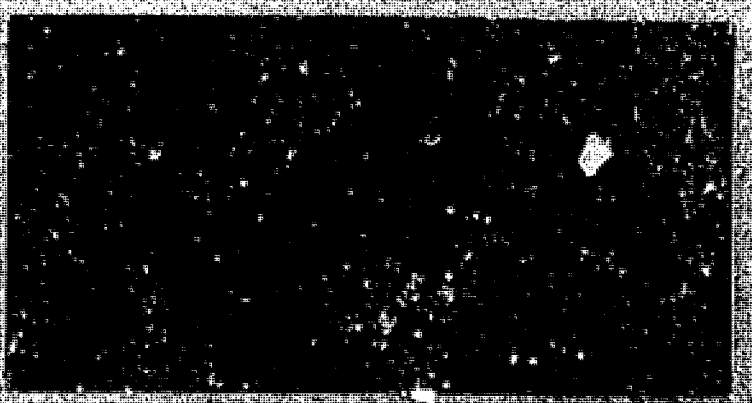
Employment and Enterprise Policy Analysis Discussion Papers



THE EFFECT OF POLICY AND POLICY REFORMS ON NON-AGRICULTURAL ENTERPRISES AND EMPLOYMENT IN DEVELOPING COUNTRIES: A REVIEW OF PAST EXPERIENCES

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E.E.P.A. Discussion Paper No. 1
March, 1986

Prepared for the Employment and Enterprise Development Division
Office of Rural and Institutional Development
Bureau for Science and Technology
U. S. Agency for International Development
Washington, D. C. 20523

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The views and interpretations in this publication are those of the authors and should not be attributed to the Agency for International Development or to any individual acting in its behalf. The authors acknowledge with thanks helpful comments received from E.E.P.A. colleagues Tyler Biggs, Susan Goldmark, Donald Snodgrass, and Robert Young. Since we have not followed all their suggestions, we alone are responsible for any remaining shortcomings.

The Employment and Enterprise Policy Analysis Project, composed of a consortium of the Harvard Institute for International Development (Prime Contractor), Development Alternatives, Inc., and Michigan State University (Subcontractors), is funded under U.S. Agency for Interational Development Contract No. DAN-5426-C-00-4098-00.

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EXECUTIVE SUMMARY

This paper explores two sets of issues. The first concerns the magnitude of policy induced distortions in developing countries and the impact of these distortions on the economy, paying special attention to differential impacts between firms of different sizes and resulting effects on the level of employment. The second concerns the prior experience of donors and LDC governments with the process of policy change. The following major themes emerge from the review.

A wide range of policies affect efficiency, employment, and the size distribution of firms in LDCs. These policies, often conceived in isolation, interact to form a complex policy environment in which non-agricultural enterprises operate. Since some policies are mutually reinforcing while others counteract one another, a focus on only one aspect can result in at best partial and at worst misleading diagnoses.

The magnitude of the effects of policy distortions varies considerably among policy arenas and from country to country. Several general patterns can be identified across LDCs. Labor market distortions appear to be relatively minor in most developing countries. In capital markets, on the other hand, the cumulative effects of various policies can lead to substantial and significant distortions in the price of capital. Overall, the policy induced factor cost distortions were found to be quite sizeable, with large non-agricultural enterprises facing wage/capital-rental ratios that are often more than twice those faced by their smaller counterparts. There is also evidence that trade and agricultural policies operating through product markets have substantial differential impacts on enterprises of different sizes.

Empirical estimates of the magnitude of the impact of these policy distortions on the economy are limited in number, often partial, fraught with ceteris paribus problems, and often depend crucially on particular assumptions about directions of causality and availability of complementary inputs. The magnitude of the policy induced allocative inefficiency has been estimated to be in the range of six to eighteen percent of GDP. More conclusive results will require more systematic analysis and improved data.

Experience in monitoring policy change has pointed to the importance of the time dimension. Entrepreneurs do respond to altered incentives, but such moves involve time as well as transactions costs. The embryonic nature of existing data and data collection mechanisms in most LDCs also contributes to lags by increasing the time required for informed analysis and decision making.

Previous discussion of donors' roles in LDC policy reform has centered primarily around issues of leverage and conditionality. This approach has met with some success in cases of stabilization policies, particularly during the course of foreign exchange crises. We have found less evidence

of successful leveraging aimed at developmental policies concerned with enterprise or employment questions. It may be unrealistic to expect leveraging to work in these areas, given the non-crisis nature of employment and enterprise issues, the complex and wide-ranging nature of the policy changes required, the analytically and politically controversial nature of such changes, and the limited amounts of funds likely to be available for conditional assistance for these types of changes.

Donors' most important contribution to employment and enterprise policy formulation will probably come through assistance in building up indigenous capacities for policy analysis. Often this will involve strengthening the data base on which policy analysis rests, as well as improving the understanding of the complex ways in which policies affect different sectors of the economy. While the provision of sound and timely economic analysis will not guarantee optimal policies, the most important contribution that donors can make to improved policy environments will likely come through support for the development of analytical capabilities among those engaged in policy formulation within LDCs.

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I. INTRODUCTION

This paper examines the effects of policies and policy reform on non-agricultural enterprises and employment in developing countries.[1] Since a multitude of policies affect employment and enterprise development, it is necessary to review a comprehensive array of government interventions, ranging from those affecting the labor market to policies dealing with interest rates, product prices, foreign trade and sectoral growth.

Particular attention is focused on the differential impact of these policies on non-agricultural enterprises of varying sizes and in different localities. Numerous studies have made clear that enterprises of different sizes and types vary substantially in their capacity to generate employment; some types of producers are far more labor-intensive than others. It is also clear, however, that the strength and economic viability of different types and sizes of producers is strongly influenced by the policy environment in which they operate. This means that it may be difficult to realize the potential for expanding productive employment through an encouragement of labor-intensive but efficient producers, if the policy environment is skewed in perverse ways. Yet there is a growing recognition that the policies of many developing countries are biased and discriminatory in their impact. There is a need, then, to examine systematically the nature and extent of these policy biases as well as the types of policy reforms which have proven to be most effective in overcoming them.

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[1] Although agricultural enterprises are also important contributors to economic development, they are not included in this review. They are extensively covered in other studies and, indeed, are the focus of a separate agricultural policy project. Agricultural policies do have a powerful effect on non-farm activities, however, particularly those located in rural areas, and their role in influencing these non-agricultural activities are considered in this paper.

There is a close relationship between projects, on the one hand, and policies, on the other, in encouraging the growth of different groups of producers. Policies can be viewed as affecting whole categories of enterprises while projects generally operate through individualized relationships between an agency running a project and selected beneficiary enterprises. To the extent that existing policies or projects discriminate against certain types of producers, there is a temptation to establish new projects aimed at offering direct benefits to previously excluded firms, "evening things out" by creating new and offsetting assistance packages. The result is that projects may be justified by the existence of distortions in the economy, but in turn may create new distortions as well as new occasions for increased government intervention. In such a situation, a first-best solution would often involve seeking to eliminate the original distortions rather than trying to create offsetting new ones. This will generally involve policy reform. In fact, this provides one of the main reasons for an interest in policy reform. Project assistance is also often expensive to provide, since it involves dealing with large numbers of small and often widely dispersed beneficiaries. In the case of policy change, by contrast, the impact is widely dispersed on large as well as small producers, operating through the forces of the market.

Notwithstanding the increased recognition of the importance of policy change in recent years, it is important to keep its role in proper perspective. If the need for policy change received too little attention in earlier discussions, there is a danger that, as the latest focus of attention in the development field, it may receive too much blame (or credit) today. It is only one of many determinants of long term,

sustainable and broadly based growth, and is generally at most a necessary but not sufficient condition for such growth.

The ensuing review will first examine the issues of employment and enterprise policy. Particular attention is focused on empirical evidence of the magnitude of policy distortions and their effects on the efficiency, employment, and size distribution of enterprises in the economy. The various approaches to policy change in this area are then examined. Of particular concern are the alternative paths to effect these policy changes and the alternative roles of donor agencies in this process. A concluding section summarizes the lessons that emerge from the review.

II. ECONOMICS OF EMPLOYMENT AND ENTERPRISE POLICY

A. THE ECONOMIC AND POLICY SETTING

Before examining existing policy distortions and their effects on the economy, some background information may be helpful to place these issues in proper perspective. A descriptive profile of non-agricultural activities will first be presented. A possible explanation for some of the observed characteristics of these activities will then be sought through an examination of the workings of factor and product markets in developing countries. This will lead to the establishment of a simple framework to facilitate the consideration of policies and the ways they influence non-agricultural enterprises of various sizes.

1. Descriptive Profile of Non-agricultural Activities

Recent research has shed new light on the characteristics of non-agricultural activities in developing countries, particularly those at the small end of the size spectrum. Small scale firms, which in this paper are defined as establishments employing fewer than fifty workers,[1]

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[1] There is no commonly accepted definition of what constitutes a small scale firm. A survey of 75 countries conducted in 1975 revealed that over 50 different definitions were used (Auciello et al., 1975). Although the definition used in this paper is somewhat arbitrary, this upper limit was chosen because it would exclude most foreign-owned firms as well as most of those more complex, specialized enterprises that have privileged access to capital or other inputs. Indeed, some analysts, such as Steel and Takagi (1983), use access to formal capital markets as the key discriminating variable. Others such as Squire (1981) suggest an analagous approach, dividing firms based on whether or not they pay minimum wages. While not identical, we believe these three possible grouping rules -- based on size, access to capital, or wage market status -- will result in broadly similar firm groupings. Recognizing that no selection can be perfectly satisfactory, we opt for a size designation based on employment, since the bulk of comparative statistics is available in that form.

form a significant component of the non-agricultural sectors of most developing countries. A review of data from 13 countries reveals, for example, that in all but one case, more than fifty percent of manufacturing employment was generated by small firms (see Table 1). Although comparable data are generally lacking on the relative importance of employment in small enterprises in other non-agricultural sectors, it is usually contended that small producers predominate in the the trading and service sectors as well[1] (see Page and Steel, 1984).

Among small scale non-agricultural producers, manufacturing tends to be a major component. In a review of non-farm employment in rural areas of 9 developing countries, Chuta and Liedholm (1979) found that an average of one-third of total reported employment was in manufacturing. Because of manufacturing's relative magnitude, because of its importance for growth and structural change, and because data on most other components are generally sparse, much of the subsequent analysis in this paper focuses on the manufacturing sector.

Studies comparing small and large scale non-agricultural activities in developing countries have discovered important differences in their production technologies. Virtually all studies indicate, for example, that small manufacturing firms generate more employment per unit of capital (i.e., are more labor intensive) than their larger scale counterparts (see Page and Steel, 1984, and Liedholm and Mead, 1986). Some studies report that smaller firms in particular product lines also produce more output (or value added) per unit of capital and thus generate more output as well as employment for a given investment than do larger firms. Finally,

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[1] Large-scale enterprises generally predominate in mining and utilities.

Table 1. Distribution of Employment in Manufacturing by Firm Size

-- Percentage --

Country and Date	Per Capita Income ($) 1982	Firm Size: Large Scale 50 or more workers	Small Scale 10-49 workers	Small Scale below 10 workers
India-1971	$260	38%	20%	42%
Tanzania-1967	$280	37%	7%	56%[a]
Ghana-1970	$360	15%	1%	84%[a]
Kenya-1969	$390	41%	10%	49%[a]
Sierra Leone-1974	$390	5%	5%	90%
Indonesia-1977	$580	16%	7%	77%
Honduras-1979	$660	24%	8%	68%
Thailand-1978	$790	31%	11%	58%[a]
Philippines-1974	$820	29%	5%	66%
Nigeria-1972	$860	15%	26%	59%[a]
Jamaica-1978	$1330	49%	16%	35%
Colombia-1973	$1460	35%	13%	52%
Korea-1975	$1910	53%	7%	40%

Note: [a]Computed residually as the difference between total employment recorded in labor force or population surveys (including enterprises of all sizes) and employment in larger firms, as reported in establishment surveys.

Sources: Africa: Tanzania, Ghana, Kenya, Nigeria: computed from Page (1979); Sierra Leone: Chuta and Liedholm (1985);
India: Mazumdar (1980);
Indonesia: computed from Snodgrass (1979);
Honduras: Stallmann (1984);
Thailand: Estimated from data provided by National Statistical Office, Thailand;
Philippines: Anderson and Khambata (1981);
Jamaica: Fisseha (1982);
Colombia: Berry and Pinell-Siles (1979);
Korea: Ho (1980).

most analysts imply either implicitly or explicitly that large and small non-agricultural firms produce similar though not perfectly substitutable products. Although there is some evidence that small firms tend to produce somewhat lower quality products for lower income customers, they do serve high income consumers as well (see Page and Steel, 1984, and King and Byerlee, 1978).

One of the primary explanations for the co-existence of large and small firms producing similar goods using different labor-capital ratios is the alleged existence of segmented factor markets. This segmentation is said to parallel closely the division between large and small scale enterprises. In the labor market, for example, it is claimed there is a wage gap between large and small enterprises, even after adjusting for quality differences. This segmentation forces larger firms to pay a higher price for labor than their smaller-scale counterparts (see, for example, Berry, 1978, and Berry and Sabot, 1978). It is also argued that a comparable segmentation exists in capital markets. Large firms are said to be able to obtain funds from institutional sources at rates substantially lower than those facing small firms in the informal credit markets (see, for example, Chuta and Liedholm, 1979). The segmented factor markets thus are said to cause large and small firms to face differing factor prices, which led them to employ differing combinations of capital and labor.

These segmented markets have often been either created by or reinforced by governmental policies. Indeed, it is through these factor markets as well as the product markets that most policies ultimately affect the economy. Consequently, in examining the effects of policies on non-agricultural employment and enterprises, a framework that focuses attention on these markets seems particularly fruitful. Such an approach enables one

to capture the full range of policy distortions, not only those arising in the factor markets, but also those in the product markets, where policies affecting the level and composition of demand for various products can be scrutinized. This framework draws on that developed by Steel and Takagi (1983).

2. Policies and Their Points of Impact

A wide array of government policies influence non-agricultural enterprises through effects on input and output markets.[1] Although conceived in isolation one from another, these policies -- labor market, interest rate and trade policies, to name a few -- cumulate and interact to form a system of incentives to which entrepreneurs respond. Table 2 furnishes an inventory of policies according to standard, functional categories, while Table 3 shows how these policies influence input and product markets. Perhaps the most striking conclusion to be drawn from Table 3 is how wide a range of policies come into play to influence the price of capital, the price of labor, prices of material inputs, the profitability of various categories of production, and the structure of demand for non-agricultural products.

In the factor markets, exchange rates, tariffs, import duties and interest rates affect the price of capital faced by firms of different size in the economy. Minimum wage laws and other types of labor legislation, government salary structures, and policies governing union activities all

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[1] This paper is concerned with government policies. There is also a wide array of enterprise standard operating procedures, which could be referred to as private sector policies, covering such things as labor practices, entrepreneurial customs, and contract procedures. Except to the extent that they are influenced by government policies, these private sector practices are treated as outside the scope of this paper.

Table 2. Inventory of Policies, by Functional Groupings

1. Trade Policy
   a. import tariffs
   b. import quotas
   c. export taxes or subsidies
   d. foreign exchange rates
   e. foreign exchange controls

2. Monetary Policy
   a. money supply
   b. interest rate
   c. banking regulations

3. Fiscal Policy
   a. government expenditure
      -- infrastructure
      -- direct investment in production, marketing or service enterprises
      -- government provision of services
      -- transfers
   b. taxes
      -- corporate income
      -- personal income
      -- payroll
      -- property
      -- sales

4. Labor Policies
   a. minimum wage laws
   b. legislation with regard to working conditions, fringe benefits, etc.
   c. social security
   d. public sector wage policy

5. Output Prices
   a. consumer prices
   b. producer prices

6. Direct Regulatory Controls
   a. enterprise licensing and registration
   b. monopoly privileges
   c. land allocation and tenure
   d. zoning
   e. health

Table 3. A View of the Factor and Product Markets: Points of Policy Intervention Influencing Production, Employment, and the Size Distribution of Firms

Factor and Other Input Markets

1. Policies affecting the price and availability of capital
   a. interest rates and credit availabilitly [2b]
   b. import duties and quotas [1a, 1b]
   c. exchange rate and controls [1d, 1e]
   d. capital-based taxes (e.g., accelerated depreciation) [3b]

2. Policies affecting the price of labor
   a. minimum wage laws [4a]
   b. labor legislation [4b, 4c]
   c. public sector wages [4d]
   d. policies towards unions [4]
   e. labor based taxes [3b]

3. Policies affecting the availability and price of other inputs
   a. import duties [1a]
   b. exchange rates and controls [1d, 1e]
   c. price controls [5b]

4. Regulatory policies affecting the relative profitability of different producers and production techniques
   a. zoning [6d]
   b. licensing and registration [6a]
   c. monopoly privileges [6b]

Output Markets

1. Policies affecting demand for domestic products through the price of competitive traded goods
   a. effective rates of protection (import duties on inputs and outputs) [1a, 1b]
   b. exchange rates [1d, 1e]
   c. export taxation [1c]

2. Policies affecting demand through sectoral income distribution (agriculture versus industry; rural versus urban)
   a. differential structure of protection [1a, 1b]
   b. differential export taxation [1c]
   c. differential foreign exchange rates and access [1d, 1e]
   d. differential expenditure on services and infrastructure [3a]
   e. differential taxation [3b]
   f. differential output pricing [3a, 3b]

3. Policies affecting demand through vertical income distribution
   a. fiscal policy, transfers and taxation [3a, 3b]
   b. item 2 above

4. Price controls for finished products [5a]

Numbers in brackets refer to policies listed in Table 2.

affect the price of labor. Tariff rates, exchange rates and price controls affect the price of material inputs. Regulatory policies such as zoning and licensing laws affect the relative profitability of different enterprise groups as well as different commodities.

In the output markets, a range of trade policies affect the demand for domestic products, either through the price of competing imports or the price at which exports can be sold. An even wider array of trade, fiscal and price policies affects the sectoral and vertical distribution of income. It is argued by some that increased agricultural income, increased rural income, increased export production and increased incomes for the poor will all increase the demand for more labor intensive products, often produced by smaller enterprises. This implies that a wide range of demand side policies can play a potentially significant role in influencing aggregate employment in an economy.

By definition, policy distortions lead to allocative inefficiencies and hence to lower output than would prevail in a distortion-free world. Numerous authors have suggested that these distortions also lead to lower employment, because of the biases common in many trade, credit and fiscal policies. As a first step in examining the validity of these contentions, the empirical evidence relating to the magnitude of these distortions will now be considered. This is followed in section C below by a discussion of the extent to which these observed distortions have had an impact on patterns of output and employment in the economy.

B. THE NATURE AND MAGNITUDE OF EXISTING DISTORTIONS

Empirical estimation of the magnitude of policy distortions is an inherently difficult task. In segmented markets, prices of factors of

production as well as products diverge for a variety of reasons. Some of those divergences have a "real" basis such that they would continue to exist even in a distortion-free world with perfect information; these include such things as quality differences (for labor, or finished products), or differences in risk or administrative costs (for capital). It is only after correcting for these "real" sources of divergences that one could refer to remaining differences as distortions. These in turn might arise from a variety of different sources. For our purposes, we wish to separate them (conceptually, at least!) into those which result from policies, versus all others. The latter category might include price divergences arising from lack of information and/or power of some participants to manipulate markets. What this means is that not all divergences between prices in segmented factor or product markets should be called distortions, and not all distortions arise because of policies. Our interest in this paper is in policy-induced distortions. Where possible in the subsequent discussion, we shall attempt to keep these distinctions clear; needless to say, in the review of empirical data, this is generally virtually impossible. It is for this reason among others that the data can only be used to indicate orders of magnitude rather than as precise measures.

Although the existence of policy-induced distortions has been widely recognized in many developing countries, relatively few attempts have been made to quantify them.[1] As Krueger et al. point out in their comprehensive study of trade and employment in developing countries, "little is known

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[1]The World Bank has recently done a study in which they classified 31 countries according to the degree of distortions in factor prices, product prices, and foreign exchange prices. For subcategories of each of these headings, the Bank staff used quantitative measures plus their own judgement to classify the extent to distortion as high, medium, or low. See World Bank, 1983.

about the probable orders of magnitude . . . and their consequences" (1983, p. 120). With the possible exception of trade effects, the treatment of this topic has been piecemeal and sporadic. This section marshalls the limited evidence that exists on the nature and magnitude of distortions, highlighting those that differentially affect large and small non-agricultural enterprises. Policies affecting the factor markets will be examined first, focusing particularly on the labor and capital market distortions and how they affect the relative costs of employing these inputs in enterprises of different sizes. This will be followed by a discussion of distortions influencing the product market.

1. Factor Market Distortions

Government policies can introduce a variety of distortions, many of which operate through differential impacts on costs of factor inputs facing large and small firms. The primary focus of this section is on the labor and capital markets.

a. Labor Market Distortions

Labor markets in developing countries are frequently segmented in a fashion that parallels the distinction between large and small enterprises. Empirical evidence of a wage gap along these lines is well documented.[1] Although the range of wages among small firms is wide, the average real wage for unskilled workers in large scale firms is often on the order of

[1]See, for example, Berry and Sabot (1978), Knight and Sabot (1980), and Kannappan (1983).

twice that in small and medium-sized firms.[1] A portion of this gap reflects subtle differences in skill levels and labor turnover, since large firms are more likely to be able to select the most proficient and reliable of the unskilled workers.[2] Nevertheless, some of the gap may be due to policy interventions that differentially affect enterprises of different sizes. Although interventions such as minimum wage legislation, mandated fringe benefits, restrictions on the ability to fire workers, and government-supported union pressures exist in many developing countries, there is evidence that these are generally applied only to the larger, more visible enterprises.[3] The ubiquitous smaller enterprises are usually either formally exempt from such regulations or escape through lax enforcement.

Minimum wage legislation is one of the main forms of government intervention in the market for unskilled labor and is an important feature in most developing countries. Watanabe's (1976) international survey of such legislation indicates that the precise form as well as the effectiveness of implementation of minimum wage legislation varies from country to

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[1]See Page (1979) for Senegal and Upper Volta, Mazumdar (1979) for Bombay, Child (1977) for Kenya, Byerlee et al. (1983) for Sierra Leone, and Steel (1977) for Ghana.

[2]Variation in personal attributes such as commitment and stability as well as ability, experience and skill are discussed in Squire (1981) and Mazumdar and Ahmed (1978).

[3]Government-mandated fringe benefits such as social security programs are mainly confined to Latin America, although a few programs do exist elsewhere (e.g., in Sri Lanka, Malaysia, and Zambia). These programs are primarily applied only to large enterprises and cover approximately 15 to 20 percent of the labor force in Latin America (Squire, 1981).

country.[1] In several cases, such as in the Sudan (Kannappan, 1977), the Philippines (Anderson and Khambata, 1981), and Thailand (Akrasanee, 1981), small and medium firms are specifically exempt from coverage. In other instances, the minimum wage is set sufficiently low that actual wage rates in the small scale sector exceed the minimum, as in Egypt and Zaire (Page, 1979). In most cases, however, the minimum wage is not enforced in small firms (see Watanabe, 1976, p. 154).[2] These findings are consistent with information generated from small firm surveys, which indicate that virtually none of the small entrepreneurs reported that they were directly affected by such legislation (see Liedholm and Mead, 1986). This suggests that the labor prices facing small scale non-farm enterprises are relatively undistorted and closely approximate the opportunity cost of that labor.[3]

The accumulating empirical evidence also indicates that even for large firms the effects of minimum wage legislation are often limited. In several countries, including Sierra Leone (Byerlee et al., 1983), the Philippines (Anderson and Khambata, 1981), and Zaire (Page, 1979),

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[1]Descriptions, and in some cases analysis, of minimum wage legislation in particular countries are contained in: Gregory (1975) for the Philippines, Mexico, Sri Lanka, and Kenya; ILO (1970) for Colombia; Frank (1968) for Ghana and Uganda; Kannappan (1977) for the Sudan; Joshi and others (1974) for the Ivory Coast; Atasi (1968) for Syria; Fapohunda and others (1975) for Nigeria; Guisinger (1978) for Pakistan; Bertrand and Squire (1980) for Thailand; and Reynolds and Gregory (1965) for Puerto Rico.

[2]Puerto Rico is recognized as perhaps the one exception where relatively high minimum wages are effectively applied to enterprises of all sizes.

[3]Frequently, however, the medium sized and even some large firms find themselves subject to formal or variable enforcement, which can subject them to undue harassment or to pressures for side payments, and thus lead to some distortions.

larger firms pay a higher wage than the mandated minimum wage. Some of this may be traceable to trade union activity (either directly or through public wage tribunals) or the hiring practices of public firms, although the empirical evidence of these effects is mixed.[1] Moreover, since the middle 1960's, legislated wage increases in many countries have been less than increases in the general price level and have tended to follow rather than lead those in large scale private firms.

Evidence on the rough orders of magnitude of policy induced distortions in the labor market between large and small enterprises in several countries is summarized in Table 4. In the unfettered markets of most Asian countries, labor market distortions were virtually non-existent during the period covered by these surveys.[2] In a number of Latin American and African countries, minimum wage legislation and mandated social insurance schemes for larger firms frequently caused some distortions. The magnitude of the distortions for the countries listed -- 20-25 percent -- appears typical for other countries in those regions. Since unskilled labor, which is the most likely labor category to be affected by minimum wages, accounts for a relatively small portion of the total cost of these firms, the effect of these particular distortions may not be large. The empirical evidence seems to support the contention of Berry and Sabot (1978), Webb (1977), Squire (1981), Steel and Takagi (1983), and Krueger et al. (1983, p. 147) that the extent and magnitude of labor market distortions are generally rather small.

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[1] See Squire, 1981.

[2] Since the middle 1970's, however, minimum wage and other labor legislation have been imposed in Indonesia and Pakistan; it is unclear whether these labor markets continue to be essentially undistorted today.

Table 4. Magnitude of Policy Induced Distortions in the Labor Costs of Large Scale Non-Farm Enterprises[a]

Country	Year	Percent Increase in Labor Costs
Asia		
Hong Kong	1973	0
Indonesia	1972	0
Pakistan	1961-64	0
South Korea	1969	0
Africa		
Ghana	1972	+25
Ivory Coast	1971	+23
Sierra Leone	1976	+20
Tunisia	1972	+20
Latin America		
Brazil	1968	+27
Argentina	1973	+15

Note: [a]As discussed in the text, most small enterprises operate in essentially undistorted labor markets. The figures in the table reflect the policy-induced percentage increases in the large enterprises' wage rates, compared to those that would exist in an undistorted labor market.

Sources: Ghana: Ingram and Pearson (1981);
Ivory Coast: Monson (1981);
Sierra Leone: Chuta and Liedholm (1985);
Tunisia: Nabli (1981);
Hong Kong: Krueger et al. (1983);
Indonesia: Pitt (1981);
Pakistan: Guisinger (1981);
South Korea: Hong (1981);
Brazil: Carvalho and Haddad (1981);
Argentina: Nogues (1980).

b. Capital Market Distortions

Three types of capital market distortions need to be considered. The first stems from distortions that arise from the operation of domestic capital markets. The second stems from the operation of the trade regime, and concerns both the tariff structure and the foreign exchange market. Finally, direct taxes and related tax concessions and exemptions can lead to distortions in the capital market. These three aspects are discussed in turn.

i. Domestic Capital Market Distortions

Domestic capital markets are segmented in most developing countries in ways that parallel the labor market segmentation previously described. Large firms with established credit ratings are usually able to obtain funds from commercial and public banks as well as other formal sector financial institutions. Small and medium scale firms rely almost entirely on traditional sources of funds, particularly personal and family savings and to a lesser extent traders, suppliers of goods, and money lenders. Indeed, the limited extent to which small enterprises rely on formal sources for their funds is striking. In small enterprise surveys in several developing countries, the vast majority reveal that less than one percent of initial investment funds for small producers come from formal sources (see Liedholm and Mead, 1986).

Capital costs in formal and traditional markets are vastly different. In most developing countries, governments either explicitly or implicitly have imposed on the formal banking system interest rate ceilings or credit controls that have tended to keep these interest rates artificially low. The World Bank's (1975) review of formal sector interest rates in 34 countries revealed that in over two-thirds of them the nominal interest rates were 10

percent or less; in several cases real interest rates were negative.[1] Similar results are reported in more recent surveys (see Page, 1979). Faced with an excess demand for funds, banks and other formal sector financial institutions have generally responded by rationing the scarce funds by giving priority to their large scale clients.

Evidence on the interest rates facing small and medium enterprises in traditional or informal markets indicates that they are substantially higher than these formal sector rates. A comprehensive IMF survey by Wai (1957), reviewing "unorganized" money market rates in 23 developing countries primarily during the 1950's, revealed that the "usual" nominal interest rates ranged from 17 to over 100 percent with the world-wide average falling between 30 and 40 percent depending on the weighting scheme used. More recent studies have also found high rates in the informal or unorganized credit markets. A World Bank survey (1975), based on studies of informal credit markets in 23 countries during the late 1960's and early 1970's, found that real rates in excess of 100 percent were not unusual and

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[1]The nominal interest rates in formal financial markets, however, may understate the true effective interest rate; lenders often impose additional administrative charges, special repayment provisions, forced saving requirements or other such conditions on the lender that serve to make the effective rate exceed the nominal interest rate.

that the median real interest rate world-wide was 40 percent.[1] In virtually every country, small firms faced real interest rates ranging from three to over ten times those facing their larger scale counterparts. A summary of the quantitative evidence on the magnitude of the interest rate differentials is presented in Table 5.

To some extent, higher rates in traditional capital markets are simply a reflection of the higher risks and higher transactions costs of providing funds to small enterprises.[2] It is frequently argued that the administrative costs and risk premiums associated with small loans greatly exceed those associated with larger loans (see, for example, Page, 1979). One of the reasons behind the higher perceived risks of lending to small firms concerns the general lack of information about such borrowers, which makes it difficult and expensive for financial institutions to screen

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[1]Wai has also undertaken a follow-up study examining interest rates in informal markets, mostly in the period 1968-71. His figures suggest some decline in these rates over the two decades from the first study to the second. The mean figures declined from 44% to 40%, while the median figures dropped from 33% to 30%. There were many differences in the country coverage of the two studies, however; the first study covered data from 22 countries, the second from (a somewhat different) 33. For the 13 countries for which data were available in both time periods (albeit often based on quite different primary studies), the mean interest rates in informal markets declined from 40% to 30%, while the median dropped from 34% to 28%. See Wai, 1977.

[2]Differences in the duration of the loans made in formal and informal financial markets may also account for some of the observed differences in interest rates. Loans in traditional capital markets are usually made on a very short term basis; lending through formal institutions, on the other hand, may be for fixed or working capital purposes, but is generally for longer periods than in informal markets. The effect of this difference on interest rates is unclear. In developed countries, long term rates generally exceed short term ones. Yet in developing countries the pattern is generally reversed (see, for example, Wai, 1977). A partial explanation for this term structure of interest rates in developing countries may lie precisely in the fact that longer-term lending is generally undertaken by formal sector institutions and is more likely to be subject to interest rate ceilings.

Table 5. Formal and Informal Nominal and Real Interest Rates in Selected Economies

	Informal Rates (%)		Formal Rates (%)	
	Nominal	Real[d]	Nominal	Real[d]
Africa				
Ethiopia[a]	70	66	12	8
Ghana[a]	70	64	6	0
Ivory Coast[a]	150	145	10	6
Nigeria[a]	200	192	6	-2
Sudan[a]	120	120	7	7
Sierra Leone[b]	75	60	12	-3
Asia				
Afghanistan[a]	33	NA	9	NA
India[b]	25	15	9	-1
Indonesia[a]	40	29	14	3
Jordan[a]	20	15	7	2
Malaysia[a]	60	58	18	16
Pakistan[a]	30	27	7	4
Philippines	30	24	12	6
Republic of Korea[a]	60	49	6	5
Sri Lanka[c]	26	20	5	-1
Thailand[b]	29	27	9	7
Vietnam[a]	48	20	30	2
Latin America				
Bolivia[a]	100	96	9	5
Brazil[a]	60	38	15	-7
Chile[a]	82	52	14	-16
Colombia[b]	48	40	24	16
Costa Rica[a]	24	20	8	4
El Salvador[a]	25	23	10	8
Haiti[b]	140	122	15	-3
Honduras[a]	40	37	9	6
Mexico[a]	60	57	10	7

Sources: [a]World Bank, 1975. Formal rates are average of those charged on various types of loans by agricultural credit institutions. Informal rates are from various credit studies in the reporting countries. Both sets of figures cover the period from 1967-1970.

[b]Chuta and Liedholm, 1979. Data are from the period 1970-1975.

[c]Wai, 1977.

[d]Real rates were obtained by subtracting from nominal rates the average annual rate of increase in the consumer price index for 1967-1970 for World Bank countries or 1972-1975 for Liedholm-Chuta countries.

good borrowers from "lemons." Consequently, commercial banks and other formal financial institutions act to reduce this perceived risk by insisting on full collateral and by dealing primarily with established, large scale borrowers.[1]

Empirical evidence on administrative costs and risk premiums among informal sector lenders has been somewhat sparse in the past, but new evidence is emerging. In a recent review of the literature, Liedholm (1985) reports that, in some carefully-designed programs, the transactions costs for small scale loans may be lower than previously imagined. Administrative costs as a percent of loan value in informal markets in India and in several innovative small enterprise lending schemes are less than 6 percent. Moreover, the arrears and default rates on many of these schemes compare quite favorably with those of lending schemes to larger borrowers. For programs such as these, probably no more than 10 percentage points of the interest rate differential between the formal and informal markets can be traced to administrative and risk transactions cost differences (see also Saito and Villanueva, 1981).

A summary of empirical evidence on the quantitative magnitude of distortions on the domestic capital market for selected countries is presented in Table 7 (p. 31 below). To the extent possible, adjustments have been made in these figures for administrative and risk differentials between large and small borrowers, so the figures can be described as

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[1]Collateral requirements not only operate to enhance repayment, but also provide compensation to lenders in the event of default. Informal lenders frequently do not require collateral; they thus lack comparable protection from loss. The result is that their private risk from default would be higher, even if actual default rates were comparable so the default risks to the society (i.e., the social risks) were comparable for formal and informal sector lending..

measures of capital market distortions between these different types of borrowers. Except for Hong Kong, these distortions are quite large, exceeding 30 percent. No significant differences are apparent among different regions of the world. Relative to what would exist in integrated and distortion-free capital markets, the actual cost of capital to large firms is unduly low. That for small firms may be closer to capital's real shadow rate, although in some instances the rate facing small firms m: exceed the shadow price of capital.[1] In a distortion-free financial market, much of the currently-observed interest rate differential would disappear.

ii. Foreign Trade Regime-Induced Capital Distortions

The tariff structure and the operation of the foreign exchange market also introduce distortions that differentially affect large and small non-agricultural enterprises. In particular, they can distort the price facing firms of different sizes for their imported capital goods.

The import duty structure introduces enterprise size distortions in two important ways. First, many capital (as well as intermediate) inputs used by small non-farm enterprises are classified as consumer goods. Since in most countries the structure of protection involves relatively high duties on consumer goods and relatively low duties on intermediate and capital goods, the small firms end up paying relatively high duties on these items. In Sierra Leone, for example, items such as sewing machines

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[1] In Sierra Leone (Byerlee et al., 1983), for example, it was estimated from field surveys that the risk free return to informal lenders was approximately 43 percent; subtracting 6 percentage points for administrative costs yields 37% as a measure of the informal market rate. When the country's 15 percent inflation rate was subtracted from this figure, it closely approximated Sierra Leone's assumed shadow price for capital, 20%.

and outboard motors are crucial capital goods for small producers, but were apparently classified as consumer goods since they were taxed on the order of 35 percent, the same rate normally levied on imported consumer goods (Byerlee et al., 1983). In Burkina Faso, a similar pattern emerges, with import duties of 72% on hand tools, 63% on electrically powered wood and metal working tools, and 41% on sewing machines (Haggblade, 1984).

Second, in many developing countries, large scale enterprises are granted investment incentives that enable them to import capital goods duty-free for an extended period. These concessions are granted by government agencies that administer the investment tax codes to qualified or "priority" enterprises. Usually, these are large scale, modern, import substitution activities considered to be crucial to the country's development, although sometimes "modern" export activities are included as well (such as in the Ivory Coast [Monson, 1981] or in South Korea [Hong, 1981]). In some countries, these incentive laws specifically exclude firms below a certain size; in most countries, however, small firms are either ignorant of the concessions available or are unable to undertake the protracted bureaucratic procedures required to obtain them (see Liedholm, 1985).

There are only limited data to measure the magnitude of this distortion in the price of capital due to the differential treatment of imported capital. Nogues (1980) estimates that in Argentina investors eligible for duty free imports of machinery received a subsidy of about 40 percent of their capital costs. In Sierra Leone, it was estimated that large firms accorded import duty relief on their capital also obtained an implicit subsidy of approximately 25 percent compared to their smaller scale counterparts in the same industries (see Appendix A). As an additional perspective on the differential treatment created by the import

duty relief in Sierra Leone, it was estimated that the effective rate of tariff protection for large scale clothing producers, all of whom received such relief, was 430 percent, while for their smaller counterparts in the same industry, the effective rate of protection was only 29 percent.[1] Thus, these investment concessions linked to the tariff structure have operated in several countries to create a differential in the cost of capital between large and small enterprises.

Quantitative restrictions on imports through quotas and licensing have also served to create distortions in the price of imported capital between small and large enterprises. Import licensing has been a major instrument of protection in several countries either as a substitute for or an adjunct to the tariff structure. Bhagwati, in his authoritative volume on exchange control regimes (1978), argues that "the majority of authorities like to think of themselves as biasing access to imports in favor of the smaller applicants and indeed in countries such as India and Pakistan, this . . . was considered one of the benefits of an import control system" (p. 26). The evidence produced by his nine country studies indicated, however, that "in point of fact . . ., ex post outcomes appear to have been disturbingly concentrated on the large-scale applicants." For Ghana, Leith (1977) indicated a deliberate bias in favor of large importers, while in the case of India, Bhagwati and Srinivasan (1978) concluded that the control system discriminated against the small scale sector. For Pakistan, Guisinger (1981, p. 333) reported that "in the 1960's, few small scale manufacturing

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[1]The effective rate of protection (ERP) is the rate of protection provided to domestic value added in a particular activity, taking account of tariffs on both outputs and inputs. The higher the value of the ERP, the greater is the protection. In the Sierra Leone case cited above, both large and small firms received identical nominal protection on their output but received substantially different tariff treatment on their inputs.

firms in Pakistan had access to import licenses, and when they purchased foreign equipment it was through import agents who appropriated the scarcity value of the import licenses for themselves." According to Bhagwati (1978, p. 28), the reasons for the bias against small producers include: "1) ease of administration in dealing with smaller numbers of successful applicants; 2) a feeling that larger firms were more reliable; 3) a sense that larger firms would get better terms from foreign suppliers; 4) the greater access (and contacts) of the larger firms to the bureaucracy and politicians in general, and to the licensing authorities, in particular; and, 5) the important edge obtained by the larger firms quite simply because nearly all the authorities tended to allocate to past shares or other quantity-related variables."

What is the magnitude of the differentials created by such a system? Guisinger contends that in Pakistan during the 1960's tariff protection was a far less significant factor in overall protection than import licensing. He estimated that the capital cost differential between large and small firms caused by the trade-regime was approximately 38 percent. Even when small firms in Pakistan purchased machinery made locally, he felt that "the prices generally reflected the full scarcity margins and tariff duties on the capital and intermediate inputs used in their production" (op. cit.).

In many developing countries, the operation of the market for foreign exchange also contributes to differentials in the capital prices facing large and small enterprises. The exchange rate in many developing countries is overvalued, so that the market price of foreign exchange in terms of domestic currency is below its equilibrium values. Consequently, the prices of imported capital and other imported inputs are unduly low for those with access to foreign exchange at the official rate.

What is the extent and magnitude of these currency overvaluations? The empirical evidence, summarized in Table 6, indicates that while there has been a general trend towards liberalization over the past two decades, the overall pattern of currency overvaluation has affected a wide range of countries, and remains significant in many today. In the Krueger et al. review of trade and employment conditions in 13 countries during the post-war period, only Hong Kong escapes, although South Korea, Brazil, and the Ivory Coast had rates that were thought to be close to equilibrium for some periods. The estimates of the degree of exchange overvaluation for those countries ranged from 20-40 percent. In Jansen's review of 14 African economies in 1979, she found that the average overvaluation amounted to 40 percent, with quite a wide variance ranging from 0 (Cameroon) to 300 percent (Ghana). Black market foreign exchange rates also indicate a similar pattern of overvaluation.

Since there is an excess demand for foreign exchange at an overvalued exchange rate, the government must employ some rationing mechanism to determine who is allowed to import at the implicitly subsidized rate. In some countries this is done through multiple exchange rates; at the end of 1984, some twenty-five countries were maintaining multiple exchange rate systems (Lizondo, 1985). Usually, only the large firms in priority activities were permitted to obtain foreign exchange at the lowest rates, leaving the smaller enterprises to pay the higher rates and thus creating a differential. Other methods used to ration available foreign exchange are quantitative restrictions and systems of tariffs, both of which were previously seen to create distortions between large and small firms.

The orders of magnitude of capital market distortions caused by currency overvaluation coupled with differential tariffs or licensing

Table 6. Degree of Currency Overvaluation [Percentage]

	Year	Indications of Degree of Currency Overvalued
Africa		
Botswana	1983 (a)	10%
Camercon	1979 (b)	0%
Ghana	1983 (a)	228%
Egypt	1983 (a)	66%
Ivory Coast	1979 (b)	10%
Kenya	1983 (a)	17%
Malawi	1983 (a)	60%
Nigeria	1983 (a)	45%
Senegal	1979 (b)	40%
Sierra Leone	1983 (a)	37%
Sierra Leone	1976 (b)	15%
Tunisia	1983 (a)	12%
Zambia	1983 (a)	27%
Asia		
Bangladesh	1983 (a)	42%
Hong Kong	1983 (a)	0%
India	1983 (a)	28%
Indonesia	1983 (a)	0%
Malaysia	1965 (c)	4%
Malaysia	1983 (a)	1%
Pakistan	1963 (c)	50%
Pakistan	1983 (a)	30%
Philippines	1963 (c)	15%
Philippines	1983 (a)	50%
South Korea	1983 (a)	8%
Taiwan	1965 (c)	20%
Taiwan	1983 (a)	6%
Latin America		
Argentina	1958 (c)	100%
Argentina	1983 (a)	11%
Brazil	1966 (c)	50%
Brazil	1983 (a)	37%
Chile	1966 (c)	68%
Chile	1983 (a)	17%
Colombia	1968 (c)	22%
Colombia	1983 (a)	21%
Jamaica	1983 (a)	14%
Honduras	1983 (a)	43%
Mexico	1960 (c)	15%
Mexico	1983 (a)	20%

Sources: (a) World Currency Yearbook (1984); black market premiums as of December 31, 1983. (b) Jansen (1980). (c) Healy (1972); citing Little *et al.* (1970) and Balassa (1971).

systems for various countries are set forth in Table 7. Pakistan, Ghana, Sierra Leone, and Tunisia, the four countries with significant trade regime capital distortions, were all following import-substitution strategies. In these countries, overvalued currencies, combined with relatively low (often zero) rates of protection on imports of capital goods of larger firms made the capital imports of large enterprises unduly low in price. Sierra Leone and Tunisia relied primarily on tariff rates to regulate the capital inflow, while Ghana and Pakistan relied primarily on licensing. Yet, in all four countries, the order of magnitude of the capital price distortion between large and small enterprises caused by the trade regime ranged from 25 to almost 40 percent, not an insignificant amount. Distortions of similar magnitude were claimed to exist in Uruguay, Argentina, Chile, and Indonesia (Krueger et al., 1983, p. 145). On the other hand, negligible trade regime capital distortions were reported to exist in Hong Kong, South Korea (1975), and Brazil (1968), whose currencies were not greatly overvalued at that time and were following export promotion strategies.

iii. Domestic Tax-Induced Capital Distortions

The domestic tax policies of developing countries can also create distortions that differentially affect non-agricultural enterprises of various sizes. Among large enterprises, the previously mentioned investment concessions frequently provide not just subsidized capital and import duty relief, but also other tax inducements such as income tax holidays, accelerated depreciation allowances and property tax reductions. These direct tax concessions affect the returns to capital and thus contribute to capital cost differentials between those large enterprises receiving them and those which do not.

The treatment of the direct tax component of the investment concessions package also creates distortions between large and small enterprises. Small enterprises are frequently not subject to direct taxes, which gives them a differential advantage over those large enterprises not receiving such concessions. Many small firms, the majority of which are unincorporated, are formally exempt from such taxes. In Sierra Leone, for example, no income tax was paid in 1965 if yearly income was below $560, a figure that was 4 times the country's average per capita income. In other instances, smaller firms may be formally subject to tax, but are able to avoid payment because of lax enforcement and the difficulty of collecting from widely-dispersed small firms. Needless to say, large firms in such environments are also often able to avoid these payments as well.

Data on the magnitude of these direct tax-induced differentials are particularly sparse, but information from a few countries is presented in Table 7. Most of these are probably upper-bound estimates of the distortions, because it is assumed that, except in Korea, small firms pay no direct taxes, and that all direct taxes fall on the returns to capital of the large firms.[1] The limited evidence indicates that outside the special cases of Hong Kong and South Korea, direct taxes increase the effective capital costs of large over small non-agricultural enterprises by at most 20 to 25 percent. Investment concessions, special tax provisions, and tax evasion

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[1]There is continuing controversy concerning the locus of the burden of the corporate profits tax. In the short-run (and assuming that firms operate in a profit maximizing fashion), the burden of the tax falls on the owners of the capital in taxed (large) firms. In the long-run, however, the burden can potentially be shared by capital owners in the untaxed (small) firms as well as by other groups in the economy (see, for example, Harberger, 1962). It should be noted, however, that the tax is levied on the firm's "accounting" rather than on its "economic" profit and thus is directly imposed on the return to capital of the owner.

Table 7: Policy-Induced Factor Price Distortions in Large and Small Non-Agricultural Enterprises

Expressed as the Percent Difference in Large Firms' Costs Relative to Small Firms

Country	Period	Percent Difference in Labor Costs	Percent Difference in Capital Cost[a] Owing to:				Percent Difference in Wage/Capital Rental Rate
			Trade Regime	Interest Rate	Taxes	Total Capital	
Asia:							
Hong Kong	1973	0	0	0	0	0	0
Pakistan	1961-64	0	-38	-44	+22	-60	+150
South Korea	1973	0	-5	-35	+10	-30	+43
Africa:							
Ghana	1972	+25	-25	-42	+26	-41	+119
Sierra Leone	1976	+20	-25	-60	+20	-65	+243
Tunisia	1972	+20	-30	-33	NA[b]	NA	NA
Latin America:							
Brazil	1968	+27	0	-33	NA	NA	NA

Notes: [a]All capital related figures have been converted into the annual rental value of a unit of capital (or user costs) using a modification of the capital recovery formula presented in Guisinger (1981, p. 329).

[b]NA = data not available.

Sources: Hong Kong: Krueger et al. (1983); Pakistan: Guisinger (1981); analysis based on those large firms receiving special incentives; taxes for large from White (1974) based on estimate of actual tax paid; assumes small pay no tax. South Korea: Hong (1981). Figures adjusted to reflect actual duty paid by smaller firms; interest rate differential reflects curb market interest rate (adjusted) facing small. Ghana: Ingram and Pearson (1981); analysis based on projection derived from sample of seven large firms (out of a total of 158) receiving investment concessions; also reflects overvaluation of currency and "real" (adjusted) interest rate differential between large and small firms. Sierra Leone: Liedholm (1985); tax figure estimated from actual tax payments made by large firms as a percentage of before tax profits based on figures in Anderson (1972). Assumes small pay no direct taxes. Tunisia: Nabli (1981); figures compare only public (large) and private (small). Brazil: Carvalho and Haddad (1981).

"enjoyed" by many of the larger enterprises operate to reduce the magnitude of their apparent legal direct tax burden, which sometimes amounts to over 50 percent of a larger firm's profits.[2] The actual tax burden incurred by the larger firms thus partially offsets, but does not eliminate, the overall capital cost advantage they enjoy over smaller non-agricultural enterprises.

In summary, capital market distortions, whether caused by domestic or foreign trade policies, were a significant factor in virtually every country examined (the sole exception being Hong Kong). The difference in capital costs between large and small enterprises ranged from 30 to 65%. The differentials were greatest in countries following import-substitution strategies, where both foreign and domestic policies contributed, often in equal amounts, to the capital price distortion. Yet even in export promotion countries significant distortions existed due primarily to domestic policies. In the majority of instances, most of the distortion came from the unduly low price of capital facing large firms. Capital prices facing the smaller enterprises were closer to their "shadow" or social prices, although it could be argued that in some instances the actual price of domestic capital facing the small enterprises may have exceed its domestic shadow price.

c. Total Magnitude of Factor Cost Distortions

A review of Table 3 above makes clear that distortions arise in factor markets from a variety of sources. In particular, four major categories of

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[2]For example, rough -- and probably conservative -- calculations from Jamaica indicate that large firms actually paid out only about half of their total tax liability in 1981 (calculated from Wozny, and Government of Jamaica, 1981).

distortions are identified: those arising in capital markets; those working through labor markets; those which affect the availability and price of other inputs; and those which operate through regulatory policies, affecting the relative profitability of different producers or different production technologies. Our discussion, of necessity, has focused on the first two of these, since these are areas where it was possible to obtain empirical estimates of the magnitudes of policy-induced distortions. Unfortunately, quantitative data on the differential impact of regulations by firm size is sparse and net effect of such regulations can not be specified with certainty.[1]

Looking only at capital and labor market distortions, the orders of magnitude of the resulting distortions between large and small enterprises in selected countries are summarized in Table 7. The figures provide a crude measure of the degree to which the wage/capital rental ratios between

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[1]Some tentative hypotheses, based on impressionistic findings, relating to the differential effect of regulations on firm size, might be set forth. These effects would seem to vary depending on the type of regulation. Municipal zoning regulations, for example, appear to have, on balance, a negative effect on small enterprises because of the local nature of their markets and their crucial need to deal directly with pedestrian consumers. Small firms are often excluded from certain urban areas for aesthetic rather than health or safety reasons. Such policies create a bias in favor of larger firms, which tend to be relatively less dependent on close proximity to local markets (see, for example, Kilby's [1982] description of such regulations in Kenya). The net effect of registration and licensing requirements are more problematic. The smallest firms in general do not register and are not licensed with public authorities. When small firms are specifically excluded by law, as they are in some African countries, this would constitute a bias in favor of the smaller producers. When the small are formally subject to these rules, however, the scope for haphazard and discriminatory enforcement grows, particularly for the more visible intermediate sized firms. The degree to which firms are actually affected by these regulations is uncertain and, indeed, is a research topic of some importance. Finally, since licensing and registration fees can be viewed as overhead expenses, per unit of output they fall more heavily on the smallest firms when levied. On balance, the differential effect of these regulations on firms of different size cannot be stated with certainty.

such enterprises diverge from those that would have prevailed under well-functioning and non-distorted factor markets.

The evidence indicates that the total effect of the factor cost distortions have been quite sizable in most of these countries. The labor market, trade regime, and domestic capital market factors have tended to induce higher labor costs and lower capital costs for larger enterprises when compared with their smaller scale counterparts, all leading in the direction of higher capital/labor ratios for the larger firms. Taxes operated in the opposite direction, but they served only partially to offset these other factors. Although each of these sources of pricing disparity between large and small enterprises by itself can be important, operating together the effects are generally magnified. In Sierra Leone, Ghana, and Pakistan, for example, the wage/rental ratio facing large non-agricultural firms was more than twice that facing the smaller enterprises.[1]

There is no single pattern to the relative importance of the various sources of factor price distortion. Pakistan, which had one of the largest overall disparities, had a relatively free labor market. Ghana, on the other hand, had distortions from all sources, yet had a somewhat lower overall level of factor market distortions. The rank order of the overall level of distortion thus seems to be independent of number of sources of that distortion. There is some evidence, however, that exporting countries such as Hong Kong, South Korea, and Brazil had lower levels of total factor market distortions than did import substituting countries.

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[1] In Argentina, Nogues (1980, p. 149) estimates that, under certain assumptions, the wage/rental ratio in the modern sector might be as much as 8 times that in the traditional sector.

2. Product Market Distortions

In addition to factor market distortions, government policies also cause product market distortions that affect the pattern of production and employment among firms of different size. Taxes and subsidies on domestic and foreign goods, for example, can alter the production structure that would result from efficient resource allocation. Estimates of the quantitative magnitude of these distortions are even rarer than those relating to factor markets and thus the "rough order of magnitude" caveat applies with even greater force here.

Although a large number of different types of policies affect production, employment, and the size distribution of firms through their effects on output markets, most of these fall under the heading of trade policies, as Table 3 (page 10 above) makes clear. In fact most of the discussion of this section relating to product markets concerns the ways in which trade policies affect these markets. Our discussion follows the same order as that given in Table 3: after a brief overview of alternative trade strategies, we look first at ways in which the trade regime directly affects the competitive position of domestic producers of different sizes. We then examine the ways in which these trade policies affect the pattern of income in the economy; in section C-2 below, the links are explored between these income distribution dimensions and patterns of production and employment by firm size.

a. Foreign Trade Regimes: an Overview

The foreign trade strategy adopted by a country plays a central role in determining the nature and extent of product market distortions found in the country. Import substitution regimes, which were dominant in the

developing world during the 1960's, usually had the following characteristics: 1) high levels of protection for a number of industries, with a wide range of levels of effective protection; 2) extensive quantitative controls and bureaucratic regulations, particularly with respect to imports; and 3) overvalued exchange rates. Export promotion regimes, by contrast, were generally characterized as having: 1) minimal or zero levels of protection for local activities; 2) few quantitative restrictions on imports; 3) equilibrium exchange rates; and 4) some subsidization of exports. Taiwan, South Korea (beginning in 1961), Hong Kong, and Singapore -- "the Baby Tigers" -- along with Brazil (after 1967), Colombia (after 1970), and the Ivory Coast (after 1960) are often cited as countries that have adopted export promotion strategies.

Empirical evidence clearly supports these characterizations. In the nine countries studied by the National Bureau of Economic Research (1978), careful calculations were made of each country's effective exchange rate, which corrects the official exchange rate to reflect the duties, subsidies and quota premiums for exports and imports (see Table 8). Only in South Korea (and marginally in the case of Egypt) did the effective exchange rate for exporters exceed that for importers, indicating that exporters received more in local currency per dollar of foreign exchange earned than importers had to pay.[1] In all the other countries, all of which followed import substitution regimes, the biases favored production for import substitutes over export promotion.

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[1]South Korea as well as Brazil, beginning the the late 1960's, sought to sustain the effective exchange rate for exports over time and prevent it from falling below the import rate, through continuous adjustments of the exchange rate and subsidies (see Frank et al., 1978).

Table 8. Effective Exchange Rates (Local Currency per US$)

Country	Year	Trade Strategy	Effective Exchange Rates Exports (EERx)	Effective Exchange Rates Imports (EERm)
Brazil	1964	IS	1874	2253
Chile	1965	IS	3.31	3.85
Egypt	1962	--	43.5	42.9
Ghana	1967	IS	0.8	1.5
India	1966	IS	6.79	9.23
Korea (S)	1964	EP	281	247
Philippines	1970	IS	5.2	8.7
Turkey	1970	IS	12.9	24.0

Source: Krueger, 1978, p. 73.

Note: IS = Import Substituting
EP = Export Promotion

An important feature of the export promotion regimes is the large package of incentives granted to exporters. Several instruments are used, including tax incentives, tariff exemptions, and direct subsidies per unit of sales, all of which operate to introduce special benefits for sales in export markets. Cavalho and Haddad (1981, p. 44) estimated for Brazil that it required only 68 percent of the sales price abroad to compensate the firm for a loss of sales domestically, once the export inducements were taken into account. For South Korea, Westfall and Kim (1977) estimated that exporters received subsidies worth about 30 percent of the commodity's total value when selling abroad. As these and other studies make clear, the exporting success of a number of these newly industrializing countries, far from arising out of the free play of market forces in a laissez-faire environment, rested heavily on a set of government interventions providing extensive export incentives to designated producers (Scitovsky, 1985; Streeten, 1985).

b. Differentials by Size of Enterprise in Tariff Protection and Export Assistance

To what extent has the structure of tariff protection and of export assistance varied according to the size of enterprise receiving this assistance? Unfortunately, most of the trade studies have paid little or no attention to the size issue, so the empirical evidence is particularly scanty. On the import side, one exception is Anderson and Khambata's study (1981) of small enterprises in the Philippines. Examining the tariff structure of that country, they found that sectors which provided over two-thirds of small scale employment had negative rates of effective protection, while sectors where large scale enterprise predominated had effective rates ranging from 25 to over 500 percent.

Two other studies have also examined the size issue with respect to effective protection. In Indonesia, Hiemenz and Bruch (1983) found a negative correlation between the share of small enterprise production in a particular industry and the effective rates of protection. For Malaysia, von Rabenau (1976) demonstrated that average plant size is much higher in highly protected industries (i.e., with effective protection rates above 100) than in less protected ones. The limited evidence would thus indicate that the sectors in which small scale enterprises are found in greater numbers tend to be discriminated against by the tariff structure. Direct evidence of the differential effect of other product market distortions by size of enterprise is conspicuous by its absence.

Turning to the size distribution of enterprises benefitting from export incentives, Krueger et al. (1981, p. 41) argued that "an important feature of export promotion regimes is that these incentives are provided to anyone who exports. They provide a uniform degree of bias among exporting activities." There is, however, contrary evidence. In Korea, for example, it appears that only the larger exporting enterprises were eligible for subsidies. Frank et al. (1978, pp. 39-41) note that under the Trade Transaction Law of 1957 there were minimum export values, which rose over time, before an exporter could be registered by the authorities and thus be eligible for subsidies. A prerequisite for registration was a minimum export of $5,000 for exporters and a minimum export of $20,000 for importers. To maintain a privileged status, traders also had to sustain annual exports exceeding $20,000 per year for exporters and $100,000 for importers. There is evidence that many small enterprises were unable to meet these volumes and thus that the foreign trade regime may have operated to create a further distortion in the product market between large and

small enterprises. Scitovsky (1985) argues that, perhaps as a result of this discrimination, large firms have played a major role in Korea's export boom. In Taiwan, on the other hand, where the policy stance has been less discriminating (and for a number of other reasons as well), small firms have played a much larger role in industrial development, including in export production.

c. Agriculture and Industry

In addition to the direct effects of the trade regime just discussed on enterprises of different sizes, there are also indirect effects operating through the structure of production and income in the economy, working back in this way through the pattern of demand to the level of output and employment among firms of different size. Our discussion here focuses on the sectoral dimension of this reasoning, and in particular, on the impact of trade regimes on the distribution of income between agricultural and industrial sectors. There is considerable evidence to support the widely-held view that policies in many developing countries have tended to be biased against agriculture in favor of industrial activities. The tariff structure of many developing countries is biased against agriculture, particularly in those countries following import substitution strategies. Industrial and other non-agricultural products in these countries are protected by relatively high tariffs, while agricultural products typically are not. Protection thus acts like a tax on agriculture, raising the price of industrial products in relation to agricultural goods in the domestic market.

Evidence of the differential effect of import protection on agriculture and manufacturing is provided in Table 9, which lists effective

Table 9. Effective Rates of Protection

Country	Year	Trade Strategy	Agriculture	Manufacturing	Consumer Goods[b]	Intermediate Goods[b]	Capital Goods[b]
Brazil	1966	IS[a]	46	127	198	151	33
Chile	1961	IS	58	158	226	150	16
India	1968	IS	12	95	128	82	78
Korea	1968	EP	18	-1	-2	1	100
Mexico	1960	--	6	32	50	40	21
Malaysia	1965	--	22	11	7	17	1
Pakistan	1963	IS	-19	188	348	160	110
Philippines	1965	--	33	53	72	45	10

Source: Balassa et al., 1971, p. 55 for all but India and Korea.
Korea: Westphal and Kim, 1977.
India: Bhagwati and Srinivasan, 1975.

Note: [a]IS = Import Substitution and EP = Export Promotion for those countries included in the NBER studies [Krueger, 1978 and Krueger et al., 1983].

[b]Aggregates for consumer, intermediate, and capital goods are unweighted averages of the disaggregated data.

rates of protection by sector for several developing countries in the 1960's. In five of the eight countries shown, the effective rate of protection enjoyed by manufacturing was more than double that of agriculture, which in one country faced a significantly negative rate of effective protection.

A broader measure of the magnitude of the bias against agriculture in several countries is provided in the studies of Little et al. (1970). In a survey covering six countries in the 1960's (Brazil, Mexico, India, Pakistan, Taiwan and the Philippines), the authors measured the sectoral contribution to these nations' gross national product with and without protection, including an allowance for the overvalued exchange rate. These exchange rates generally penalized agricultural exporters, who tended to be the largest exporting group. Without protection, it is estimated that agricultural value added in these countries would have been from 8 to 48 percent higher, while manufacturing value added would have been between 8 and 94 percent lower.

The relatively high taxes levied on agricultural exports in a wide array of countries tend to magnify the distortions caused by the import duty structure. In Sierra Leone, for example, the price paid to farmers by the marketing board was less than fifty percent of the market price for several agricultural commodities, including coffee and cocoa (Byerlee et al., 1983). Indeed, such a result is common throughout Africa. After reviewing information relating to major export crops in 13 African countries during the 1970's, the World Bank concluded that African farmers' "tax burden, defined as the ratio of farmgate producer price to economic value at the farmgate, is on the average in the 40 to 50 percent range." Subsidies on inputs to farmers, the Bank contends, "soften the impact very

little, by 10-15 percent in most cases" (World Bank, 1981, p. 55). In summary, it is clear that policies of many developing countries have tended to discriminate against agriculture in favor of other sectors, particularly manufacturing.

As suggested above, the main impact of these intersectoral distortions on employment and the size distribution of non-agricultural enterprises arise from forces working through the structure of demand among different income recipients. These issues are discussed in section C2a below.

3. Concluding Comment

This review of the empirical evidence has indicated that a panoply of government policies in the factor and product markets have created significant distortions that fall unevenly on non-agricultural enterprises of different sizes. Unfortunately, the few studies that have attempted to quantify the magnitude of these distortions by enterprise size have generally focused only on single policies. What is needed is a systematic examination of all these distortions arising from the entire array of policies that differentially affect firms of various sizes. A possible framework for such an endeavor and its application to data from Sierra Leone is set-forth in Appendix A.

C. The Impact of Policy Distortions on the Economy

The pervasive policy distortions just described undoubtedly influence economic efficiency, employment and the size distribution of enterprises. A limited amount of empirical work has been undertaken estimating the impact of these distortions on the economy. However, the scope of coverage varies widely from study to study, with many considering only a segment of the

overall policy environment. Much of this evidence consists of ex ante predictions of the effect of policy change based on partial equilibrium (or less frequently, general equilibrium) modeling exercises. A few analysts have also attempted ex post evaluations of the impact of policy change by directly measuring key economic variables before and after significant policy changes.

In reviewing this disparate evidence, we look first at the economic impact of factor market distortions and then turn to look at distortions in output markets. Of particular concern is the effect of policy on economic efficiency and employment. Where evidence exists, we assess the impact of policy change on the size distribution of firms. This is particularly important in its effects on employment because of the differing labor intensity in firms of different sizes, and because removal of policy distortions will shift employment in different directions in large and small firms. This means that the net impact of policy interventions on employment is strongly affected by resulting changes in market shares of small and large firms.

1. Effect of Policy-induced Factor Market Distortions

a. Efficiency

The often considerable factor market distortions reviewed above lead to economic inefficiency. Estimating the magnitude of this inefficiency in developed countries has frequently led to very small projected losses, in the range of 1% of GNP (Berry and Sabot 1978). In developing countries, where markets -- particularly capital markets -- are far more distorted, one might expect considerably larger aggregate inefficiency. Estimates of allocative inefficiency in LDCs vary substantially, because they focus on different countries, in which the magnitude of policy distortions may vary

significantly, and on different subsets of the total policy environment. Nonetheless, available evidence does support the expectation of higher costs in LDCs given the larger policy distortions.

Reviewing the performance of labor markets in LDCs, Berry and Sabot (1978) conclude that distortions there are normally quite small, with the ensuing resource misallocation normally amounting to less than 2% of GNP. They base this conclusion on partial equilibrium work by Leibenstein (1957) and by Dougherty and Selowsky (1973) as well as their own experience in studying LDC labor markets.

More recent estimates of labor market distortions have been higher. A computable general equilibrium (CGE) model for Colombia has estimated urban labor market distortions leading to inefficiencies equal to 2.7% of GDP when capital stocks are assumed to be fixed and 10.7% of GDP if capital is mobile among sectors (de Melo, 1977). This experiment examines a different set of labor market distortions from those previously discussed in this paper; it looks not at segmented labor markets (that is, differing wage rates among firms in the same industry) but rather at variable wage rates across sectors of activity. The higher estimated inefficiency in de Melo's CGE framework stems from his inclusion of interactions between production cost and quantities of both domestically produced and traded output as well as from the CGE inclusion of potential factor migration out of agriculture. Earlier partial equilibrium work makes no allowance for these interactions. Hence, one's conclusion about labor market distortions depends not only on the extent to which one considers economic feedbacks and interactions, but also on the assumed mobility of factors of production.

Looking beyond labor markets, analysts have commonly found higher efficiency losses. Since most such analyses have lumped together capital

and output market distortions, we have no independent assessment of the output reducing effects of capital market distortions alone. The magnitude of the capital plus output market distortions, though, has been computed to be in the range of 6 to 16% of GDP in several LDCs, clearly much larger than distortions arising out of labor markets. Since most of these studies emanate from trade policy reviews, the detailed evidence is presented later under that heading. For the present it suffices to note that, while variable, inefficiency losses due to capital and output market distortions have been found to be larger than those due to labor market distortions alone.

b. Employment and Size Distribution of Firms

Factor market distortions affect employment not only through their effect on output but also via firm-level decisions on choice of technique. Because policy-induced factor price distortions are so common in LDCs, many analysts have tried to estimate the impact of a changing wage/rental ratio on factor utilization in firms. Most have projected the impact by estimating elasticities of substitution between capital and labor. Since the introduction of the Constant Elasticity of Substitution (CES) production function in 1961, analysts have estimated manufacturing elasticities of substitution in at least 25 LDCs (White, 1978). Bruton (1972), Morawetz (1974 and 1976), Steel (1977), and White (1978) summarize many of them. In general, these early studies measured elasticities in the range of .5 to 1.2 (White 1978). Behrman (1982) provides a more recent estimate looking at evidence from 23 manufacturing activities across 70 countries and finds most elasticities of substitution not significantly different from 1. Although those studies were based predominantly on

large-firm data, some estimates have been made looking specifically at elasticities in the very smallest firms. Chuta and Liedholm (1976), for example, directly estimate a CES production function for a range of small enterprise activities in Sierra Leone and find elasticities of substitution not significantly different from 1. Page, using recent evidence from India, finds elasticities of substitution to be similar for large and small firms (Page, 1984). Using a translog production function, for which elasticities of substitution need not be constant, he concludes that substitutability among skilled labor, capital and unskilled labor does not vary systematically by firm size. For large and small firms, he finds the elasticity of substitution between skilled and unskilled labor between 1 and 3.7. For capital and unskilled labor, it lies between .4 and 1; between capital and skilled labor, it lies in the range from 1 to 2.4. Kim (1984) also computes elasticities of substitution separately for large and small firms. Using data from South Korea to estimate a CES production function, he finds elasticities of substitution to be significantly different from zero in all industries and for both large and small firms. Elasticities range up to about .9 for small and medium size firms and to 1.6 for large enterprises. Yet in some industries substitutability appears greater in small firms, while in others large firms appear to exhibit more supple factor substitution.

Some analysts have taken estimates of the elasticities of substitution, along with a knowledge of the magnitude of factor price distortions, to estimate the employment reducing impact of factor pricing policies on firms subject to those distortions. Akrasanee (1976) follows this procedure to estimate the impact of minimum wage legislation on Thai manufacturing. Combining what he believes to be a 26% premium of minimum

wages over the shadow wage rate for unskilled labor and knowing the share of unskilled labor by commodity group, he estimates that eliminating the minimum wage would increase employment in manufacturing firms by about 20%. Because of limited data availability, this estimate is made only for firms employing five or more workers. He does not project these changes to smaller firms, although the impact would presumably be quite small given that few are likely to pay minimum wages. His estimate for the larger firms may well be an overestimate given that some may successfully evade the minimum wage laws.

Hooley (1981) has undertaken a similar exercise for the Philippines in which he projects the employment impact of removing capital market distortions embodied in a set of capital-biased trade incentives. Assuming that one-fourth of all manufacturing firms benefitted from capital price subsidies, Hooley estimates that removal of the subsidies would lead to a 5.4% increase in that portion of manufacturing employment generated by firms with five or more workers.

Exercises of this nature must be treated with some caution given the widely acknowledged problems with elasticity of substitution estimates. Gaude (1975), Morawetz (1974 and 1976), O'Herlihy (1972), Pack (1972), Roemer (1975), Steel (1977) and White (1978) all discuss these shortcomings. Particularly disconcerting is the observation that in the estimating form most commonly used, the indirect CES function regressing value added per worker on wage rates, the direction of causality may move in either direction. Higher wages may not induce capital-labor substitution (or management-labor substitution, as Pack [1972] suggests) but may instead merely reflect a rise in wages following increases in worker productivity. Hence, the elasticity of substitution estimates

may not assure that removal of policy induced factor price distortions will in fact lead to higher labor use.

Some analysts have tried a related technique, regressing employment on wage rates, to determine their impact on factor employment. Eriksson (1970) and Reynolds and Gregory (1965) fall into this category. Summarizing many similar efforts, a Williams College research report says, "measurement of the effects of wage changes on industrial employment show consistently that higher rates of wage increase are associated with slower growth of employment" (Williams College, 1972). Steel (1977) and Wolgin et al. (1983) concur based on observations in Ghana and Malawi, although they do not perform statistical correlations. In a similar vein, Fields (1984) concludes, on the basis of a review of seven LDCs, that wage restraint is a necessary ingredient if export oriented trade strategies are to result in higher levels of employment. On a cautionary note, Reynolds and Gregory (1965) and Steel (1977) provide illuminating discussions of how correlations between wages and employment may camouflage a variety of other underlying changes that are more important than wages in affecting employment levels. While Steel, Wolgin and Fields offer no employment elasticity of wage rates, Eriksson puts it at about .4 indicating that a 20% reduction in wage rates (a common level of policy induced distortion found in the previous section) would be associated with an 8% increase in employment. Depending on one's view of the direction of causality, this could describe wage-induced shifts in employment in response to factor price changes, or it could be interpreted as wages following gains in worker productivity which enable firms to hire fewer workers.

Although minimum wage and related labor legislation has received substantial attention as a potential source of employment reduction, few

direct measurements have been made of its impact on employment. Lipton (1978) summarizes the results of one of the very few such attempts. The study he cites measured changes in employment in Botswana's formal sector firms one year after a 80 to 100% increase in minimum wage rates. As testament to the difficulties of attributing causality in such before-after measurements, Lipton notes that employment actually increased by 1% in the year following the wage increase. Of course, the increase was due to general growth in the economy. Employers indicated that employment would have risen even more in the absence of the minimum wage rise. They estimated that the minimum wage hike caused them to reduce employment by 1% overall and by 2 to 3% in the sectors where wages increased the full 100%. The 1% overall drop in formal sector employment amounted to a 6 to 10% increase in formal sector unemployment. Lipton emphasizes that those hardest hit were the unskilled workers and the females. But the inescapable conclusion is that even a huge increase in the minimum wage rate had a very small effect in aggregate formal sector employment. In a similar exercise, Pack (1972) found that factory owners in Kenya felt a wage rise on the order of 200 to 300% would be necessary before they would reduce their labor force.

Squire, in a purely mathematical modeling exercise, reaches a similar conclusion. He finds that even a 46% drop in minimum wage rates would lead to only a 1.6% increase in total employment. One noteworthy feature of his estimate is that it specifically includes employment shifts in both large and small firms together (Squire, 1981). Aside from this one calculation, though, we have no estimate of the net effect on employment when the joint impact of factor price changes on large and small firms is considered together.

In addition to the magnitude of employment changes, several authors have also examined the speed at which the changes are made. Lipton, for example, notes that in Botswana one year after the minimum wage increase, hardly any enterprises had replaced workers with machines. Instead they had shifted to the use of more skilled labor. This underlines the potentially significant time lags involved between the introduction of policy changes and their impact on employment and especially on capital utilization. Williamson (1971b) corroborates this conclusion, estimating short- and long-run changes in factor proportions following a large increase in capital costs that accompanied trade liberalization efforts in the Philippines in 1960. Incorporating a lag into his estimating equation, he finds short-term elasticity of substitution to be around .3, while in the long run it is much higher, around .8. Thus even if factor substitution is possible, as the weight of evidence suggests, policy makers must be prepared for a time lag of up to several years between policy implementation and the resulting impact on employment.

Many authors recognize that factor market distortions operate in different directions in small and large firms. The capital subsidies compounded by minimum wage legislation result in lower large firm employment than would be found in a neutral policy environment, while the artificially high capital costs faced by small firms lead them to hire more workers than they would under undistorted input markets. Thus, a removal of factor price distortions would lead to higher large-firm employment and lower employment in small firms. The net impact on employment is, a priori, uncertain. It will depend not only on intra-firm factor substitution but also on initial small and large firm market shares and how much they change with a change in relative factor prices. This

in turn depends, among other things, on the geographic dispersion of markets, transport costs, substitutability of final outputs, how relative profitability of small and large firms will be affected by changes in input prices, and economics of scale. To date, we have no evidence on how small and large firm market share will change and hence we have no estimate of the net employment effect of factor price changes.

2. Effects of Policy Interventions in Output Markets

There are a variety of ways in which policy interventions influence the composition of final demand faced by producers of non-agricultural products and services. Most important are those affecting agriculture, those affecting exports as opposed to imports, and those influencing the distribution of income. We examine, to the extent evidence permits, the effects of each set of policies on economic efficiency, employment and the size distribution of firms.

a. Agriculture

Policies designed to enhance agricultural output and income can have important effects on non-agricultural output and employment as well as on the size distribution of enterprises, particularly those located in rural areas. In addition to the factor market linkages, two important demand relationships closely tie agricultural and non-agricultural activities together. The first is the consumption linkage that arises from incomes generated by agricultural households, while the second is the production linkage that stem from the agricultural sector's demand for farm inputs or for processing of agricultural outputs. As a result of these linkages, policies aimed at removing the previously described biases against agri-

culture can have potentially significant influences on non-agricultural activities.

Quantitative evidence on the magnitude of the relationship between agricultural growth and non-agricultural employment, output or the size distribution of enterprises is unfortunately rather sparse. Few empirical studies have focused on these relationships in a comprehensive fashion in any one country. Typically, only one region or only one facet of the interrelationship is examined. Moreover, the results are dependent on the assumptions used to analyze these relationships and on the underlying quality of the data.

Several studies have used input-output analysis to quantify the direct and indirect employment and output effects of agricultural growth or of alternative agricultural policies. For India, Raj Krishna (1976) employed a detailed 77 sector input-output table for 1964-65 combined with detailed farm data from the East Punjab to examine the effects of an increase in agricultural output accompanied by a labor displacing change in agricultural technology. His results showed that a five percent increase in agricultural output leads, through inter-sectoral and multiplier linkages, to a 5.1% percent increase in non-farm employment, yielding a non-farm employment-to-agricultural-output elasticity of approximately one. Mellor and Mudahar (1974), using a simulation model built on a three sector input-output framework for the Indian economy, find that the "potential" employment growth in non-agricultural sector response to a four percent growth in food grain output is four percent, thus also yielding a nonfarm

employment-output elasticity of one.[1] Neither size nor location, however, are incorporated into these models.

Studies undertaken by Byerlee (1973) for Nigeria and Byerlee et al. (1977) for Sierra Leone have attempted to examine the employment linkages to agriculture with location and size of enterprises included in the analysis. Using Nigerian (1950-1966) and Sierra Leone (1974-1975) data and a general equilibrium simulation model built on an input-output framework, these two studies find that the non-agricultural employment elasticities with respect to increases in agricultural output were 1.2 in Nigeria and 1.6 in Sierra Leone, somewhat higher than those found in India. The employment elasticities varied quite markedly between large and small scale enterprises, however. In Nigeria, the non-farm employment elasticity coefficient for large enterprises with respect to agricultural output was 1.5, while for small enterprises it was only 1.1; in Sierra Leone, a similar pattern was found, with the corresponding figures standing at 2.0 and 1.5, respectively. Moreover, the urban coefficients were somewhat larger than the rural ones. Finally, the employment coefficients were found to vary with the simulated agricultural policy options. With an agricultural export promotion policy, which tended to benefit larger farmers, small scale enterprise non-agricultural employment fell, while large scale enterprise employment rose. With a food crop production campaign aimed at small farmers, however, small scale non-agricultural employment increased while large scale production remained virtually

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[1] Rangarajan (1982), in an empirical study of agricultural and industrial performance in India, found that a one percent increase in the agricultural growth rate generated an additional 0.5% to the growth rate of industrial output and a 0.7% addition to the growth rate of national income.

unchanged. The implication of these studies is that the type of agricultural policy change can have an important effect on non-agricultural employment and the size distribution of enterprises.

Two other regional studies provide measures of the direct and indirect non-agricultural rural employment effects of agricultural activities. Gibb's study (1974) of the growth of nonfarm employment in the Gapan area of Central Luzon in the Philippines provides an indication of the magnitude of nonfarm employment induced in rural areas by the growth of local agriculture. During the 1960's, a development strategy based on encouraging small farm agriculture led to rapid increases in agricultural output and incomes, which induced rapid increases in local nonfarm employment opportunities. Using actual data on agricultural output and employment in a broad range of nonfarm occupations in 1961 and 1971, but with no formal model, he estimated the elasticity of demand for nonfarm labor with respect to changes in agricultural incomes. The overall employment elasticity was 1.3, but varied for individual activities from .8 for public services to 1.97 for trade, crafts and construction. As with previous studies, the nonfarm employment links with agriculture were strong.

A final regional study by Bell, Hazell and Slade (1982) attempted to measure the indirect effects generated by an irrigation project in the Muda River region of Malaysia in 1974, using a regional model of the agricultural sector along with a semi-input-output model of the regional economy. This well specified model, which is built on a detailed data base, localized the indirect effects of the project. The results of their study indicated that for each dollar of income created directly in agriculture by the project, 90 cents of value added was created indirectly in the nonfarm economy. Another important finding was that about two-

thirds of the indirect rural non-farm activity was due to increased rural household demands for consumer goods and services, while the remaining one-third was due to agriculture's increased demand for inputs, processing, and marketing services.[1]

This review of the empirical relationship between agricultural production and non-agricultural output and employment reveals that the linkages are quite strong. In virtually all the countries examined, the non-agricultural employment elasticity with respect to changes in agricultural output exceeded one. Changes in agricultural policy and agricultural output have important effects on non-agricultural activities, particularly those in rural areas. Those few studies that include size and location into their analysis indicate further that alternative agricultural policies have important differential effects on nonfarm enterprises of different sizes and locations.

b. Exports Versus Imports

Trade policies affect economic efficiency to a considerable extent. Balassa and associates (1982), for example, have computed the cost of distorted output and capital markets which accompany trade protection at 7% of Brazil's 1966 GDP and 6% of Chile's 1961 national income. Using data from Krueger (1966), they put Turkey's loss at 7% of GNP. Using a general equilibrium framework, deMelo et al. (1980) put the cost of trade protection in Colombia at 11 to 16% of GNP, depending on assumptions about

[1]Recent empirical studies in several countries have revealed a strong, positive relationship between increases in rural income and increases in the demand for rural non-farm products. Rural expenditure elasticities for rural non-farm products, for example, were found to be 1.40 in Sierra Leone (Byerlee et al., 1983), 1.34 in the Gusau region of Nigeria, and 2.05 in the Muda region of Malaysia (Hazell and Roell, 1983).

the availability of surplus labor. Harberger (1959) arrives at a 15% estimate for Chile, demonstrating not only the potentially significant levels of income loss due to policy distortions but also the margin of error incumbent in such analyses.

Employment, too, can be substantially affected by trade policy, first through the impact of policy on efficiency and overall output and secondly through its effect on the commodity composition of output. Reductions in total output decrease employment opportunities in proportion to the decline in output if the commodity mix and production techniques remain unaltered. That is, if the employment elasticity of output is equal to 1, employment losses of up to 16% would arise due to the output reducing effect of trade policy distortions reported above.

Several available estimates indicate that output is the most important of the three factors commonly viewed as influencing employment (the other two being output mix and choice of technology used for producing given outputs), and that employment elasticities of output in the range of 1 are not uncommon. Both McPherson (1984) and Banerji and Reidel (1980) conclude that output growth was the most important of the three factors affecting employment in Zambia, India, and Taiwan. Using a decomposition identity coupled with input-output coefficients, they find that increases in output account for 1.5 to 6 times as much of the employment growth as do changes in output mix and labor productivity or choice of technology. In an analysis closely parallel to that of Banerji and Reidel, Belassa and associates (1982) examine changes in Taiwanese and Indian employment, separating out the individual effects of changes in manufacturing output, commodity composition of output and labor productivity on total employment growth. In the case of Taiwan over the period 1961-71, they conclude that

the observed 10% increase in manufacturing employment came 18% from increased output, 4% from a shift to increasingly labor-intensive industries, a 4% decline due to increased labor productivity and a further 8% decline due to cross effects. Similarly for India during the 1960's, they found that the 3% increase in manufacturing employment was due 11% to increases in output, -1% to a shifting composition of output, and -4% to cross effects. This amounts to an output elasticity of employment of 1.8% in Taiwan and over 3 in India over those periods. Eriksson (1970) found similar results for Argentina, Brazil, Colombia, Costa Rica and Mexico. He computed employment elasticities of output between .7 and .9 and determined that these figures were about 30% greater than elasticity with respect to wages and three times as great as the elasticity with respect to the capital/labor ratio. The much more negative assessments of employment elasticity of output in manufacturing, commonly found in the literature, come from studies which fail to separate the effects of output from the simultaneous influence of commodity mix and factor price distortions. We conclude that allocative inefficiency induced by trade policy distortions can be an important source of employment loss through decreases in aggregate output.

Trade policy can also influence employment by shifting a country's commodity mix toward more labor-intensive export commodities. A rapidly accumulating body of evidence indicates that, as Heckscher-Ohlin-Samuelson would lead us to expect given the low wage rates prevailing in most developing countries, LDC exports do tend to be more labor using than import substitutes. Studies by Krueger et al. (1983) and Little, Scitovsky and Scott (1970) indicate that a shift from import substitutes to export-oriented industries will generally result in increased employment in

LDCs. Table 10 indicates the magnitude of the differential labor use in the two types of manufacturing. It shows, for example, that in Argentina one unit of value added in exports provides 30% more employment than does a comparable unit of import substitutes. In all countries in the table except South Korea (where gains from export promotion have already been captured), export promotion promises significant increases in labor use. The increase in labor use in exports compared to import substitutes ranges from 21% to 107%.

Krueger acknowledges that these estimates may be biased, since they are based on technical coefficients taken primarily from large-scale firms (Krueger et al., 1982, p.24). She suggests that the employment gains from export promotion may be understated to the extent that more labor-intensive small firms might participate in an export expansion. Unfortunately, the bias might also work in the opposite direction if labor intensive small firms supplying local markets are displaced by imports as a result of trade liberalization. While evidence is limited, Ho does note that small enterprises in Korea and Taiwan expanded fairly rapidly during both countries' import substitution phases, but their growth was curtailed in each case by a shift to an export orientation (Ho, 1980, p.90). For example, during South Korea's import substitution phase, employment in small firms (those employing 4 to 9 workers) increased at a rate of 6.6% per year; but after their switch to export promotion, this growth dropped to .3% per annum. Similarly in Taiwan, employment in the smallest firms (those employing 1 to 3 workers) grew at 2.3% per year under import substitution policies but declined to 1.6% per year under export promotion strategies. Ho speculates that this is due to the importance of economies of scale and small firms growing up through the size distribution, but it

Table 10. Increase in Employment Obtainable by Shifting One Unit of Value Added from Import Substituting Activity to Export Production

Country	Percent Increase in Employment
Argentina	30
Brazil	107
Chile	34
Colombia	91
Indonesia	26
Ivory Coast	21
Pakistan	41
South Korea	0
Thailand	70
Tunisia	23

Sources: Krueger et al., 1983, p. 180, for all but Thailand.

Krueger, 1978, for Thailand.

could also be explained by large firms' preferential access to export advantages. Berry also notes the importance of the size distribution of firms in export strategies. He indicates that while the Colombian trade liberalization of 1958 did result in a decreased capital intensity in large-scale manufacturing and a modest drop in unemployment, the employment gains were not nearly so substantial as might have been hoped, primarily because labor-intensive small scale enterprises did not participate in the export growth (cited in Ranis, 1975, pp. 15-16). He concludes that export oriented strategies should be accompanied by measures aimed at ensuring the participation of small-scale labor intensive units and suggests measures such as the institution of marketing arrangements necessary to funnel the small producer output to the export markets (Berry, 1972, p.103).

Fields makes a related observation about the importance of policy interactions. In his study of seven countries that had adopted export promotion strategies, he notes that employment increased only when the trade liberalization was accompanied by wage restraint. Thus, Jamaica, Barbados and Trinidad/Tobago achieved little employment growth as a result of their export growth, because their institutional wage setting mechanisms resulted in substantial wage increases. On the other hand, Taiwan, South Korea, Singapore and Hong Kong achieved rapid export-led employment growth. He suggests that this was because they maintained a tight wage policy (Fields, 1984).

Overall, the potential impact of export promotion on employment appears substantial. To realize the employment potential of exports frequently requires conditions complementary to liberalization, for example wage restraint, the availability of complementary factors of production and

possibly mechanisms for including small-scale labor intensive enterprises in the export growth.

c) Income Distribution

A final link between output markets and employment has to do with income distribution and its impact on employment. Optimists hypothesize that increased incomes for the poor will shift demand patterns in favor of more labor-intensive products and hence lead to increases in aggregate employment. During the early 1970's, the initial upsurge of interest in income distribution issues led to a spate of studies investigating the relationship between income distribution and employment through changing patterns of demand. Morawetz (1974) has summarized the results of 11 such studies undertaken between 1970 and 1974. Eight concluded that low income groups did indeed consume a more labor-intensive basket of commodities than did the rich. One study (Wieskoff 1973) dissented, and two others (Soligo 1972, and Jimenez 1972) made a distinction between long-and short-term effects. Soligo, for example, projected that in Pakistan in the first three years after policy implementation, increased income for the rich would lead to higher growth of employment because of a high demand for housing; but in the longer run, that is after the third year, increased income for the poor led to maximum growth of employment. In addition to pointing out the potential complexity in the income distribution-employment relationship, his study underlines the importance of time dimensions which one must consider when evaluating policy changes. In a more recent study, King and Byerlee (1978) report that households in the lowest income deciles in rural Sierra Leone have expenditure patterns that lead to more

employment per additional dollar of expenditure than do those in the top income decile.

While these analyses generally point in the direction of increased employment due to income redistribution, they estimate the magnitude of the impact to be quite small. Even major redistributions of income, they project, would normally lead to no more than a 5% increase in employment (Morawetz 1974). Another study, not cited by Morawetz, estimates that a huge redistribution of income in the Philippines -- one lowering the Gini coefficient from .47 to .25 -- would increase employment by 10% initially but would lead to a .5% lower employment growth rate in ensuing years (Paukert, 1974). Few analysts discuss how resource transfers of this magnitude might be accomplished. While some redistribution is possible via government fiscal policy on both tax and expenditure sides, the resource transfers of the magnitude apparently necessary to have an impact on employment would probably require redistribution of assets. This takes us beyond the realm of policy distortions and indicates that, realistically, the opportunities for increasing employment through manipulation of fiscal policy are most likely quite small.

D. Summary

The evidence assembled above leads to several conclusions. First, the magnitude of current LDC policy distortions is considerable in many countries, with capital prices typically more distorted than wage rates.

Second, these distortions lead to allocative inefficiency which can result in substantial reductions in aggregate output. Total policy induced allocative inefficiency has been computed in the range 6-18% of GDP. The estimated level of inefficiency varies greatly by country as well as

according to the portion of the policy environment selected for study and the method of estimation used.

Third, the effect of the entire package of policy distortions on the size distribution of firms is not well documented. The limited evidence available suggests that the overall policy environment confers cost advantages on large firms, thereby allowing them to hold a larger market share than they would in a neutral policy environment. Where this is so, it is because the large capital price subsidies have outweighed the higher wages and potential tax liabilities faced by large firms. Investment codes and non-payment of taxes have played a significant role in reducing the tax liability of larger firms.

Finally, employment is affected in a variety of ways by policy distortions, but by how much and even in what direction it is difficult to say. Decreases in aggregate output induced by policy distortions clearly reduce employment opportunities. So too do policies which discriminate against agriculture and against exports. And the factor price distortions faced by large-scale firms clearly lead them to employ fewer workers and more capital than they would in a neutral policy environment. But we have less evidence on the magnitude of counteracting policy influences on labor use in small enterprises, and virtually none measuring the effect of policy on the size distribution of enterprises. Without such evidence, it is not possible to estimate with any degree of confidence the aggregate effect of the policy environment on employment. It is likely that overall policy distortions do lead to reduced employment given their impact on large firm employment and particularly their impact on employment via efficiency losses in aggregate output. At this stage, however, such a judgement can best be termed informed speculation which needs to be tested by more comprehensive data and analysis.

III. APPROACHES TO POLICY CHANGES

The preceding review has demonstrated the substantial magnitude of existing policy distortions in developing countries. The limited evidence available suggests that these distortions have a significant impact on efficiency and employment in non-agricultural enterprises. In this situation, rectification of the policy environment can be of central importance in facilitating the growth of employment and efficiently organized production throughout the economy.

This leads to questions, then, concerning the process of policy change, and particularly, the potential role which donors can play in facilitating such change. The ensuing review examines the policy-making process in LDCs, exploring some alternative roles which donors have played in facilitating policy analysis and change. Of particular interest is experience gained in seeking to influencing policies related to non-agricultural enterprises. We begin first with a review of the analytical framework within which the policy process can be viewed. This is followed by an examination of donor experience in seeking to influence LDC policy making.

A. ANALYTICAL FRAMEWORK FOR STUDYING POLICY CHANGE

For decades if not centuries, a variety of disciplines have been engaged in policy relevant research. Yet it is only recently that analysts have made a concerted study of the process by which policy decisions are made and the effectiveness with which they are implemented. While acknowledging that many strands of the current policy literature date back to the 1920's and 1930's, Brewer and deLeon date its coming of age at

1970. For it was in that year that the journal, Policy Studies, began publication, and that major institutions began professional training and degree granting programs in the policy sciences. The vigorous intellectual activities of the '70's have attempted to draw together many disparate threads of analytical work, bringing them to bear on questions of how policies are changed, implemented and evaluated.

To date, virtually all the conceptual work on policy change has been undertaken by analysts working in developed countries, primarily in the United States. Given this fact, it is not surprising that the literature takes largely for granted the kinds of institutional arrangements common in the U.S. Because institutions, social relations, culture, history and the types of policies considered often vary between developed and developing countries, policy analysis appropriate for the United States may not be readily transferable into LDC settings, at least not without significant modification.

Even for those with a developed country focus, the field of policy analysis is sufficiently young that no dominant paradigm has emerged. In LDC settings, the analytical variation is even more pronounced. The few analysts that have begun to look at the process of policy change in LDC's have consistently decried the lack of an appropriate analytical framework (Nelson, 1984; Cohen, Grindle and Walker, 1984; Berg and Bachelder, 1984; Ilchman and Uphoff, 1969).

Among the various intellectual currents presently swirling through the policy literature, three appear particularly promising for application in LDC settings. First is a body of literature which analyzes policy making as a process involving a sequence of activities. Although the terminology and number of analytical steps separately identified varies from analyst to

analyst, all view the policy making process in three main stages: decision making, implementation, and termination. Analysts often break decision making into several substages: attention focusing, evaluation of alternatives, and selection. While this has generally proven adequate in developed country settings where large banks of policy relevant data already exist, it maybe desirable in LDC settings to acknowledge the dearth of reliable statistics and include data collection as a specific step in the process. Analysts also frequently break the implementation and termination stages into several components. Some view implementation as requiring organizational set-up before implementation; and most view the last stage of the policy process as including termination and evaluation. Large bodies of literature are growing up around major steps in the policy sequence. The implementation and evaluation literatures are particularly large. In addition, and potentially pertinent to donor activities in LDCs, the literature includes a branch which focuses on the role of consultants in policy making.

For present purposes, two of the three stages -- decision making and implementation -- appear most crucial. At the decision making stage, attention focusing appears to have been of primary concern. Donors who wish to influence policies must have some inkling of how attention can be focused on an issue of importance. When foreign exchange convertibility is in jeopardy, the IMF often has an easy time focusing policy makers' attention on an issue which cannot be avoided; but with employment policy, where a gradual accretion of urban slums or a slow but steady increase in rural unemployment may not command such dramatic attention, it is less clear how donors might bring policy makers to come to grips with key policy issues. Historically, donors have been particularly concerned with the

attention-getting stage, and with assisting governments in evaluating policy alternatives.

In addition to showing how donor actions fit into the overall policy sequence, this body of policy analysis is important in its highlighting of implementation as a key step in the policy chain. Given the lack of administrative depth in many LDCs, donors wishing to influence policy will have to look beyond decision making if they wish policy changes to have a lasting impact on the economy.

A second relevant current in the burgeoning policy literature is one which views policy change as the outcome of dynamic interactions among various interest groups. Governments are not monolithic. Many factions within a government compete for resources, influence, and control of key policy levers. Potential actors also include groups outside of government, commonly parties that will be favorably or adversely affected by particular policy changes. Using this framework, analysts view policy making as the result of coalition building, negotiation, bargaining and maneuvering among concerned interest groups. Many variants of this approach exist, differing along several dimensions: the groups on which they focus, the motivations attributed to various actors, and the rules of the game alleged to govern interactions among groups. The general view of policy dynamics as resulting from the interaction of diverse interest groups has important implications for donors looking for ways to influence LDC policy making. Many of the case studies that we have reviewed highlight the role donors can play in supporting analysis by factions within the government that seem most inclined to favor economic policies judged by the donors to be of high priority.

A final current of thinking in the policy literature calls for the categorization of policies into several common themes according to characteristics of the policies themselves. Lowi originally suggested a three-way typology classifying policies as distributive, redistributive, or regulatory. He claims that the analysis of policy change is very different for each of these three categories. Embellishing on the second set of issues discussed above (relating to interactions between interest groups), he asserts that the sorts of alliances and interactions among interested parties -- the policy dynamics -- will be broadly similar within each policy category, but will vary markedly among the three groups. Hence the appropriate analytical focus will vary depending on which type of policy is of interest. While this approach appears to have been little used in practice, we have found it helpful -- at least in modified form -- in our efforts to systematize the framework for studying policy dynamics in LDCs.

In the absence of a dominant paradigm, we propose to draw on all three of these complementary currents of the policy analysis literature in our review of policy change in LDCs. Specifically, we will view policy change as a sequence of events -- highlighting the decision-making process (attention focusing, evaluation and selection of alternatives) as well as policy implementation. In tracing out this sequence of events, we will try to highlight the dynamics of interaction among various interest groups within and outside of government during the policy making process. Where possible, we will comment on the different dynamics observed among different types of policies. In particular, we will suggest an alternative way of classifying policies that seems more fruitful for this area of analysis.

B. ALTERNATIVE PATHS TO POLICY CHANGE

In thinking about policy change and the role of outsiders in fomenting it, we have found it helpful to consider four alternative approaches:

i) leveraged policy reform;

ii) high-level outside experts;

iii) long-term training, research and advisory approach; and

iv) indigenous policy change.

In practice, these categories are not sharply delineated; one approach often shades over into another. Yet there are real differences between alternative thought patterns and modes of operation in this arena. As a first approximation, the first of these categories could be thought of as characteristic of IMF credits and some types of World Bank loans. The second is characterized by the ILO comprehensive employment missions. The third is represented by long-term advisory teams, such as those of HIID. For the fourth, one could point to a variety of policy changes subsequently either praised or blamed by outsiders, but in the formulation of which outsiders played no central role.

Our subsequent discussion seeks to do two things. The first is to explore the effectiveness of these alternatives as ways in which outsiders might encourage or influence policy change. The second is to examine which particular policies have been of interest to different outside groups, and the relationships between their policy interests and issues of employment and enterprise size. As we shall see, there is a link between these two questions, since outsiders' influence will be different for different areas of policy concern.

1. Leveraged Policy Reform

a. The IMF

The provision of outside aid "with strings attached" is surely as old as the provision of aid itself; it is a very ancient saying that "he who pays the piper calls the tune." In the provision of finance to governments, the institution that is perhaps best known for this approach is the International Monetary Fund, although as we shall see, they are far from alone in this arena.

Each member country in the IMF has a number of credit tranches. In times of foreign exchange shortage, countries have the right to draw on their lower credit tranches virtually without restrictions. For upper credit tranches, on the other hand, the Fund imposes increasingly stringent conditions before it releases credits. In recent years, the IMF has imposed such conditions on a growing share of its lending. In 1981-82, "about 80% of [IMF] lending . . . was accompanied by stringent conditions," while in "1974-75, the last (previous) period of major net lending activity, the IMF imposed a similar degree of conditionality on only one-third of its lending" (Helleiner, 1983, p. 13. Cyclical variations in the extent of conditionality in IMF loans are also discussed in Williamson [1983], pp. 640-649).

IMF lending is designed primarily to help with balance of payments problems; its conditions center around a correction of those problems. The core of the programs generally focus on credit restraints: sometimes in the aggregate, sometimes with sub-ceilings for particular categories of lending. While the general guiding principle has been that conditions will not specify targets for taxes and expenditures separately, in practice there has been a rather extensive inclusion of particular tax policy

statements and expenditure ceilings in the conditionality agreements (see Beveridge and Kelly, 1980).

It is not clear how one should go about evaluating IMF conditional credit programs. While the central goal generally concerns an improvement in the balance of payments, there are other subsidiary goals as well, particularly relating to maintenance of growth and the avoidance of direct impediments to free trade. The precise terms of an agreement between the Fund and a borrowing country are not made public, so it is impossible for outsiders to judge performance relative to agreed-upon targets. Beyond this, it is not clear what would be an appropriate basis for comparison. Williamson (1983, pp. 130-132) lists four alternatives: i) what was happening before the intervention; ii) what would have happened if an ideal set of policies had been adopted; iii) what would have happened if no policies had been changed; and iv) what would have happened if policies had been changed, but without pressures or intervention by the Fund. Any of these four could be compared with the actual developments. Williamson argues that the first of these is the least satisfactory, since what was happening before was presumably what brought on the problem; it may well reflect an unsustainable pattern, and hence provide a standard of comparison which is of only limited interest. Unfortunately the other alternatives all involve counter-factual conjectures, and therefore can only be very rough.

Two evaluations have been done by the IMF themselves. Each was comprehensive in terms of country coverage, although partial in other respects. One of these involved an evaluation of 105 stand-by arrangements in the upper credit tranches between 1969 and 1978, where the evaluation was done relative to targets set in the agreement. In this study,

Beveridge and Kelly (1980) found that in 54 cases (51% of the total), the overall credit ceiling established was in fact observed. At least relative to the standard of having reduced credit as much as was set out as a target in the stand-by agreement, these agreements appear not to have been very successful. Beveridge and Kelly do not address the more fundamental question as to whether the credit restrictions succeeded in improving the balance of payments position of the country; their evaluation is only in terms of the intermediate target of reducing credit levels.

A study by Reichmann and Stillson (1977) explored somewhat similar questions for an earlier period (1963-72). Their tests were designed to compare the periods (4 or 8 quarters) just before and just after an agreement, to see if there is a statistically significant difference in the rate of growth of credit, the rate of inflation, or the net foreign assets of the country. Measured against these more lenient standards, they found that the principle purpose of the agreement was in fact met in 76% of the cases. As suggested above, this standard of comparison is of only limited validity.

In addition to these multiple-country studies, a number of case studies have been completed examining the particulars of individual situations. Such country-specific evaluations have been undertaken as part of at least three different sets of reviews. One of these was undertaken by the Overseas Development Institute in London, under the direction of Tony Killick (Killick, 1982 and 1984). A second set of studies was undertaken by the Brookings Institution, under the direction of William R. Cline and Sidney Weintraub (Cline and Weintraub, 1981). A third set of case studies was compiled by the Institute for International

Economics, under the direction of John Williamson (Williamson, 1983). Williamson's review of nine post-1975 case studies (including some done as part of one of the other studies) concludes that one (Tanzania) never got off the ground; for a second (India), the assistance (when he did his study, in 1982) was too recent to be evaluated. Among the remaining seven, three or possibly four (Britain, Jamaica, Kenya, possibly Peru) involved "stabilization with adjustment:" balance of payments problems were resolved by a fall in income plus some financing. Only in three cases (Italy, Portugal, and Turkey) "can the Fund program plausibly be given credit for securing a measure of adjustment" (Williamson, 1983, p. 650).

As far as can be determined by outside observers, issues of enterprise location or size have played no role whatsoever in the design or implementation of IMF stand-by agreements. IMF conditionality has been focused on dealing with balance of payments problems. While the agreements have included policies relating to exchange rates, tariff structures, and other similar types of trade intervention, the key feature -- particularly in recent years -- has been the control of domestic demand through a restriction on the rate of growth of credit.

Similarly, there has been some discussion of the income distribution impact of the IMF policies (Chander, Robless and Teh; Johnson and Salop; Cline, in Williamson, 1983). The ILO and others have encouraged the IMF to consider balance of payments approaches that are less costly in terms of their effects on employment; UNICEF has expressed similar concerns on behalf of children. Other analysts have argued, on the other hand, that the IMF should, as at present, restrict its concern to balance of payments issues (Cooper p. 573 and Diaz-Alejandro p. 344, in Williamson, 1983).

In practice, IMF conditionality has been focused narrowly on dealing with balance of payments problems.

In terms of Lowi's three areas of policy concern, issues of balance of payments problems which are central to the IMF credits fall in the regulatory arena. For this category of problems, he says that "policy tends to be a residue of the interplay of group conflict . . . Because individual regulatory decisions involve direct confrontations of indulged and deprived, the typical political coalition is born of conflict and compromise among tangential interests that usually involve a total sector of the economy" or, one might add in this case, the economy as a whole (p. 695). Lowi characterizes the resulting structure of decision-making as unstable (p. 713), presumably in the sense that those who benefit from a particular policy outcome do not have long-run interests in common, while those who lose out will constantly seek for new coalitions through which they can regroup to redress their losses. If one seeks to extend the area of concern of the IMF to issues of employment and income distribution, this moves us into Lowi's redistributive arena. If these are handled in ways which are integrally linked to the regulatory aspects of the balance of payments issues, this could greatly complicate the process of policy change.

b. The World Bank

The World Bank has also been very much involved in the use of policy conditionality in its lending. While the focus has again been on balance of payments problems and adjustments needed to meet such problems, more emphasis has been placed on the longer-term developmental needs of the country rather than simply getting through immediate balance of payments crises. The Bank's approach to conditionality has appeared most sharply

in the 1980's in the Structural Adjustment Loans (SALs) and in their successors, the Sectoral Adjustment Loans. These general-purpose loans provide financial support for countries engaged in a reorientation of policies in order to effect a change in the structure of their economy, generally involving a move towards liberalization. The first SALs were issued in 1980; over the fiscal years 1980-84, 27 loans and grants were approved, in 16 countries. In 1985, disbursements for structural and sectoral adjustment loans accounted for about 9% of total disbursements, a figure somewhat below the level of the immediately preceding years. If one includes sectoral investment and maintenance loans, designed to finance "broad categories of equipment, material, services, and civil works related to the whole, or a time slice, of a sector program," and therefore not built around individual projects, then the share of this total rises to 37% of all disbursements (World Bank, 1985, pp. 50-51. For a general discussion of the Bank's SAL program, see the paper by Ernest Stern, "World Bank Financing of Structural Adjustment," in Williamson [1983], pp. 87-107).

In a recent review of their structural and sectoral adjustment lending programs, the Bank found the following to be the principal concerns common to all these loans and grants:

i) changes in trade regimes so as to improve the competitiveness of, and incentives for, exports;

ii) mobilization of domestic and foreign resources;

iii) improvement in the efficiency of domestic resource use; and

iv) institutional reform (World Bank, 1984, p. 1 and 1985, p. 53).

Much has been written about the strengths and limitations of the Bank's SAL program. An interesting paper by Berg and Batchelder argues

that this set of activities is motivated by a particular (and, in their view, particularly uncertain) perception of the process of policy change. As they interpret the Bank's intentions, the primary goal was to enable the Bank's representatives to "get to the high table of decision-making of the country." In terms of the features outlined in section A above, this implies that the crucial problem is one of calling attention to a particular problem. The implication is that once decision-makers recognize the existence of a certain issue, the rest will follow relatively smoothly. As Berg and Batchelder point out, there are reasons for skepticism about this approach. On the one hand, World Bank representatives generally have enough "clout" to be able to get to the "high table" without any particular additional bribes. On the other hand, the fact that one reaches that table surely does not insure that all policy changes which one suggests will be accepted, much less implemented. In one telling quote, they say that ". . . most LDC political authorities and probably most LDC technical people, including economists, do not agree with the views of, say, most Bank economists, on how markets and market institutions work in their country, or on the impact of proposed reforms. This is especially true, for example, in such key areas as agricultural marketing, industrial policy, trade and exchange rate policies, and interest rate policy" (p. 25). What is at issue is not simply raising issues, calling attention to particular problems, but analysis of how the economy operates, in a search for effective ways of dealing with those problems.

Berg and Batchelder make an additional point which bears on the discussion in this paper. They argue that the key to policy change lies in the changing of minds of developing country decision-makers. That process of changing minds is necessarily one which involves discussion,

even argumentation; it will probably involve research, perhaps new data-collection. One might make three points about this reasoning. The first is that people generally do not change their mind on the basis of an argument based on generalities or ideologically-derived positions. Officials coming in from the outside who bring only preconceived ideas about how economies operate are most unlikely to be effective change agents. To prescribe needed changes, one needs a reasonably sophisticated understanding of the operations of a particular economy and society in question. Secondly, minds are most likely to be changed if the relevant decision makers understand -- preferably, participate in -- the analysis which leads to a particular conclusion. Thirdly, a process whereby policy changes are dictated from the outside and accepted only in order to receive an associated credit seems unlikely to lead to the rethinking, reformulating, and continuing dialogue which must be a central feature of enduring and implemented policy change. As Berg and Batchelder express it, conditionality imposed from the outside with only limited understanding or commitment on the inside seems certain to stand in the way of rather than contributing to the changing of minds, which is at the heart of meaningful and lasting policy reform.

As suggested above, the key points of focus of the SALs have concerned the balance of payments, resource mobilization, efficiency questions, and institutional reform. While employment could enter this list under the heading of resource mobilization, the emphasis has clearly been on the mobilization of financial resources; employment has not figured prominently among the concerns addressed by these loans. Nor have we been able to locate any examples in the SAL agreements of attention to the size distribution of firms, or of the special needs for policy change of small

enterprises. This set of issues seems not to have been addressed in the SAL negotiations.

One can approach this questions from an alternative point of view, working "up" from the Bank's small enterprise loans rather than "down" from the structural adjustment loans. Starting in 1975, the World Bank has given considerable attention to expanding loans for small and medium-sized enterprises. This was a new undertaking for the Bank; during the period 1972-76, out of US $2.2 billion which the Bank lent to development finance corporations, only US $100 million was designated for small and medium enterprises (SMEs). Over the same period, the Bank also lent US $3.1 billion directly for large scale mining and industrial projects (Levitsky, 1985, p. 1).

As the Bank became increasingly involved in small enterprise lending, they came to be increasingly concerned about the policy context in which these enterprises operate. This was for two reasons: i) loan projects reach only a limited number of producers, while policy can have a much broader impact; furthermore, ii) if the policy context discriminates against small producers in other ways, then providing credit to such borrowers will have only limited success in facilitating their growth. Levitsky writes that "it became increasingly evident during implementation that there was a need for the Bank to concern itself more with the impact of policy framework" (ibid. p. 17). In his thoughtful discussion, Levitsky concludes that "until realistic exchange regimes were established and until changes took place in trade, investment and financial policies . . . it was difficult to effect a substantial development of SSEs along healthy economic lines. It is hardly feasible to press for the use of appropriate technologies and maximum employment creation in a situation where

subsidized finance for equipment purchase is offered and where it is possible to operate in a protected market where profits are high enough to justify equipment used for only a small part of the time" (ibid. p. 33).

While the need for improved policy was recognized, a context was slow to develop in which the Bank could work effectively towards that end. Efforts to include policy dimensions in small enterprise loans met with little success, largely (says Levitsky) because the discussions were with the wrong officials; those who negotiated the small enterprise loans had no authority over broader issues of macro economic and investment incentive policies. Beyond that, one might add, the loan sizes generally were not large enough to enable the Bank to have much leverage on broader policy issues. The structural and sectoral adjustment loans seem well suited to deal with both of these limitations. Unfortunately, the evidence suggests that in the formulation of these loans, and in the associated design of conditionality clauses, the particular needs of small enterprises have been forgotten. The policy focus of the structural and sectoral adjustment loans seems to have paid no attention to the size dimension of enterprises.

2. High-level Outside Experts

While many donors agencies have sought to bring about policy change through analyses done by high-level outside experts, this approach is perhaps most closely associated with the ILO and its major employment missions through the World Employment Programme. Starting in 1970, the ILO dispatched comprehensive, interdisciplinary teams to advise governments of several developing countries on "the strategy of employment promotion within the framework of development planning" (ILO, 1973, p. 1). There have been eight such missions to date, in Colombia (1970), Sri Lanka

(1971), Kenya (1972), Iran (1973), Philippines (1974), Dominican Republic (1975), Sudan (1976), and Egypt (1980). Some evolution of emphasis is evident in the reports, including considerations of the overall shortage of work opportunities in Colombia, a preoccupation with structural imbalances in the labor market in Sri Lanka, and concerns with the relationship between employment and income distribution in Kenya, the Philippines, the Sudan, and Egypt.

In spite of these varying and evolving emphases, a key feature of the first seven missions was the "comprehensive nature of their approach to the analysis of the employment problem and of the strategy to cope with this problem" (ILO, 1973, p. 63). Employment was viewed not just in terms of finding jobs, but as part of the problem of poverty and income distribution and the whole social situation in the countries concerned. To deal with these problems, the policy and project recommendations contained in the various mission reports were broadly focused, ranging from simple adjustments in labor laws to such items as radical land redistribution, complete restructuring of the educational system, improvement in health services, and income policies.

There have been no formal evaluations of the employment missions, in the sense of monitoring the extent to which recommended policies were actually put into practice. In 1973, the ILO sponsored a seminar which undertook a preliminary assessment of the impact of the first four missions. The published report on that seminar provides the only written evaluation to data of their effectiveness (ILO, 1973a). Much of the discussion of this section is derived from that source.

That report suggests that the inherent complexity of the topic makes it impossible to provide any direct evaluation of the extent to which the

missions have had an impact on the ultimate goals such as employment or distributional equity. Of necessity, then, the evaluation focuses on intermediate results rather than ultimate targets. The two main intermediate results identified were i) increased knowledge and understanding of the problems with which the governments are concerned; and ii) changed policies. On the first of these, Jolly, Sears, and Singer, the team leaders of the first three missions, argued that "in all three countries (i.e., Colombia, Sri Lanka, and Kenya), the thinking of the individual leadership, officials and key individuals outside government and inside as well, has clearly been influenced, and this is perhaps the most important outcome" (ILO, 1973a, p. 31). Professor Urrutia, a country representative from Colombia, stated that "the major effect on policy formulation of the mission to Colombia was through its impact on attitudes of the Government and politicians. A result of the mission was that employment and income distribution considerations, for the first time, were used as criteria for decision-making" (ILO, 1973a, p. 146). There were similar examples from other countries.

With respect to the missions' impact in actually changing policies, the claims made in 1973 were modest. Jolly, Sears, and Singer state that "implementation of all three reports has been very partial . . . one can hardly expect a complete change of development strategy to be implemented in every detail . . . our reports were a package, each containing dozens of proposals. In every case some proposals of each type have been carried out (though possibly they would have been carried out anyway)." Cited as policy changes were increases in the price of sugar, a partial removal of the rice subsidy, and a partial devaluation in Sri Lanka; changes in import controls, increased use of shift work, and increased credit to farmers in

Colombia. With respect to small industries, it was claimed that "the (Colombia) Mission's recommendation strengthened the Industrial Finance Fund in i. policy of financing labor intensive small scale industries and led to the elimination of some of the special concessions made in the case of capital goods under the import deposit scheme" (ibid., p. 86). On the whole, it would appear that the missions' impact on changing policies was at best a mixed one, at least as of 1973.

The early missions made an explicit decision to exclude nationals from the country under study in the mission teams. The Colombia mission had 27 members, none of whom were Colombians. This was presumably done in order to rely on individuals who were independent of existing factions in the country, thereby supposedly ensuring both a more unbiased study and a greater willingness on the part of all in the country to treat the resulting recommendations seriously. The result, though, was that once the report was written, presented and discussed, those involved in the underlying analysis generally all left the country. While some leaders may have been influenced by discussions and by their reading of the report, as suggested above, still the lack of participation by nationals of the country in the analysis limited the studies' long-run impact on the policy formulation process. In later missions this defect was remedied. The Egypt mission, the last one undertaken (Hansen and Radwan, 1982), made only limited use of outside experts, relying instead on a large number of Egyptian professionals who worked as consultants, writing commissioned reports on which the final report drew heavily.

The ILO comprehensive employment missions made a number of recommendations relating specifically to policies for the encouragement of non-agricultural employment and small and medium scale enterprises. One such group of policies

was aimed at removing artificial distortions in factor prices so these would more accurately reflect social opportunity costs, thereby encouraging more labor-intensive methods of production. It is interesting to note in this regard that while the removal of artificial ceilings on interest rates was urged in all the reports, elimination of a minimum wage floor was usually not recommended (see, for example, the Philippines report, p. 19; Kenya report, p. 24). Alterations in some of the restrictive labor laws, however, were frequently urged. Reducing the degree of over-valuation of exchange rates and removal of special tax concessions for duty-free importation of capital and other inputs were also featured in most reports.

The comprehensive employment mission reports made two important contributions to the understanding of policy as it related to non-agricultural employment and enterprise structure. The first is their recognition of the need for a comprehensive approach to this set of issues; the second concerns their focus on the "informal" sector. On the first of these points, the studies made clear that, in examining the impact of policies on employment and enterprise structure, it is necessary to reach beyond traditional labor market and industrial policies to include trade, foreign exchange, sectoral growth and other related policies as well. An important corollary was their highlighting of the crucial link between income distribution (particularly through the role of demand) and the pattern of rural non-farm employment and enterprises development.

A second major contribution of the ILO missions to the understanding of the impact of policy on enterprise size and employment concerned the informal sector. Although this concept has subsequently been criticized, among other things, as being too fuzzy for meaningful quantification (see, for example, Lipton, 1980, and the special issue of World Development

[1980]), the recognition of very small enterprises as sources of employment and the exploration of the policy environment in which these small firms operate has been fruitful. While traces of the concept are found in the Colombia and Sri Lanka reports, it was most fully articulated in the Kenya mission report (ILO, 1972, p. 20). A strong case is made there for these activities on the grounds of the role they can play in providing productive employment and income. The Kenya report argued that the "informal sector" has been discriminated against through a variety of policy measures. It urged a more positive policy stance through such measures as i) ceasing the demolition of informal sector housing; ii) reviewing trade and commercial licensing with a view to eliminating unnecessary licenses; iii) intensifying technical research and development on products suitable for fabrication in the informal sector; iv) inducing larger firms to train and work with small subcontractors; and v) attempting to increase government purchases from informal sector firms (ILO, 1972, p. 22).

The areas of concern addressed by the ILO missions encompassed all three types of policy change discussed in Lowi's categorization: distributional, redistributional, and regulatory. In general, the reports paid little or no attention to the political or decision-making context in which policy is changed. Implicitly, they seemed to assume that the key missing ingredient was information; once the facts were made known, it was implicitly assumed that results would follow. It is clear, though, that both facts and their interpretation are subject to dispute, even when they are presented and argued by world-renowned figures. While no studies have shown precisely the extent to which the policy recommendations of the missions have been implemented, one might hypothesize that this has been

related to the degree of involvement with the missions by nationals of the country.

3. Long-Term Training, Research, Advisory Teams

An alternative approach to policy change has come through teams of long-term advisors working with nationals of a host country. While many institutions have been involved in funding and organizing such advisory teams, the discussion of this section focuses particularly on the experience of the Harvard Institute for International Development and its predecessor organization, the Harvard Development Advisory Service.

From the mid-1960's to the mid-1980's, DAS/HIID has worked in some 25 projects and countries. These have ranged from relatively short-term studies of focused topics (e.g., Liberia's educational institutions, Mali's rural health delivery system) to long-term planning advisory teams concerned with all aspects of the economy. The latter activities were undertaken in perhaps 7 countries (the classification of some is not clear): Colombia (1963-71), Ethiopia (1970-75), Ghana (1968-72), Indonesia (1968-present), Liberia (1964-71), Malaysia (1966-81), and Pakistan (1954-70). In several of these cases -- as in other projects in other countries -- the content of the program evolved rather sharply over time. Although they were not generally designed with this approach in mind, the work of the earlier planning advisory teams often involved quite a heavy involvement by advisors in day-to-day issues of policy formulation, interpretation, and even implementation. Over time, this focus shifted, partly due to increasing sensitivity on the part of host country nationals, but probably even more due to the growing analytical competence and administrative capacity on the part of these people to handle the work

themselves. The emphasis shifted, then, to providing the analytical underpinnings for decision-making, and training counterparts in analytical approaches and techniques. There has been a growing emphasis on policy-relevant research, often undertaken jointly between Harvard advisors or consultants and nationals of the country.

In terms of the extent to which this set of activities has in fact lead to policy change, the record seems to be a mixed one. The Harvard work has often been a minor variable in the overall political scene of a country. Policies are changed, governments come and go, in ways that are generally quite unrelated to the activities of the Harvard teams. The key determinants of the extent to which policies get changed revolve around the character and strength of these governments. In some cases, the relationship with the Harvard group has been of long enough duration that it has been able to survive changes of government, thereby raising the potential for riding out the zigs and zags, providing some long-term influence when people were ready to listen. Pakistan (16 years), Indonesia (17 years and counting), and Malaysia (15 years) are perhaps the clearest examples here. In each of these cases, there was a continuing evolution of the particular form of assistance, its focus and locus within the government, but the continuity did make possible a different type of contribution in terms of a build-up of both expertise and trust in the Harvard team members.

While issues of employment and income distribution have figured prominently in many aspects of the work of the Harvard teams, there has been relatively little attention to issues of the structure and size distribution of employment. An exception is the work on small enterprises in Indonesia by Snodgrass (Snodgrass, 1979). On the whole, though, for

the HIID teams as for others working on development problems during these years, there was little or no explicit attention to the differential effects of policy on firms of different locations, types, or sizes.

4. Indigenous Policy Change

LDC governments have been making policies on their own, without donor prompting, ever since they came into existence. The vast majority of policy decisions made today undoubtedly involve indigenous problem identification, analysis, decision making and implementation. It seems curious to have to state such a truism. But in the current upsurge of donor-centric discussion of LDC economic policies, it is easy to lose sight of this simple fact.

It may be helpful to review an example, one among many, of indigenously directed policy identification, appraisal and implementation. We take the case of Botswana and the issue of employment policy, a principal focus of this paper. Botswana's policy makers, because of their country's heavy dependence on labor exports to an increasingly reluctant South Africa, have for some time focused on employment creation as a key economic issue. Their Fifth National Development Plan, covering the years 1979 - 1985, identified employment as one of two principal objects of the plan, the other being rural development. Through dialogue between central and district governments (see Picard 1979) in combination with analytical work done at both levels, the Batswana established a key set of promotional activities to be launched during the plan in a combination of ministries including Agriculture, Commerce and Industry, and Local Government and Lands, among others.

Further analytical work was commissioned in preparation for the drafting of a new development plan, notably Michael Lipton's year-long study of employment issues (Lipton, 1978). In addition, key advisory and staff positions were filled in the Ministry of Finance in areas that focused on employment issues. The National Employment, Manpower and Incomes Commission (NEMIC) was resuscitated and serious analytical work was undertaken by an inter-ministerial working group. The outcome of these analyses and discussions was a Financial Assistance Policy (FAP), a major program aimed at diversifying the narrow productive base by channeling diamond revenues into new investments. The system of incentives under the FAP was specifically designed to counter the previous capital-biased incentives embodied in the policy environment (Government of Botswana, 1982a). An initial review of the Financial Assistance Policy (Isacsson et al.) suggests that their efforts are bearing fruit.

In this instance, as in many others, donors can play an important supporting role in the policy process. In their review of employment policy, the Botswana government called on donors to assist with several important analyses, with funding some elements of the employment-generating projects and a portion of the Financial Assistance Policy. Yet the key impetus for focusing on employment issues came from the Botswana government itself. They commissioned the key analyses and made the key decisions. Since host country governments normally wish to address key economic problems at least as much as donors, and since they are in the business of making policy, it seems that a productive way for donors to approach questions of economic policy in LDCs is to see how, as in Botswana, they can support the indigenous policy making apparatus that is currently working towards that end.

5. USAID's Multi-Level Influence on Policy Change

USAID has influenced LDC policy making in all three ways discussed above: through policy conditioning of aid; through policy relevant analyses they commission or perform; and by funding long term advisors, training and building up local analytical capacities and institutions. Despite this diversity of experience, AID's own internal reviews of their role in LDC policy change have focused almost exclusively on the effectiveness of policy conditioning and leveraging. Yet AID applies a considerable proportion of its resources in the two other policy arenas. Institution building, for example, has long been a key focus of AID activity, and efforts at building up planning departments, agricultural policy units and educational institutions have certainly increased LDC capacity to collect and analyze policy relevant data. The funding of expatriate advisors and counterparts has played an important role in such efforts. AID has likewise participated in the direct production of policy relevant data and analyses through projects as well as through their normal program design efforts.

As suggested at the start of this section, these three approaches to outsider influence on policy decision-making are not mutually exclusive. AID, and to a lesser extent the World Bank and the ILO, have often used two or three together in facilitating policy change on a particular issue in a given country. For example, the second and third options -- policy analysis by outsiders or training and collaborative efforts -- can be used effectively to get policy makers' attention and then perhaps combined with leverage to influence policy decisions. While recognizing the potential for overlap, we wish nonetheless to discuss AID experience with each of the

three types of outsider interventions, highlighting the role they have played in influencing LDC policy decisions.

a. Joint Analyses and Institution Building

AID has historically concentrated a large part of its budget on LDC institution-building, much of it focusing on policy making institutions. A recent internal review indicates that AID has funded over 900 institution-building projects in LDCs. This amounts to approximately 30% of all AID projects (Barnett and Engel, 1982). Two thirds of the field-based institution-building projects concentrated on national organizations, and over one-fourth on economic development planning, clearly a policy related focus. A further one-fourth of the projects focused on agricultural institutions, also probably with at least an indirect policy focus given the importance of technical and economic data as an input in policy forumlation. A further 15% of the institution-building projects were designed to bolster educational institutions, a move that in the long run will boost local analytical capacity in a variety of policy-relevant fields.

Although not formally evaluated as such, many of AID's major research projects involve institution building through collaboration between U.S. and LDC institutions. Some of these have focused on small enterprise and employment issues. A recent fruitful example of such efforts is the work on rural off-farm employment done with Kasetsart University in Thailand. While it is always hazardous to infer causality, the Thai development plan drafted immediately following this AID-funded research placed particular emphasis on rural employment through small-scale enterprises. Similar joint small enterprise analyses have been performed with the Rural

Development Studies Bureau of the University of Zambia, and the Institute of Social and Economic Research at the University of the West Indies in Jamaica, each leaving behind an improved analytical capacity in the indigenous institution.

While about half of the formally-labeled institution building projects have been evaluated or audited and one global synthesis prepared, evidence on the policy impact of these projects is unavailable. This is not surprising given that institution building is an intermediate input in the process of policy change. Strengthened LDC policy institutions p oduce data and analysts which together can be applied to assess pertinent policy issues. The large number of U.S. alumni operating in LDC policy positions leaves little doubt that such institution building has had an important impact on policy analysis and formulation. Unfortunately, this important contribution to LDC policy making is routinely overlooked in the current spate of papers on AID's role in policy change and policy dialogue.

In addition to institution building projects, AID has funded an accelerating number of policy projects. As of September 1985, these numbered 79 (AID/PPC/CDEI data base search, September 1985). In the small enterprise and employment area, the current Panama Employment Policy Project and the Honduras Rural Technology Project can be cited. In the latter project, two policy analyst positions in the government were supported by the project. Of course, some policy projects entail analysis by foreign experts and thus fall mainly into the next category of donor intervention, policy analysis by outside experts.

b. Policy Analysis by Outside Experts

AID undertakes and commissions a substantial amount of policy relevant research and analysis which is done by AID staff or outsiders working

outside of LDC institutions. The normal programming sequence requires analysis in the course of preparing Country Development Strategy Statements (CDSSs), Annual Budget Submissions (ABS) and in project development through Project Identification Documents (PID) and Project Papers (PP). While these efforts are mainly conducted without close participation of LDC institutions, there have been some notable and fruitful exceptions such as the recent experience in Burkina Faso. In this case, CDSS related analyses on macro policy and the business climate were performed jointly with key Burkinan institutions. This culminated in a Burkinan Chamber of Commerce symposium that involved high-level discussion between members of the business community and government, focusing government attention squarely on issues of key importance to the business community. This involvement appears likely to result in a number of policy changes, for example relating to incentives in the investment code (Chambre de Commerce, 1985). Muscat (1984) provides a good overview of how AID programming efforts can and do treat policy issues, but both he and others acknowledge that this effort is not well documented (Bremer et al., 1985). Thus it is difficult to evaluate the quantitative importance of policy-focused analyses or, aside from selected anecdotes, to document its impact on LDC policy analysis. Muscat cites some recent successes, but experience with AID programming exercises suggests that many of AID's policy-related analyses are performed by non-host country analysts, are written up in English, remain on AID shelves and end up having little impact on local decision makers.

c. USAID Experience with Policy Conditionality

Conditionality of one form or another has long been commonplace in AID lending and grant programs. Yet policy conditioning has ebbed and flowed

in importance over the past 25 years. During the decade of the 1960's, AID began to tie considerable amounts of aid to policy reform. While this tendency declined during the 1970's, it has resurged dramatically in the 1980's.

USAID's propensity to condition aid on policy reform has varied not only over time, but also according to source of funds and funding channel. Program lending, funded most frequently out of Economic Support Fund (ESF) monies but occasionally from Development Assistance (DA) funds, appears to have been the major vehicle for conditional aid during the 1960's as well as during the 1980's. The policies conditioned in program lending have generally included macro policies such as exchange rates, government spending and credit, often in conjunction with the IMF. While program loans and grants remain a primary channel for policy based aid disbursements, the recent renewal of interest in policy conditioning has led to increased attention to the potential for using PL 480 funds for such purposes. Policies addressed through PL 480 conditionality include mainly agriculturally related concerns such as farm pricing, output marketing, and input supply and distribution. Recent evidence suggests that, in the current return to policy conditioning, even project lending and grants have become vehicles for policy conditionality. A study of policy conditionality in 6 AID country programs between 1982 and 1984 showed some use of policy conditioning in 93% of program grants and loans, 100% of PL 480 allocations, and in 37% of project agreements (U.S. Congress, 1985).

AID experience with policy conditional grants and loans has undergone four major reviews. Two early studies, Snodgrass et al. (1970) and Gulick and Nelson (1965), examined the record of policy focused lending during the 1960's; while two others, Muscat (1984) and the U.S. Congress (1985), have

examined the experience of the 1980's. Both of the early studies focused on program lending only, asserting that while PL 480 was in some cases substantial, it as well as sector and project loans were much less important vehicles for policy reform than were the program loans. Snodgrass et al. undertook a careful examination of the effectiveness of policy conditioning among program loans to Brazil, Chile, Colombia, India, Pakistan, Tunisia, Turkey and South Korea from 1962 to 1968. Gulick and Nelson reviewed the experience with program lending in Brazil, Chile, East and West Pakistan, and Taiwan between 1960 and 1964.

The second wave of AID interest in policy reform, beginning in 1980, has induced a second pair of reviews of recent policy related efforts. The first, commissioned by Congress, is a basic review of the extent and effectiveness of policy based aid in Bangladesh, Costa Rica, Egypt, Honduras, Philippines, and Sudan during 1982-1984 (U.S. Congress, 1985). This report presents data with very little interpretation and without any indication of how projects and programs were selected for review, making it unclear how representative the results are, even for the countries studied. Nevertheless, the report is an important source of information, since it constitutes the only comprehensive scoresheet of policy based aid, including not only program lending but also PL 480 and project based disbursements. Some aspects of that scoresheet are summarized in Table 11. In a second recent review, Muscat provides a qualitative overview of the successful current efforts at policy dialogue in Bangladesh, Kenya, Somalia, Sri Lanka, Sudan, Thailand and Zaire (Muscat, 1984). Unlike the Congressional review, Muscat endeavors to identify reasons for success or failure of recent policy conditioning efforts. In addition, Zuvekas has undertaken a very preliminary review of program lending in Latin America

Table 11. Summary of AID Conditionality in Five Countries, 1982-1984

	Total Number of Projects	Number with Policy Conditions	Policy Conditions Met? Yes	Partially	No	Too early to say
I. Project Aid						
Bangladesh	3	3	2	0	1	0
Costa Rica	6	0	0	0	0	0
Egypt	6	4	1	3	0	0
Honduras	6	1	0	1	0	0
Sudan	6	2	0	1	0	1
Total Projects	27	10	3	5	1	1
II. Program Aid Plus Commodity Import Programs						
Bangladesh	0	0	0	0	0	0
Costa Rica	10	10	3	7	0	0
Egypt	4	3	3	0	0	0
Honduras	9	8	5	3	0	0
Sudan	5	5	1	4	0	0
Total Program + CIP	28	26	12	14	0	0
III. PL 480 (Food AID)						
Bangladesh	1	1	1	0	0	0
Costa Rica	1	1	0	1	0	0
Egypt	2	2	0	2	0	0
Honduras	2	2	0	2	0	0
Sudan	2	2	0	2	0	0
Total PL 480	8	8	1	7	0	0

Source: U.S. Congress, "A Study: Conditionality in the Agency for International Development's Economic Assistance Program in Six Countries," mimeo, February 17, 1985.

and the Caribbean during the 1980's (Zuvekas, 1984). As still further testimony to AID's renewed interest in policy reform, AID has commissioned a first round of PL 480 evaluations as well as a series of papers exploring the relationship between AID and IMF policy conditionality (Dunlop and Adamczyk, 1983; Clay and Singer, 1982; Pack, n.d.; Reid, 1984, Weintraub, 1984; Weaver and Watchel, 1984).

While the annointment of policy dialogue as one of the "four pillars" of AID's development efforts has unleashed a flood of reports and discussion papers on policy conditioning, a careful sifting of the literature indicates that all the analyses ultimately repose on three of the original four studies cited above: Gulick and Nelson (1965), Snodgrass (1970), and Muscat (1984). The recent congressional review (U.S. Congress, 1985) has not yet been included in the secondary literature.

While much of this secondary literature has provided useful distillations (especially Zuvekas and Bremer et al.), it is important to recognize that although the volume of discussion on policy dialogue is substantial, it resembles an inverted pyramid. All of what we know really reposes on the three or four primary studies cited above.

While the four primary reviews of AID experience do not agree in all respects, a number of common conclusions do emerge. First, the two early studies make a point of distinguishing between two types of policies, development and stabilization policies. As Snodgrass points out (p. 26), donor efforts at influencing stabilization policies -- exchange rates, trade controls, interest rates, government spending, overall credit allocation -- are easier to condition than are development policies and programs; this is because development issues often require institutional change rather than simple manipulation of policy levers. In addition,

stabilization policies are often faster acting than are efforts to promote broad based development, for example in areas such as agricultural production. In a related observation, Gulick and Nelson (p. 2) note that stabilization goals are more easily quantified than are development objectives and thus stabilization lends itself more easily to conditionality based on frequent, short-interval monitoring.

The distinction between development and stabilization policies appears to be an important one, which is frequently overlooked in the current donor rush towards policy conditioning. All along the standard policy sequence, there exist important differences between stabilization and development policies. Certainly the ability of donors to focus the attention of LDC policy makers on stabilization issues will frequently be great given the often urgent nature of foreign exchange shortages, while development problems such as employment, poverty, and rural development are often accretionary and less likely to generate regime-threatening flare-ups. Similarly, differences appear at the analysis and decision making stages. While economics offers relatively clear and widely held prescriptions for dealing with balance of payments crises, there is far less agreement on the analysis of more general development issues. Moreover, decision making and analysis are more complicated for development than for stabilization policies. Data required for analyzing development issues are almost always less reliable and less readily available than are data relating to stabilization issues. While trade, monetary and government budget flows are frequently known within reasonable confidence intervals, information of agricultural production, employment, food consumption and nutrition, for example, are often much less precisely known. Finally, as Gulick and

Nelson point out, development objectives are harder to measure and monitor.

The evidence which is available suggests that stabilization policies have been easier to change than development policies. Morrison and Arreaga-Rodas (1981), for exampled, in their review of liberalization in Sri Lanka, Egypt, and Sudan conclude that stabilization policies such as trade and exchange rate policies proved most amenable to change while development policies such as liberalization of public sector enterprises, price controls and domestic subsidies proved most difficult (pp. 52, 53). Similarly, tabulations based on the recent Congressional review of AID policy conditionality indicate that policy leveraging has been more successful when applied to stabilization policies than when applied to development policies (see Table 12).

All this suggests that stabilization and development issues should be approached differently. In fact, the distinction between stabilization and development policies may be the appropriate LDC analog of Lowi's classification of policies according to characteristics of the policy making process. Of course, this is only a very preliminary notion, and developing the hypothesis would require a careful classification of the individual policies listed in Table 2. At least one can conclude that donors hoping to influence stabilization and development issues should approach the two sets of issues differently. While heavy leveraging and explicit conditionality may be feasible for stabilization issues, it is likely to be considerably more difficult when development issues are concerned. Participatory analysis and persuasion may be far more effective in influencing developmental decisions relating to broader development issues.

Table 12. Effectiveness of AID Policy Conditioning by Type of Policy

	Stabilization* Policies		Development** Policies	
Aid Imposed Policy Conditions Met Fully	9	(50%)	5	(28%)
Aid Imposed Policy Conditions Partially Met	9	(50%)	9	(50%)
Aid Imposed Policy Conditions Not Met	0	(0%)	4	(22%)
Total (100%)	18	(100%)	18	(100%)

*Stabilization policies include exchange rate, banking and currency legislation, export policy and tax policy, all most frequently in conjunction with IMF stand-by agreements.

**Development policies include agricultural policies, import/export legislation unrelated to IMF agreements, investment promotion policies, water resource reform, electricity pricing, family planning, water pricing, rural savings and interest rate policy, and domestic marketing policies.

Source: Tabulations based on U.S. Congress, "A Study: Conditionality in the Agency for International Development's Economic Assistance Programs in Six Countries," mimeo, February 27, 1985, pp. 8-15.

In those situations where leverage may be feasible and appropriate, the four primary reviews of AID experience to date offer insights into how a donor might most effectively do so. First, any conditions should be kept few in number. Second, threats must be made credible by a willingness to withhold aid if conditions are not met. More contentious are interpretations of how leverage is obtained. Snodgrass (p. 35) views size of the aid program as less important than potential changes in aid levels, although he admits that in the countries he and his colleagues studied leverage was generally considerable -- averaging about 10% of total import bill for most of the countries examined. Probably most sensible is Muscat's conclusion that a large aid program is a necessary but not sufficient condition for effectively leveraging change (Muscat, 1985, p. 18).

In assessing the requirements for successful policy leverage, Snodgrass makes a further point that has, unfortunately, received little prominence in subsequent reviews; he points out that leverage cannot work if the LDC does not have adequate administrative capacity to implement the course of action agreed upon (p. 37). He remarked that the countries in which AID successfully applied leverage during the 1960's were those with the best developed cadres of local professionals. Transferring such an approach to less well endowed LDC administrations, he says, would be difficult if not impossible. Thus, in the same way that data collection may be a prerequisite for informed analysis of many LDC development policies, so too donor support for administrative and analytical training of LDC personnel may be a prerequisite for effective policy conditioning. This will be particularly important in countries of Sub-Saharan Africa where trained personnel are in especially short supply. In sum, leveraging

policy change works best when there is: 1) a lever, i.e., a significant aid program; 2) a belief that aid will be withheld if conditions are not met; 3) a limited number of policy issues, principally in the area of stabilization; and 4) adequate administrative and analytical skills among the LDC officials.

While recent discussion revolves primarily around leverage and conditionality, the four basic reviews of AID policy reform experience also offer insights into how donors might effectively use persuasion. According to those reviews, persuasion (as well as he use of leverage) requires: 1) adequate administrative and analytical skills among LDC personnel; 2) well-trained, resident analytical staff on the donor side; 3) sensitive mission personnel, particularly the director. Although not highlighted in any of the above reviews, it seems implicit that adequate data for informed decision-making constitutes a fourth prerequisite for both effective leveraging and effective use of persuasion. The requirements for successful persuasion revolve around the bolstering of the capacity for analysis by LDC decision makers and analysts. Ultimately, as Muscat indicates (p. iv), persuasion will be most effective when it leads to a capacity for self generated, internal, indigenous policy dialogue.

Current AID doctrine on policy dialogue is most clearly specified in AID's policy dialogue paper (USAID, 1982) and in the Agency's recent major policy effort, the $500 million Economic Policy Reform Package (EPRP) in Sub-Saharan Africa. It is clear from both that current thinking at AID draws heavily on the two reviews of the agency's experience with policy reform during the 1960's. In particular, both emphasize explicit conditioning and tranche releases.

But there are important differences in today's situation, differences that may qualify the conclusions of the earlier experience. First, USAID's leverage is considerably diminished compared to what it was 20 years ago. While in the six of the eight countries studied by Snodgrass et al. U.S. program loans alone amounted to 10% of imports, today total aid exceeds 10% of import bills in only a few politically important countries such as Egypt, El Salvador, Israel, Liberia, and Somalia, countries where observers agree that our large aid provides little leverage because of overriding political imperatives that make it impossible to make credible withdrawal threats. Not only is leverage considerably diminished, but so is staffing as a result of personnel cutbacks of the early 1980's. Although little repeated in the secondary literature, Snodgrass (p. 39), Gulick and Nelson (p. 5) and Muscat (p. 19) all emphasize the importance of intimate on-site analytical capacity at AID missions as a necessary requirement for achieving the expertise needed to diagnose policy problems in LDCs. Snodgrass indicates that four full-time economic analysts is a minimum for supporting the kind of policy program operated in a typical Latin American country during the 1960's. Given today's field staffing patterns, nothing like that analytical capacity is present in the majority of AID field missions. Thus, with considerably lessened leverage and substantially reduced field expertise, AID's ability to implement carefully conditioned policy reform is considerably reduced over what it was 20 years ago. Furthermore, AID's policy interest has shifted away from what in the 1960's was a focus on stabilization policies. Today, the IMF has largely taken the lead in stabilization policy conditioning, while AID and other donors have concentrated increasingly on development policies for which leverage is a less effective instrument of change than is persuasion. In addition, AID

now operates in smaller and poorer countries than it did in the 1960's. Consequently AID's current recipients are endowed with poorer data bases and with fewer trained host country analysts and administrators.

These shifts, combined with the lessons of the past and present policy reform efforts, lead to several conclusions. First, current efforts at policy reform should focus more on participatory analysis and persuasion than they have up until now. This will require the development of local analytical capacity, local data collection and the presence of capable, on-site analytical staff on the AID side. Finally, in view of the AID staff reductions, it would seem prudent to focus policy reform efforts in areas of strength, perhaps in selected sector policies and in countries where AID has acquired more expertise.

IV. LESSONS LEARNED

This paper has traversed a vast landscape, covering a wide range of issues and policies as well as diverse aspects of the process of policy change. In the course of this review, the following themes have emerged.

1. A comprehensive array of policies must be considered. A whole panoply of policies - from those affecting labor and capital markets to agriculture, trade and income distribution - affect efficiency, employment and the size distribution of firms in LDC economies. These policies -- often conceived in isolation one from another -- interact and combine to form the policy environment in which non-agricultural enterprises operate. Since some policies are mutually reinforcing while others counteract one another, a focus on only one small piece of the policy puzzle can result in at best partial and at worst misleading diagnoses. Hence, one must consider a wide range of policies when evaluating policy impacts on employment, enterprises and efficiency.

2. The magnitude and sources of policy distortions vary considerably. The magnitude of policy distortions affecting non-agricultural enterprises of different sizes varies among policy arenas and from country to country. Nevertheless, several general patterns can be identified across LDCs. Labor market distortions appear to be relatively minor in most LDCs. In capital markets, on the other hand, the cumulative effects of various policies can lead to substantial and significant distortions in the price of capital. As in the case of input markets, there is evidence that trade and agricultural policies operating through product markets have substantial differential effects on enterprises of different sizes.

3. Evidence on the impact of distortions is sparse. Empirical estimates of the impact of these policy distortions on the economy are limited in number, often partial, fraught with ceteris paribus problems, and often depend crucially on particular assumptions about directions of causality and availabilities of complementary inputs. More conclusive results will require systematic analysis and improved data.

4. Policy impact takes time. Experience in monitoring policy change has pointed to the importance of the time dimension. The capital stock is not immediately replaced when factor prices change nor is production immediately and easily transferrable to new product areas, such as exports or agriculture, as policy incentives change. Entrepreneurs do respond to altered incentives, but such moves involve time as well as transactions costs. Policy makers must think in terms of lags of several years between policy changes and their impact on employment, efficiency and the size distribution of firms. Data generation also takes time. The embryonic nature of the data collection apparatus in most LDCs contributes to the lags by increasing the time required for informed analysis and decision making.

5. Leveraging is not likely to be effective for employment and enterprise policies. Previous discussion of donors' role in LDC policy reform has centered primarily around the uses of leverage and conditionality. This approach has met with some success in cases of stabilization policies during the course of foreign exchange crises, where economies face severe blockages and where the IMF has extraordinary leverage. We have found little evidence of successful leveraging aimed at developmental policies concerned with enterprise or employment issues. It may be unrealistic to

expect leveraging to work in these areas, given the non-crisis nature of employment and enterprise issues, the analytically and politically controversial nature of the policy changes required, and the limited amounts of funds likely to be available for conditional assistance for these types of changes.

6. Importance of building up indigenous policy analysis capability. Donors' most important contribution to employment and enterprise policy formulation will probably come through assistance in building up indigenous capacities for policy analysis. Donors can contribute most effectively to policy change by funding training and research on issues deemed to be of importance for employment and enterprise development. Often this will involve strengthening the data base on which policy analysis rests, as well as improving the understanding of the complex ways in which policy changes affect different sectors of the economy. While provision of sound and timely economic analysis will not guarantee optimal policies, the most important contribution that donors can make to improved policy environments will come through support for the development of analytical capabilities among those engaged in policy formulation and internal policy dialogue within LDCs.

Appendix A

A Framework for Analyzing the Differential Effect of Government Policies on Large and Small Enterprises in Sierra Leone

This note sets forth a proposed framework for analyzing the entire panopoly of policies that differentially affect small and large scale non-agricultural enterprises. The potential usefulness of this approach is then examined by applying it to data generated from Sierra Leone.

The analysis of such distortions is rare because of the difficulty in obtaining the required data. A noteable exception is Ingram and Pearson's study of Investment Concessions in Ghana (1981). Their study, however, does not examine the differential effect of these concessions by size of firm.

Government policies differentially affect firms of various sizes. Often these result, for example, from the unintended side effects of investment, trade and credit policies that were designed to encourage the development of large scale enterprises. Investment concessions, such as income tax, import duty exemptions, and accelerated depreciation, for example, are often formally restricted to larger firms; where such overt restrictions do not occur, smaller firms are ignorant of the concessions available or are unable to negotiate the protracted bureaucratic procedures required to obtain them.

Framework

To analyze the effects of the array of government policies on small and large enterprises, a private and social accounting framework is used. The distorting effect of government policies on small and large enterprises

is reflected in the divergence between private and social costs and returns. Private costs, returns and profits reflect the market prices facing the firm, while their social counterparts incorporate the adjustments needed to correct for any policy distortions. Three categories of distortions are delineated and examined: 1) output distortions due to trade and indirect tax policies; 2) tradeable input distortions due to trade and indirect tax policies; and 3) domestic factor cost distortions due to interest and wage rate policies. Such a framework will enable one to discern the magnitude of the differential impact of these three types of policy distortions on small and large scale enterprises.

Analysis

Data employed in this analysis were obtained from a year long survey of 250 small scale[1] manufacturing enterprises, which were enumerated weekly, and from 28 large scale firms in 1974. To illustrate the framework, only one industry is selected for careful scrutiny, the clothing industry. There were approximately 17,000 small scale tailoring firms, the majority of which used a simple sewing machine to produce such items as dresses, trousers, and skirts.[2] Two large scale clothing enterprises produced similar products, but also qualified, under the Development Ordinance of 1960, for an array of industrial investment incentives, including: 1) exemption from income tax for 3-10 years; 2) deferral of depreciation allowances; 3) exemption from import duties on plant and equipment; and 4) exemption from import duty on raw or semi-processed

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[1] Small scale is defined as those firms with fewer than 50 workers.

[2] Some tailors used more expensive sewing machines to undertake complex embroidery tasks. These firms are not included in the analysis.

materials. The smaller firms were not eligible for such incentives. Moreover, in the fragmented capital market, these two large firms were able to obtain loans from commercial banks at the subsidized rate of 12 percent, the maximum allowed allowed by government regulation; the smaller firms, unable to have access to the commercial banks, had to rely on their own savings or obtain loans in the informal market at rates frequently exceeding 100 percent. The social opportunity cost of capital in Sierra Leone was estimated to be 20% (Byerlee et al., 1982).

The results of the analysis of the Sierra Leone clothing industry are presented in Table 1. The figures are shown in terms of a "representative" large and a "representative" small firm, each of which reflects the average of the firms in that size category. The private price entries are the actual product and factor prices facing the firms in 1974 and thus reflect the distortions in government policies. The social prices reflect the absence of such policies. Gross output in social prices is determined by evaluating actual quantities produced in prices of comparable imports (or without the 30% average import duty on competitive clothing imports). Tradeable input costs in social prices exclude the tariffs on imported inputs and thus are lower than their counterparts in private prices. Depreciation allowances, which were based on the actual life of the particular capital item involved, are included in the tradeable inputs when imported. Consequently, the subsequent value added figures are net rather than gross. Finally, the domestic factor cots in social prices diverge from those in private prices due to shadow price adjustments to capital and labor. Thus, the profitability before direct taxes in social prices differs from their private counterparts due to the combined effects

Table 1

Differential Effect of Trade, Input, and Concession Policies on Large and Small Enterprises

-- Sierra Leone, 1974 --

[In Leones Per Firm]

	Gross Output	-	Tradable Input Cost (including capital depreciation)	=	Net Value Added	-	Domestic Factor Costs	=	Profitability Before Direct Taxation
Large Firms									
Private prices	200,000		147,000		53,000		58,600		-5,600
Social prices	154,000		144,000		10,000		74,000		-64,000
Difference	+46,000		-3,000		+43,000		+15,400		+58,400
Protection coefficient	1.30		1.02		5.30		---		---
Small Firms									
Private prices	666		159		507		433		+74
Social prices	512		121		391		322		+75
Difference	+154		-38		+116		-111		-1
Protection coefficient	1.30		1.31		1.29		---		---

Source: Data collected from 1974-75 survey of large and small enterprises [see Chuta and Liedholm (1985)].

of trade policies on output and inputs as well as domestic factor price distortions arising from the interest rate ceilings and minimum wage laws.

The results of this exercise indicate that the large scale clothing firms in Sierra Leone are not socially profitable (i.e., Le -64,000 per firm) and are able to operate only because of protection and subsidies. Output protection introduces the largest distortions (Le 46,000 per firm), followed by the net subsidy on inputs (Le 15,400 per firm), where the gains from subsidized credit outweigh the cost from more expensive labor. The loss of protection due to import taxation (Le 3,000 per firm) is minimal for the large firms since virtually all their imports are exempt from duty.

The small firms, on the other hand, are shown to be socially profitable (Le 75 per firm); yet, on balance, the policy environment is slightly biased against them (Le 1 per firm). While the small firms (as the large) benefit from output protection (Le 154 per firm), they are adversely affected by the import duties on their inputs (e.g., 22% on cotton fabric, 36 1/2 % on sewing machines, needles, buttons, thread and dyestuff). In addition, the domestic factor price distortions have a negative impact on those small firms (Le 111 per firm), where the losses from unduly highly priced capital far outweigh the small gains stemming from low priced labor.

These results thus highlight the extent to which the policy environment is biased against the small scale firm. While the large firms gain Le 58,000 per firm from protection and subsidies, the smaller firms, on balance, lose Le 1 per firm. The playing field is clearly not level.

The differential effect of protection can also be gleaned from this exercise. The nominal protection coefficient on output, which is the

tariff inclusive (i.e. private) price over the tariff-exclusive (i.e. social) price, is 1.3 for both large and small firms. The nominal protection coefficient on inputs, however, is 1.02 for the large firm and 1.31 for the small. Consequently, the effective protection, which is the percentage increase in value added made possible by the tariff structure, is 430 percent for the large and only 29 percent for the small.[1] Clearly, the system offers much more protection to the larger than the smaller firms in the same industry.

In summary, this exercise has indicated the ways in which the policy environment in Sierra Leone was biased against the small scale firms in the clothing industry. Since small firms were shown to be socially profitable while large firms were not, removal of these distortions to produce a level policy field by firm size would likely enhance the efficient use of Sierra Leone's scarce resources.

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[1] Effective protection of zero (effective protection coefficient means one) indicates a neutral effect, while numbers above zero indicate higher degrees of protection.

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