economic Democracy op. cit., Chapter 7 and Fred Best, Work Sharing, (Kalamazoo: Upjohn Institute, 1981).


44. Paul Osterman, "Internal Labor Markets in White Collar Firms," op. cit.

Chapter V


4. Richard Schaffer provided a verbal description of the goals, objectives, and strategies of the Corp.'s leaders during various phases of the agency's history. Richard Schaffer, Interview, April 22 and May 5, 1981.

5. Ibid.


7. For a summary of this material see A Lawyer's Manual on Community-Based Economic Development (Berkeley: National Housing and Economic Development Law Project, 1974), pp. 2-4.


10. Schaffer, Interview, op. cit.


12. Ibid.

13. Schaffer, Interview, op. cit.
14. A note on the source of data on the Economic Development loans: Two reports were used to obtain information on loans. The first was an October, 1977 report written by Economic Development staff entitled SIP Loans "Summary Information and Classification," which described each borrower individually, when the firm's loan was granted, whether payments were on schedule and the nature of any problems which would affect repayment. Another report, "SIP Loans Litigation Status Report," issued in April of 1977, accessed the possibility of retrieving funds from firms which were extremely late in paying back their loans; most of these firms had been discontinued. Although this sample does not represent the entire portfolio, it does constitute over two thirds of all the loans issued by Restoration. Lending activity came to a halt in the fall of 1977.

15. David Birch, Job Creation in Cities, op. cit.


20. The following staff in Restoration were exceptionally forthcoming in providing background on the Payments Credits Program: Ken Cooke, Charles Palms, Richard Shaffer, Tom Bettridge, and Ken Diaz. A number of documents were also helpful, including the "Model Contract" with credit recipients, and "Payments Credits for Job Training," a general program outline.


24. Ibid. See also "Restoration of Confidence," April 1981 and one of the first funding proposals for the Center, "Bedford Stuyvesant Shopping Center," OMBE 0160-40, pp. 1-3.


28. Ibid.

29. Several key personnel in Restoration were extremely helpful in providing a detailed description of the Cablevision investment/training project, particularly Ken Diaz, Tom Bettridge, Richard Schaffer, and Charles Palms. Among the documents describing the genesis of the program are: "Memorandum" from Charles Palms to Clifton Daniels, (11/12/80); "Memorandum" from Charles Palms to Curtis Wood, (11/12/80), "Memorandum" from Charles Palms to Clifton Daniels, (11/14/80); Cablevision's Contract with Restoration, (7/11/80); Letter from Clifton Daniels to Tony Clarkson, Vice President, Atlantic Cable, (2/4/81); Schedule of Orientation for Participants, (4/15/81).


32. Some development finance analysts assert that small and middle sized banks can perfect capital markets by developing innovative lending programs that concentrate on the small dynamic firms that are ignored by the rest of the financial market. In defense of this view, one can cite the relatively impressive financial performance of New England's smaller commercial banks (See "The Best Earning Bankers of New England," in *New England Business*, April 18, 1983). As noted above, an alternative explanation for this phenomenon is the trouble large banks have recently experienced with their overseas borrowers.
Chapter VI


4. For an excellent account of the effects of crisis management on public bureaucracies, see Michael Lipsky, Street Level Bureaucracy, (New York: Russel Sage, 1980).

5. Martin Rein and Peter Marris, Dilemmas of Social Reform: Poverty and Community Action in the U.S., op. cit.
6. See for instance, Carl van Horn, "A Final Report on the Targeted Jobs Demonstration Program," op. cit., p. 40. Also see Peter Bearse "On the Linkage of Employment and Training and Economic Development," op. cit. The conclusions regarding the world views of public FI's were gleaned during many interviews, but particularly those with Alan Bell of the New York Public Development Corporation and Andrew Gordon of the New York Economic Capital Corporation, op. cit. Those pertaining to LI's were founded on interviews with Ken Díaz and Charles Palms of the Bedford Stuyvesan Restoration Corporation, as well as Dan Donovan of the New York City Private Industry Council, op. cit.


9. Ibid., and Peter Bearse, "On the Linkage of Employment and Training and Economic Development," op. cit, p. 30. Interview with Alan Bell, Vice President of the New York Public Development Corp.


11. Interview with Ken Díaz, Restoration, op. cit.


15. This kind of co-optation of PIC's is quite common and applies to the great majority of the cases examined by Fischer and Van Horn. See for instance case study on Buffalo in Fischer.

16. See Peter Bearse, "On the Linkage of Employment and Training and Economic Development Programs," op. cit.; Interview with Dan Donovan of the New York City, PIC.

17. Interviews with various development finance staff including Alan Bell of the Public Development Corporation. These conclusions were confirmed by my own experience working at the Port Authority of New York & New Jersey as a financial/employment analyst. See works by Bearse and Van Horn cited above and "Monthly/Budget Report," ECC of New York, 3/82.
18. The Port Authority of New York & New Jersey is one notable exception. This agency utilizes a fairly sophisticated input-out model to assess the employment impacts of a venture.

19. The observations on both LI's and FI's access to data is primarily based on personal experiences working in manpower and economic development agencies. However, a useful source on both of these issues is Peter Bearse, "On the Linkage of Employment and Training and Economic Development Programs," op. cit., especially page 60. For a survey of LI's information sources see Marcia Freedman and Anna Dutka, "Training Information for Policy Guidance," R&D monograph #76, U.S. Department of Labor E&T Administration, 1980.

20. See Marcia Freedman and Anna Dutka, op. cit., Chapters 5 and 6.


22. Interviews with Andrew Gordon and Don Donovan, op. cit.

23. Ibid., pp. 211, 245, 287.


25. See Footnote #33, Chapter II.


27. Personal experience in the Port Authority of New York & New Jersey confirmed this observation.

Appendix

The Shared Information Needs of Financial and Labor Market Intermediaries

The following is a brief outline of the information needs required to carry out the public intermediation functions described in Chapter VI. The information required to undertake the following three types of assessments is briefly analyzed:

a) the evaluation of a firm's financial feasibility from a risk/return standpoint;

b) the assessment of the job and technology impacts of a venture; and

c) the evaluation of the training and promotional opportunities offered by a firm as well as the impact of the venture on the quality of other firms' jobs.

Five types of data are useful for each of these assessments. These include information on a firm's

a) technology

b) markets and competitors

c) timing of development and expansion/start-up status

d) organizational structure and culture

e) labor force requirements.

The extent of the overlap in data needs will be demonstrated by elaborating why each of these five features of a venture are critical determinants of the training, job and technology generation, and financial concerns described above.
A. Technology

a) Financial Viability

To determine how profitable a firm will be one must be familiar with its product design and production process. Thus any financial intermediary, whether public or private, must assess the viability of a firm's technology. The FI needs to determine the likelihood that a firm will achieve a competitive edge through improving production tolerances, yields and cost economies. A financial analyst should also estimate the cost and time required to complete product prototypes and to refine a process with new special tooling. If the venture involves no innovations whatsoever, the financial analyst must judge whether the firms' technology is likely to become outmoded in the near future.

b) Job and Technology Generation

By definition, technological assessment is required to determine whether a venture is likely to generate an important innovation. A deeper understanding of the industry's structure is needed however to estimate how the firm's innovative behavior will affect other firms' technological generation capacities and inclinations.

Second, to derive a decent estimate of the indirect and induced multiplier effects of firms' labor and input needs it is useful to be familiar with the firm's technology. The direct requirements coefficients in an input-output (I/O) matrix should be updated or revised to reflect the firm's idiosyncratic input demands. Even if a rough "back of the envelope" I/O analysis is attempted
it is useful to get a sense of how the firm's technology will affect its labor and supply needs and concomitantly its indirect and induced impacts.

Third, if the firm's technology is truly new and viewed as too risky by private financial intermediaries, it is less likely that public funds will simply displace private investment in the firm. Since technological risks are almost entirely systematic, this risk aversion is often inefficient. If the technology ultimately strengthens the competitive advantage of a firm or industry that is tied to a local labor force, supply network and/or market, then the venture may produce net new jobs to the target area. The FI should assess the employment trade-offs associated with: (a) automation and rationalization of production, vs. (b) cost reductions that lead to expansions in output.

c) Training & Promotion Opportunities

To assess a firm's ability to provide on-the-job training opportunities for disadvantaged workers, one must determine how the firm's technology affects its demands for skilled labor: unless the technology requires workers with some measure of skills, it is unlikely that such training opportunities will be afforded. More importantly, public agencies must assess whether the technology (a) is firm-specific and (b) requires skills supplied in a tight occupational labor market. These factors will increase the firm's incentive to train.

In addition, a technology often determines whether work stations are sufficiently proximate to one another both physically and functionally to allow workers to observe their more senior colleagues. Ideally, production
technology and layout should require a sequential development of skills, with a continuity of job functions being performed next to one another, each slightly more sophisticated than the next.

To the extent that there exist discontinuities in the personnel structure, career ladders can be constructed to bridge them if supplementary classroom training is available.

A firm's technology will also determine, to some extent, whether its products can be inventoried. The ability to store products allows a firm to accommodate vacillations in demand by allowing inventories to vary widely rather than constantly revising the firm's rate of output. Thus for example the innovations in the food industry which have enhanced shelf life have attenuated the sector's cyclical demand for labor.

The firm's technology also has a variety of indirect impacts on other firms' employment stability. For instance, if the technology requires the entire labor force to work nine to five, this will heighten the daily fluctuations in the markets of local retail and service establishments. If instead the firm's technology (and managerial strategy) permit personnel to work and consume during off-peak hours this will stabilize the output and employment of these other businesses.

Finally, the degree to which technological progress in a sector occurs at an extremely rapid pace will partially determine the stability of employment in the industry. However if the sector is experiencing rapid growth, then the instability of employment may not prevent employers from providing on-the-job training.
B. Markets and Competition

a) Financial Analysis

The most important component of any business plan is the market analysis. An FI must check the accuracy of a firm's market research. This research includes the management's analysis of their customers' purchasing decision criteria, the size and growth rate of their market segment, and the risks posed by competitors, macro-economic trends, and the development of new tastes. The estimation of cash flows and systematic and unsystematic risks will rely principally on these factors.

b) Jobs and Technological Innovation Generation

To assess whether the firm is likely to create net new jobs it is necessary to determine whether: (1) its main competitors lie within the target area (city, region, nation), (2) it serves an export market and (3) its products will substitute for goods that are currently imported.

c) Training & Promitional Opportunities

Market stability will reduce employment turnover and thereby improve the firm's ability and inclination to provide on-the-job training.

If the personnel of local competitors possess the same skills (mechanical, organizational, and conceptual) as that of the firm's workforce, the venture management will be less interested in providing training. However, collective training programs that are funded jointly by the industry and the public sector might be feasible in this case.
C. Timing of a Venture and Start Up vs. Expansion Status

a. Financial Viability

To assess the net present value of a project it is critical that the timing of cash flows are assessed properly. If the venture is a new one the financial analyst must assess when any planned construction will occur and when sales receipts can be anticipated. If the venture is an expansion it is necessary to properly assess when the added revenues will be realized and when capital equipment and inventory expenses will rise.

b. Job and Technology Generation

Many firms publicize job generation estimates that pertain to a planning horizon which is quite distant in the future. In addition, managers seeking public capital often provide development agencies with staffing projections that are based on the most optimistic scenario, rather than their most likely guess. Managers of new start-ups are particularly ambitious in their estimates, since there is no ratio of sales-to-labor force available against which their figures can be checked.

c. Training and Promotion Opportunities

As noted in Chapter II start-ups are often more attractive from the standpoint of new formal or informal recruitment networks that benefit secondary workers. Start-ups have the greatest potential for establishing informal hiring networks which extend disadvantaged groups' access to valuable job information.
Expansions can also be exploited by labor intermediaries, though it is critical to plan in advance for these projects. By placing an initial corps of secondary workers in a firm prior to its expansion the LI can ensure that disadvantaged personnel hired later will find a supportive group of established employees who can help the former adjust to the production and social structure of the firm. It is necessary to obtain a good estimate of the timing of the expansion so the initial corps can be placed and trained in advance.

D. Organizational Structure and Culture

a) Financial Analysis

In analyzing payroll costs, the financial analyst must become familiar with the firm's organizational structure. The FI must also become personally intimate with the venture's management team. This is necessary in order to form a judgment not only of the manager's abilities, motivations and integrity but also to assess whether the firm will allow the FI to participate in its affairs.

b) Job Technology Generation

The ability of a firm to innovate often hinges on an open organizational structure and culture: workers must have the freedom to communicate with personnel in other units, departments and businesses.

The firm's desire to purchase inputs and services from local enterprises in order to develop a close rapport with their suppliers and/or
enhance the local image of the firm is frequently a function of the culture and attitudes of leading managers.

c) Training and Promotional Opportunities

The organizational structure of a firm will determine the layout and degree of functional interaction between personnel with different skills. These are both critical forces affecting the extent of on-the-job training carried out in the firm.

The culture of the firm will also affect whether supervisors are committed to promoting from within or filling key positions from the external labor market. Finally, the culture will effect the degree of racial conflicts likely to arise if blacks are hired to work side by side with older white workers.

E. Labor Force Requirements: Recruitment and Training Policies

a) Financial Viability

Since close to two thirds of the expenses of most businesses are payroll costs, the financial analyst must assess the labor force requirements of a venture carefully. The number, wages and skill of workers are all critical parameters that should be analyzed in a proforma. The financial analyst must also be aware of labor supply issues: does the local work force possess the necessary skills, and if not, what is the cost and time required to train them?
b) Job and Technology Generation

Clearly, to estimate the job generation capability of a firm, one must be familiar with its labor force requirements. To determine whether the venture's jobs are likely to be given to local workers requires a knowledge of the firm's recruitment and training policies. Such estimates must be made for both the near term and any future expansions that are anticipated.

c) Training and Promotional Opportunities

As noted above, a firm must require a labor force with skills that are insufficiently developed among local residents in order to have a clear commitment to training. Ideally the firm should be amenable to using new recruiting devices: e.g., either utilizing secondary workers' social networks or the public labor market intermediary workers.

One way to reconcile the goals of compensating for excessive risk aversion and improving job quality goals is to support clusters of small firms which employ workers in similar occupations. Development agencies can improve workers' chances of finding a new job quickly after they are laid off if the correlation among the market size of new ventures is low. Moreover, if career ladders can be constructed across these firms then promotional opportunities for secondary workers can also be expanded. The likelihood of success in such an effort hinges on the compatibility of the occupational structures of the cluster firms.
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