THE INTERACTION OF DOMESTIC DISTORTIONS 
WITH DEVELOPMENT STRATEGIES

by

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ABSTRACT

This paper has provided evidence on the unfavorable effects factor market distortions have on the efficiency of resource allocation and on employment in developing countries. It has further been shown the policy-imposed distortions in product markets tend to aggravate these adverse effects in the countries concerned.

Rationing in the product, labor, and capital markets also contributes to inefficiency in resource allocation by generating rent-seeking activities. Such activities misdirect productive energies and tend to lead to excess investments in activities that stand to benefit from rationing.

Inefficiencies in resource allocation, in turn, will have adverse effects on economic growth. For one thing, less is saved and invested as the distortions lower income levels. For another thing, the efficiency of investments is reduced as capital is directed into industries that do not correspond to the country's comparative advantage.
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Introduction

This paper will examine distortions in product and in factor markets in the developing countries, and the interaction of these distortions in respect to the development strategies applied. The analysis will concentrate on policy-imposed distortions, where departures from efficient resource allocation result from policy actions; these contrast with distortions resulting from market imperfections. 1/

The principal forms of product market distortions are trade policies in the form of import protection and export subsidies (taxes), exchange rate policies, and price control, all of which affect relative product prices. In turn, factor market distortions may result from social policies, financial policies, and tax policies, which affect the relative prices of capital and labor.

But, distortions in product markets will also have an impact on factor markets and vice versa. Product market distortions will give rise to distortions in factor markets through their effects on factor prices while factor market distortions will cause distortions in product markets through their effects on the cost of production.

Historical experience further suggests that interventions in product and in factor markets are mutually interrelated, and this fact has a bearing on the choice of development strategies. Thus, governments will be less

1/ The latter have been termed "endogenous," as opposed to "policy-imposed," distortions by Jagdish Bhagwati (1971).
inclined to intervene in factor markets if product markets are relatively undistorted, as is the case under an outward-oriented development strategy, lest export prospects be jeopardized. In turn, there will be less resistance to measures that distort factor prices if protection insulates the domestic economy from foreign influences under an inward-oriented development strategy.

At the same time, the existence of policy-imposed factor market distortions will affect the choice of the policies applied in regard to product markets. Distortions in factor markets will tend to discourage the adoption of an outward-oriented development strategy, whose success depends on the unhindered operation of these markets. In particular, the impact of trade liberalization on exports will depend on the ability of capital markets to provide funds for export-oriented investments.

The experiences of Latin American and the Far Eastern countries provide support for these propositions. While in the former case inward-orientation has been accompanied by considerable distortions in labor and in capital markets, in the latter case outward orientation has been associated with free labor markets and the increased freedom of capital markets (Balassa, Bueno, Kuczynski, and Simonsen, 1986, Ch. 4).

In fact, in the mid-1960s, reforms of trade and exchange rate policies in the Far Eastern countries were carried out simultaneously with reforms of capital markets. Also, in the early 1980s, Turkey linked trade and exchange rate reforms with reforms in labor and capital markets. Finally, an IMF study has concluded that "interest rate repression often coexists with highly protectionist trade policies and overvaluation of the domestic currency" (Lanyi and Saracoglu, 1983, p. 14) in developing countries.
Section I of this paper will consider the effects of product market distortions on factor markets in the developing countries. In turn, Sections II to III will analyze policy-imposed distortions in the labor and the capital markets of these countries. Section IV will summarize the effects of the policies in question on factor markets and indicate the possible impact of factor market distortions on product markets. In each section of the paper, the available empirical evidence will also be cited.

I. Effects of Product Market Distortions on Factor Markets

Developing countries tend to protect capital-intensive industries. The resulting distortions in product markets will result in a flow of resources from labor-intensive to capital-intensive industries, thereby favoring capital at the expense of labor.

Ceteris paribus, the protection of capital-intensive industries will raise the price of capital relative to the price of labor. At the same time, there are effects that go in the opposite direction. These effects pertain to changes in the exchange rate attendant on the imposition of protective measures, the existence of relatively low tariffs on capital goods, and the use of tariff exemptions on these products.

Under import protection, balance-of-payments equilibrium can be ensured at a lower exchange rate (in terms of domestic currency per U.S. dollar) than under free trade. This will be apparent if we consider that, in a situation of balance-of-payments equilibrium, the imposition of protective
measures leads to a trade surplus that will be extinguished through an appreciation of the exchange rate. 1/ 

As capital goods loom large in the imports of the developing countries, a low exchange rate, taken by itself, will act as a subsidy to capital. This effect will be reinforced by lower than average tariffs and duty exemptions on capital goods that are widespread in the countries in question.

Take the case, for example, when the exchange rate is 100 pesos to the dollar under free trade and an average tariff of 50 percent necessitates a 20 percent appreciation of the currency in order to ensure balance-of-payments equilibrium. Now, under an exchange rate of 80 pesos to the dollar, tariff exemptions on capital goods will mean that capital goods cost 20 percent less under protection than under free trade. And, the net effect will be a decline in capital goods prices as long as tariffs on these products are less than 25 percent.

In the case of import rationing, the outcome will be further affected by the allocation of capital goods imports by the government. In developing countries, import rationing tends to favor generally capital-intensive large-scale industry at the expense of relatively labor-intensive small- and medium-scale industry.

NBER studies carried out under the direction of Anne Krueger indicate the combined effects of the overvaluation of the exchange rate, low import tariffs on capital goods, and tariff exemptions on these goods. The measures

1/ The opposite result will ensue if input-producing industries are protected, giving rise to negative effective protection (Johnson, 1966).
applied are shown to have led to reductions in capital costs ranging between 30 and 40 percent in Chile, Pakistan, and Tunisia during the period between the early 1960s and the early 1970s. Similar results have been obtained in regard to imported capital goods in Argentina, where the protection of the domestic capital-goods sector reduced the average cost differential for capital goods to 8 percent, however (Table 1). At the same time, import licensing favored capital-intensive import-substituting industries over relatively labor-intensive small- and medium-size industries in Argentina and Pakistan whereas the importation of capital goods was fairly freely permitted in Chile and in Tunisia (Krueger, 1983, pp. 145-50).

Distortions in capital goods prices were associated with the application of an inward-oriented development strategy in the countries under consideration. In turn, the effects of trade policies on the cost of capital goods were approximately nil under outward-orientation. Such was the case in Hong Kong, Korea, and the Ivory Coast, as well as after the policy reforms of the mid-1960s in Brazil (Table 1).

Reductions in the cost of capital under an inward-oriented development strategy discourage the use of labor. And while the protection of capital-intensive industries tends to raise the price of capital, it will also have negative effects on employment through the shift of resources from labor-intensive to capital-intensive industries. These effects are aggravated in cases when measures of import protection and export subsidies favor relatively capital-intensive industries within the import-substituting and within the export sectors.

Column (4) of Table 2 shows the employment effects of differences in rates of import protection and of export subsidies among import-substituting
and among export industries. In the calculation, the average labor coefficient in import substituting industries has been taken as the benchmark for each country. The estimates pertain to the late 1960s and the early 1970s. 1/

The results reported in Table 2 further show differences in average labor coefficients between import competing and export industries. It is apparent that, with two exceptions, the labor intensity of exports much exceeds that of import substitution, indicating that import-competing industries are, on the whole, more capital-intensive than export industries. The exceptions are Korea, which provided similar incentives to exports and import substitution under an outward-oriented development strategy, and Chile where the incentives applied distorted trade patterns to the extent that exports became more labor intensive than import substitutes. 2/

The estimates assume that labor and capital would be reallocated among industries in response to a move towards free trade. For such a reallocation to occur, the freedom of factor markets would need to be assured. In this connection, reference may be made to calculations by T. Paul Schultz, which show the joint effects of product market and factor market distortions on the distribution of incomes in Colombia.

Schultz has concluded that "the close relationship found here between levels of effective protection and unexplained variation in labor incomes

1/ In Pakistan, they indicate the effects of policy changes undertaken in the second half of the 1960s while the results for this country reported in Table 1 relate to the early 1960s.

2/ This was the case in trade with Latin American countries, which dominated Chile's exports of manufactured goods, but not for Chile's trade with the developed countries.
provides a prima facie case that development and trade policies have played a role in generating or at least maintaining intersectoral differences in factor incomes that look like quasi rent" (1982, pp. 109-10). It is added that "protection may have increased the returns to both labor and capital in the more protected sectors, but the proportionate gains for employers exceed those received by employees ..." (Ibid, p. 110). At the same time, the resulting quasi-rents have stimulated rent-seeking activity that involves a cost to the national economy (Krueger, 1974).

Employment will further be affected as economic growth tends to be more rapid under an outward-oriented, than under an inward-oriented, development strategy (Balassa, 1985). However, employment will be reduced to the extent that labor productivity is rising more rapidly under the first, than under the second, alternative. These effects, then, will modify the impact on employment of the sectoral composition of output.

Banerji and Riedel analyzed the effects of the above factors on industrial employment in India and in Taiwan, which can be taken to be representative of outward- and inward-oriented development strategies, respectively. The results indicate that the favorable effect on employment of a shift towards labor-intensive export industries in Taiwan were reinforced by rapid output growth while a shift occurred towards the capital-intensive industries in India where output also grew at a slower rate. With higher productivity growth in Taiwan than in India, industrial employment rose at an average annual rate of 8 percent during the 1954-71 period in the first case and at 2 percent a year during the 1950-69 period in the second (1980, Tables 1 and 2).
II Labor Market Distortions

A variety of policy-induced distortions are observed in the labor markets of the developing countries. They include regulations aimed at ensuring job security, social security schemes, minimum wage legislation, taxation of labor income, and wage and employment policies in the public sector. These will be taken up in turn.

(a) Regulations concerning job security

Developing countries have often applied measures aimed at ensuring job security. There have been cases of outright prohibition of dismissing workers as until recent years in Turkey and of governmental pressure on firms to retain labor irrespective of business conditions as in Peru today. In turn, redundancy payments, widespread in Latin America, increase the cost of firing labor.

In Argentina, for example, labor laws bestow job security on employees after only one year and severance payments increase with the length of employment. The situation is similar in Venezuela (Balassa, Bueno, Kuczynski, and Simonsen, 1986, p. 134). Furthermore, labor legislation is estimated to have raised labor costs by 30 percent, in addition to the cost of social security charges and fringe benefits, to a total of 59 percent of basic wages in Panama (Fischer and Spinanger, 1986, pp. 25-28).

Apart from reducing mobility, labor regulations aimed at limiting reductions in employment tend to have the opposite of the desired effect by increasing the cost of labor. As noted by David Laidler,

- They discourage workers from quitting voluntarily to search for other employment.
- They make it expensive for an otherwise viable firm to close down a particularly loss-making operation ...
Moreover, they inhibit employers from taking on new workers because of the prospective cost of declaring them redundant at some time in the future. Such schemes inhibit resource mobility, slow down the pace of economic change, and increase unemployment. They do not serve simply to redistribute wealth, but to reduce the total amount of wealth available for redistribution (1981, p. 81).

(b) Social security schemes

According to data collected by the U.S. Department of Health and Human Services, Social Security Administration, social charges exceed 20 percent of wages in India and range between 15 and 45 percent in most Latin American countries (1984). It has further been reported that employer and employee contributions, taken together, were in the 55-65 percent range for blue-and white-collar workers in industry and commerce in 1969 in Uruguay, and the ratio reached 46 percent for blue-collar workers and 65 percent for white-collar workers in 1968 in Chile that, however, has subsequently privatized its social security system (Mesa-Lago, 1978, pp. 50, 96).

The effects of social security schemes on the cost of labor and on employment will depend on the elasticity of supply of labor. If the labor supply was infinitely elastic in terms of the real wages, social charges would increase the cost of labor by their full amount, irrespective of whether they are paid by employers or by employees, with adverse effects on employment.

While such an extreme case is unlikely to be found in reality, in the domestic economy the supply of unskilled labor may be assumed to be more elastic than that of skilled, technical, and managerial labor, so that social security schemes will affect the cost and the employment of the former to a greater extent than of the latter. Also, the elasticity of the supply of unskilled labor is said to be higher in South Asia than in other developing areas (Lewis, 1954).
At the same time, according to Carmelo Mesa-Lago, "accumulated evidence in Latin America ... indicates that social security systems financed by contributions upon wages have a negative effect on employment" (1978, p. 16). It has further been estimated that, under realistic assumptions made about the elasticity of labor supply, average social security charges of 27 percent have reduced employment in Brazilian manufacturing by about 8 percent (Carvalho and Haddad, 1981, p. 67).

The above discussion concerned the effects on labor costs of social security charges that create a wage between the demand price and the supply price of labor. In South Asia, the compulsory provision of various services, including housing, education and training, have similar effects (Krueger, 1986, p. 16).

(c) Minimum wage legislation 1/

Labor costs may also be raised by the statutory determination of minimum wages. In this connection, one needs to consider the extent to which raising minimum wages leads to increases in the entire wage structure as well as the effects of the resulting wage increases on employment.

The classic study of the effects of minimum wage legislation on wages and employment is Wages, Productivity, and Industrialization in Puerto Rico by Lloyd Reynolds and Peter Gregory. They note that "the closeness of actual hourly earnings in most industries to the legal minimum, the parallelism in the timing of upward movements, and the tendency for the minimum to encroach gradually on the actual earnings level all suggest that it is minimum wage awards which have been forcing the pace of wage advance in Puerto Rico since

1/ This section derives from Balassa, 1983.
1950" (1965, p. 60). On the basis of an econometric estimate, the authors conclude that "a change in the wage could be expected to be associated with an approximately equal proportionate change in employment in the reverse direction, with the wage bill remaining roughly constant" (Ibid, p. 100).

It has been suggested that Puerto Rico is a special case because of its close association with the United States and its superior administrative machinery (Watanabe, 1976, p. 347), as well as because of its relatively high per capita income, its small labor force, and the high share of the labor force engaged in non-agricultural occupations in the mid-fifties (Squire, 1981, p. 111). However, one may doubt the relevance for the problem at hand of Puerto Rico's association with the United States and the superior skills of its administration. Also, there were a number of developing countries with urban incomes exceeding that of Puerto Rico in the early fifties, when minimum wage legislation was introduced there, and more countries have since surpassed this level. Finally, the size of the labor force is of little importance for the effectiveness of minimum wage legislation.

In fact, according to an ILO report, "the evidence ... suggests that conditions in which increases in minimum wages exert a substantial influence on wages actually paid are widely encountered. This influence is particularly strong where minimum rates are the going rates for large numbers of workers, which seems to be the case in most African and in many other (but not all) developing countries" (1968, p. 19). And, while the evidence provided on this point in a subsequent ILO report is inconclusive (Starr, 1981, pp. 160-84), it should be recognized that minimum wage legislation may have adverse economic effects even if it does not lead to proportionate increases in the wage structure.
Thus, the narrowing of wage differences will discourage socially profitable investments in human capital as incentives for such investment are reduced. Also, distortions will be introduced in the choice between labor and physical capital, between unskilled labor and skilled labor, as well as between labor in the formal sector and the informal sector, where minimum wage regulations are rarely applied.

There is evidence on the effects of minimum wage legislation in several countries. In Argentina, minimum wage legislation is reported to have increased unskilled wages by 25 percent (Krueger, 1983, p. 131). In the Ivory Coast, a 20 percent increase in the wages of unskilled labor through minimum wage legislation is said to have occurred (Monson, 1981, p. 273-74). While comparable estimates for developing countries are not available, in Canada the rate of unemployment is shown to have increased in the same proportion as the minimum wage (Schaafsma and Walsh, 1983, p. 97).

This is not to say that minimum wage legislation would have had a pervasive influence in developing countries. In some countries, such as Brazil, its effects have been largely eroded by inflation (Krueger, 1983, p. 132). At the same time, minimum wages are particularly high in socialist-oriented developing countries (Watanabe, 1976, p. 354). The Economist (April 30, 1983) reports in regard to Tanzania that "in the towns minimum wages in some industries were set three times as high as India's, whose labor productivity was three times higher."

According to the recent ILO report, "the problem [of setting minimum wages] is essentially viewed as one of striking a balance between the social gains to be made, in the form of improvement in the relative wage position of the lowest paid, and any costs these might entail in the form of reduced
employment, slower growth and increased inflation\(^1\) (Starr, 1981, p. 15). At the same time, with minimum wage legislation generally benefitting a privileged urban labor group, the social gains themselves may be open to question.

As expressed by one observer, "this is directly contrary to the initial objective of minimum wage legislation, i.e. the protection of unorganized workers whose wages are exceptionally low" (Watanabe, 1976, p. 356). Yet, as noted in an ILO report, "for Latin America it has been estimated that 80 percent of the urban workers receiving incomes below the legal minimum wage belong to the informal sector" and "the enforcement of minimum wages in developing countries encounters its most serious obstacles in traditional agriculture outside the larger plantations and modernized farms" (Starr, 1981, p. 140). Minimum wages are also said to have contributed to the sizable differences between formal and informal sector wages in Africa and the Middle East (Krueger, 1986, p. 16).

\(\text{(d) Taxation of labor incomes}\)

Tax rates on labor incomes tend to be high in developing countries with rapid inflation. Apart from Brazil where tax rates were indexed prior to the February 1986 monetary reform, income recipients are shifted to higher tax 

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\(^1\) An attempt to measure these effects has been made in the United States. It has been found that the income distributional effects of minimum wage legislation are very weak and "even if the elasticity of demand for low-wage labor is as low as 0.2, the reduction in national income is as large as the entire gain to the lower half of the income distribution when marginal taxation effects are ignored, and the reduction in national income is about twice as large as the net gain to the lower half of the income distribution when they are incorporated," (Johnson and Browning, 1983, p. 211).
brackets as inflation proceeds. While this can be undone through periodical revisions of the tax schedule, such revisions tend to be delayed in time.

In Turkey, for example, minimum wage income became subject to a tax of 28 percent in 1980 as a result of inflation during the 1970s. Under the new tax schedule introduced on January 1, 1981, the minimum wage is not subject to tax but the marginal tax rate is 40 percent on incomes immediately above this level (Balassa, et al, 1982, ch. 4).

Tax progressivity means that income tax rates are higher for skilled, technical, and managerial labor than for unskilled labor. In Morocco, for example, the marginal tax rate, including the National Security Contribution and the supplementary tax, rose from 13 percent at an annual income of 6000 dirhams to 50 percent at 100,000 dirhams, and to 75 percent at 750,000 dirhams in 1982, when the exchange rate was 6 dirhams to the U.S. dollar (Balassa, et al, 1984, Table 3.3). In turn, the top marginal tax rates were 65 percent in Thailand, 55 percent in Korea, 49 percent in Colombia, and 42 percent in Mexico in the early 1980s (Leechor, 1986, p. 14).

High marginal tax rates and the progressivity of the tax system create distortions in labor markets by providing incentives to reduce the work effort and to shift from payment in money to payment in kind. Also, schooling and training, as well as the movement of labor from lower to higher productivity sectors, are discouraged as differences in after-tax incomes are reduced. Furthermore, progressivity in the tax system creates discrimination against the use of skilled, technical, and managerial labor.

At the same time, the elasticity of supply of such labor will be increased through international migration. In Morocco, tax-induced increases in the cost of foreign technicians and managers are said to be a factor
discouraging the subsidiaries of foreign enterprises from establishing in the
country (Balassa, et al, 1984, p. 104). This is because the firms in question
have to assure particular levels of real income for their technicians and
managers, and the high income taxes raise their salary costs.

(e) **Wage_and_employment_policies_in_the_public_sector** 1/

Governments may also affect the wage structure through public sector
employment and wage policies. Heller and Tait have found that in thirty-eight
developing countries, on the average, public jobs account for 44 percent of
nonagricultural employment. This ratio is inversely correlated with per
capita incomes in the countries or the sample; regional averages are 59
percent in Africa, 36 percent in Asia, 27 percent in Latin America, compared
with 24 percent in the developed countries. Also, the ratio tends to be
higher in the countries that, at one time or another, adopted a socialist
orientation; it is 87 percent in Benin, 81 percent in Zambia, 78 percent in
Tanzania, 72 percent in India and 74 percent in Ghana (1983, pp. 7, 42-43).

As the authors suggest, "the clear message from these statistics is
the significant impact that government policy on wages and salaries is likely
to have on the overall remuneration of employees in the nonagricultural sector
in developing countries" (p. 7). At the same time, the ratio of the average
central government wage to GDP per capita tends to be inversely correlated
with per capita incomes; it is 6.05 in Africa, 2.90 in Asia, 2.94 in Latin
America, and 1.74 in the developed countries (p. 18).

According to the same authors, "this situation is not necessarily
surprising, as, in poorer countries, the educational requirements of public

\[1/\] This section derives from Balassa, 1983.
sector employment are often much higher than that of private sector employment" (p. 18). Differences in educational requirements provide only a partial explanation for public-private wage differentials, however. Thus, in 1971, average wages were 16 percent higher in the government and 23 percent higher in parastatals than in the private sector in Tanzania, if adjustment is made for differences in occupational composition. Moreover, the scope of fringe benefits was considerably greater in the government and in parastatals than in the private sector (Lindauer and Sabot, 1983, pp. 141-43).

Wages in the public sector exceed wages in the private sector at lower, although not at higher, levels of education in Brazil, Colombia, Greece, Malaysia, and Portugal (Psacharopoulos, 1983). In contributing to higher wages for the less-educated worker, public sector wage policies tend to compress the wage distribution, thereby aggravating distortions in labor markets. Also, in some African developing countries (e.g. Mali and Tanzania) the government or the parastals are residual employers for high school and/or university production, thereby introducing distortions as between private and social returns to education.

It has further been reported that in Pakistan increases in public wages spilled over to the private sector. Taking account of the effects of minimum wage legislation, the wage policies applied in the 1970s were said to be responsible for the major part of the increase in real wages during this period (Guisinger, 1981, pp. 325-26).

All in all, regulations aimed at ensuring job security, social security schemes, minimum wage legislation, taxation of labor incomes, and wage and employment policies in the public sector tend to raise wages in developing countries, thereby contributing to losses in efficiency and in
employment. Also, the progressive taxation of wages and public policies tend to reduce differences in remuneration between highly-skilled and unskilled occupations in the formal sector. Finally, distortions are created through differences in labor costs between the formal and informal sectors, owing to the fact that labor legislation is rarely applied, or is evaded, in the informal sector.

Estimates on the effects of social security schemes and minimum wage legislation in the formal sector have been made in the NBER studies referred to above. The estimates show the resulting increases of labor costs to have been 27 percent in Brazil, 23 percent in the Ivory Coast, 20 percent in Tunisia, and 16 percent in Argentina in the late 1960s and early 1970s (Table 1).

III. Capital Market Distortions

Policy-imposed distortions of capital markets may originate in financial policies or in tax policies. In all instances, the measures applied affect the rate of return on alternative investments in physical and financial assets, including money.

(a) Financial policies

High and unstable rates of inflation discriminate against the holding of financial assets unless they are fully indexed. In the absence of indexing, nominal interest rates on financial obligations would need to be raised in order to compensate for inflation. With variations in the rate of inflation, however, real rates of interest corresponding to a particular nominal rate vary and will be subject to uncertainty.

Also, the lack of indexing of demand deposits in the face of inflation represents a tax on non-interest bearing money holdings. This
implicit tax, and the uncertainty relating to the real rate of interest on financial assets, tend to induce people to decrease their holdings of such assets. Reductions in the demand for financial assets, in turn, lead to financial disintermediation as the banking system cannot appropriately fulfill its function of channelling funds to production and investment.

Variations in real interest rates may ensue even under the indexing of financial assets. Thus, while Brazil applied indexing, real interest rates varied to a considerable extent as a result of changes in macroeconomic policies. Following negative real interest rates in earlier years, these rates turned slightly positive in the mid-1960s. Real interest rates again became negative in 1980 while a year later contractionary macroeconomic policies led to very high real rates. In 1985, Treasury bills were yielding 15 percent and certificates of deposit 20 percent in real terms, with bank lending rates exceeding 30 percent. Little change occurred in these rates following the monetary reform undertaken in February 1986.

The policies applied after 1979 led to high positive real interest rates in the countries of the Southern Cone. Real interest rates increased further in conjunction with the stabilization efforts undertaken by these countries in response to the debt crisis. In Argentina, lending rates were set a 6 percent a month following the application of the Austral Plan, when the rate of inflation was about 4 percent a month. Real interest rates are also high in Mexico, with monthly lending rates of 7 percent and prices rising 5 percent a month (Balassa, Bueno, Kuczynski, and Simonsen, 1986, pp. 105-06).

Excessively high real interest rates have adverse effects on existing firms and may discourage investments that are socially profitable. They also engender demands for preferential treatment on the part of would-be
borrowers. Interest preferences, in turn, introduce distortions in the allocation of savings among alternative investments.

While real interest rates have been high in recent years in several developing countries, the traditional pattern has been excessively low and even negative real interest rates. \(^1\) The following discussion will concentrate on the effects of this policy on savings, on international capital flows, on financial intermediation, and on the allocation of savings among alternative investments.

The effects of interest rates on savings has been subject to much controversy. Ceteris paribus, low interest rates will favor present consumption over future consumption (savings). However, to the extent that people have definite savings objectives, for retirement or bequest, low interest rates may give rise to higher savings.

Estimates made for Asian countries by Fry (1980) showed the existence of a positive correlation between real interest rates and domestic savings in a cross-country - time-series framework. However, for the same countries, Giovannini (1985) found that the real interest rate variable loses its statistical significance if the years 1967 and 1968 for Korea are excluded from the equation and if data for longer time periods and multi-year averages are used for the individual countries. Also, estimates of the intertemporal substitutability of consumption indicated that the expected path of

\[^1\] It has been estimated that the adoption of below-equilibrium interest rates reduced capital costs by 53 percent in Pakistan and between 9 and 3 percent in Argentina, Korea, Tunisia, Brazil, and the Ivory Coast in the early 1960s and the early 1970s (Table 1). In interpreting these estimates, it should be understood that capital costs include the cost of machinery and equipment.
consumption responded to changes in the real rate of interest in five out of 18 countries while the results were inconclusive for the rest.

In interpreting these estimates, one should note the error possibilities involved in measuring consumption and savings in developing countries and in choosing the appropriate rate of interest for the calculations. In the savings equations, an additional problem is the inclusion of income growth among the independent variables. With this variable being significant in several of the equations, the impact of real interest rates on savings will be underestimated if real interest rates affect the rate of economic growth.

The existence of such a relationship has been shown in an IMF study, whose conclusion deserve full quotation:

Repression of interest rates produces lower rates of saving, of investment, and, hence, of economic growth than would result from equilibrium interest rates, chiefly because domestic financial savings are discouraged in favor of either the accumulation of goods or of foreign assets. The experience of a number of countries confirms the dependence of domestic financial saving on interest rates. Subequilibrium interest rates also encourage businesses to undertake investments with low rates of social return, such as the accumulation of inventories, rather than using their resources to build new plant and equipment. Various selective credit arrangements that accompany subequilibrium interest rates are not likely to improve the overall quality and productivity of investment (Lanyi and Saracoglu, 1983, p. 19).

In fact, the econometric results obtained in intercountry relationships show that real interest rates significantly affect the rate of growth of financial assets (the broadly defined money supply) as well as that of GDP. The relationships are confirmed if the part of the rate of growth of

1/ In view of these error possibilities, it may be surprising that statistically significant results have been obtained for five countries (also, in two additional countries, t-values exceed 2).
GDP (financial assets) uncorrelated with interest rate policy is introduced in the first (second) equation (Ibid, Table 4).

The results support the propositions put forward by McKinnon (1973) and Shaw (1973) concerning the importance of appropriate interest rates in developing countries. These authors have emphasized the adverse effects of below-equilibrium, in particular negative, real interest rates on the development of financial markets.

It has been suggested, however, that the growth of financial intermediaries may take place at the expense of unorganized money markets. Now, to the extent that reserve requirements are higher in formal than in informal markets, the availability of credit may be reduced rather than increased as a result (van Wijnbergen, 1983).

But, the McKinnon and Shaw conclusions will obtain if the shift into financial assets in the formal market comes from physical assets, such as consumer durables and gold. And, the two authors further suggest that total savings will rise in response to financial reform that entails higher real interest rates. This conclusion is confirmed by the experience of the financial reforms of the 1970s in Uruguay (de Melo and Tybout, 1985).

Also, one should consider the possibility that informal credit markets are less efficient than formal credit markets because of market segmentation, and that they entail holding substantial reserves, because of the risk involved. Finally, below-equilibrium and, in particular, negative

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1/ At the same time, a positive response of savings to interest rates was established in the pre-reform, but not in the post-reform, period.
real interest rates in formal credit markets will adversely affect the allocation of savings among alternative investments.

In such a situation, self-investment at low, and even negative, real rates of return is encouraged, thus diverting funds from higher-yielding investments in the national economy. At the same time, with low and negative real interest rates creating an excess demand for funds, there will be credit rationing that introduces arbitrariness in the decision-making process, irrespective of whether rationing is done by the banks or by the government.

In this connection, reference may be made to the conclusion of the IMF report cited earlier that inward-orientation tends to be accompanied by repressed interest rates. Now, import substituting industries will receive priority in credit allocation by the banks, because of the low risk involved in producing for the highly-protected domestic market, as well as in credit allocation by the government, which tends to favor such activities. 1/

At the same time, as the interest rate does not equilibrate the demand for, and the supply of, investible funds, the claimants for -- and the recipients of -- credits will include firms whose investments are not profitable at market-clearing interest rates. Furthermore, lending at below-equilibrium interest rates will encourage the excessive use of capital in investments which do receive financing.

Policy-imposed differences between lending and borrowing rates will introduce additional distortions by increasing the wedge between the demand price and the supply price of credit. In 1982, in Turkey, such differences were due to the existence of noninterest bearing liquidity and reserve

1/ Evidence on the latter point is provided in Krueger, 1983, p. 129.
requirements, compulsory contributions to the Differential Interest Rate
Rebate Fund, and the financial transactions tax on the revenue earning
operations of the banks. These items raised the interest rate to lenders to
76 percent, compared with an interest rate of 50 percent on six-month deposits
(Balassa, et al, 1982, Table 3.8). 1/

A further consideration is that below-equilibrium interest rates on
savings will induce the shift of private capital abroad in search of higher
rates. From available evidence, it appears that low domestic interest rates
have contributed to capital flight, in particular in Mexico whose financial
markets are the most closely linked with U.S. markets. 2/

Also, as noted above, both above- and below-equilibrium interest
rates to lenders can be expected to give rise to interventions in credit
markets. In the first case, borrowers will clamor for preferential interest
rates; in the second, credit allocation will be necessary. But preferential
interest rates also generally involve the allocation of credit and
preferential rates are not unknown in cases when interest rates are below
equilibrium levels.

A review of the financial policies of ten developing countries in the
1970-82 period has shown the prevalence of interventions in financial
markets. Among the countries under consideration, interest rate differentials

1/ While changes have been made in subsequent years, a considerable spread
between lending and deposit rates remain.

2/ In the case of Mexico, the domestic interest rate variable has been highly
significant in explaining changes in capital flight in a time-series
investigation (Cuddington, 1986, Table 3). And while this has not been
the case for other countries, it should be understood that data on capital
flight are subject to considerable error.
between preferential and nonpreferential credits were especially high in Peru (69 percent) and in Turkey (37 percent) in 1982. The government control of financial resources extended to one-fifth of the total in Peru and to three-fifths in Turkey; this ratio was 60-70 percent in Bangladesh and nearly 100 percent in Nigeria (Hanson and Neal, 1986, pp. 37-39).

As noted above, interest preferences and credit allocation introduce distortions in the allocation of savings among alternative investments. In particular, such distortions discriminate against activities that do not find favor with the government. Nevertheless, a case can be made for providing preferential credits for exports under an inward-oriented development strategy that discriminates against export activities.

(b) Tax Policies 1/

It has been noted that revisions of the income tax schedule tend to lag behind inflation, thereby shifting income recipients from lower to higher brackets. Delays in the revaluation of balance sheets may also increase tax liabilities for business enterprises as most developing countries do not use inflation accounting for these enterprises.

Such will not be the case if investments are financed from borrowed funds, since the loss in the real value of invested capital is compensated by the gain obtained through the decline in the real value of the debt. There is no compensation, however, if investments are financed from internally generated funds. Correspondingly, the taxable value of profits is overstated,

1/ This section draws on Balassa, Bueno, Kuczynski, and Simonsen, 1986, Ch. 3.
and reliance on loan capital is encouraged at the expense of the use of retained earnings for investment.

Further problems arise in regard to interest income since the principal loses value as a result of inflation. In Colombia, for example, nominal interest receipts are taxed at a rate of 18 percent but the effective tax rate of real (inflation-adjusted) earnings was 67.5 percent in 1983 (Leechor 1986, p. 20). ¹/

But even if full adjustment were made for inflation, or inflation were eliminated, various features of the tax system of developing countries will give rise to distortions. To begin with, taxing the amount saved as well as the return on savings introduces a bias in favor of present and against future consumption that is the result of today's saving. Yet, this is the case in most developing countries where incomes from work as well as from capital (interest income and dividends) are taxed. Only Uruguay taxes consumption rather than income.

Moreover, many developing countries follow the U.S. practice of taxing corporate profits as well as dividends paid from these profits. At the same time, the double taxation of corporate profits discourages corporate

¹/ The effective tax rate has been calculated as 1 less the ratio of the depositor's actual net rate of return to the real rate of return with no tax on the interest receipts. The actual net rate of return (2.6 percent in the present case) equals 1 less the tax rate of 18 percent (.82) multiplied by the nominal rate of return (30 percent), less the rate of inflation (22 percent). In turn, the real rate of return with no tax (8 percent) is the nominal rate of return (30 percent) less the rate of inflation (22 percent). The effective tax rate on real interest earnings would exceed 100 percent, i.e., capital is taxed, if the rate of inflation was 25 percent or higher (Balassa, Bueno, Kuczynski, and Simonsen, 1986, p. 103).
savings, investment in shares, and hence the development of capital markets, while introducing a bias in favor of debt and against equity financing.

Taxing the earnings of capital also encourages capital flight. This conclusion applies, in particular, to the taxation of interest income, where the choice is between domestic and foreign portfolio investments. It further applies to capital gains taxation that again reduces the relative profitability of domestic as against foreign assets.

The above considerations favor the use of consumption (indirect) taxes, which may take the form of cascade-type and value added taxes. Most developing countries and all developed countries apply the so-called destination principle, under which indirect taxes are rebated on exports and imposed on imports at the same rate as on domestic products.

The practical application of the destination principle raises practical problems in countries using cascade-type indirect taxes, however. Such taxes are levied at every stage of fabrication and their cumulative effects are difficult to gauge. Also, the burden of taxes on consumption varies according to the number of stages, thereby encouraging the vertical integration of production and discouraging the consumption of commodities that go through a greater number of stages.

To escape these difficulties, a number of developing countries, including Colombia, Korea, and Mexico, have followed the European example in adopting value added taxation, which equalizes the tax burden on all consumer goods. Also, exports are exempted from the value added tax and receive rebates for taxes paid at earlier stages of fabrication. Nevertheless, in some countries, such as Mexico, the real value of the rebate is reduced by inflation.
Further questions relate to the use of investment incentives that are widely employed in developing countries. Among the four countries covered in a World Bank study, tax credits are provided in Colombia, Korea, and Mexico, tax discounts in Colombia, and tax certificates (for paying other taxes) in Mexico. Also, tax holidays are used in Thailand and special reduced tax rates in Colombia. All four countries permit accelerated depreciation on new investment (Leechor, 1986, pp. 17-18).

Investment incentives tend to offset the tax disincentives for savings referred to above. They might even overcompensate for these disincentives thereby creating a bias in the incentive system in favor of savings. ¹ At the same time, such incentives favor corporate savings over private savings.

There is a prima facie case for investment incentives to exports that are discriminated against under import protection. A case may also be made for providing tax concessions for research and development whose effects will often spread from one firm to another. Incentives favoring particular activities will, however, distort the system of incentives, unless there is evidence of external economies.

Investment incentives tend to favor large-scale over small and medium-scale enterprises in most developing countries. This has been the case, for example, in Pakistan where small investors faced capital costs more than twice those of large-scale firms until 1972 (Guisinger, 1981, p. 333).

¹ Such a bias may, however, be desirable in order to offset myopia on the part of private individuals as regards their future needs or the needs of their descendants.
Also, there are considerable differences in regard to the sectoral pattern of investment incentives among the four countries covered by the World Bank study referred to earlier. Following selective promotion in the 1970s, Korea has practically ceased discrimination among sectors in the early 1980s and it limits tax concessions to export activities and to research and development expenditures. Having earlier promoted the steel and automobile industries, Colombia has also moved towards neutrality across sectors while granting tax incentives to export activities. In turn, Thailand provides limited incentives to projects that are considered desirable from the national point of view but may not be financed without tax incentives. Finally, Mexico has a complicated system of investment incentives, under which the extent of incentives depends on the sector as well as on the location of the investment (Ibid, pp. 35-37).

At the same time, developing countries employ a variety of instruments to provide investment incentives. The use of these instruments may entail discrimination between capital-intensive and labor-intensive projects as well as between long-lived and short-lived projects.

Tax incentives that reduce the cost of capital will discriminate in favor of capital-intensive and against labor-intensive projects. This has been shown to be the case in several of the countries in the NBER studies. Thus, it has been estimated that the tax measures applied reduced the cost of capital, on the average, by 12 percent in the Ivory Coast, by 10 percent in Pakistan, and by 2 percent in Korea (Table 1).

It has further been shown that initial tax allowances, tax credits on net investment, tax credits on gross investments which are set against depreciation, as well as interest subsidies distort incentives in favor of
long-lived investment. Accelerated depreciation rates generally have similar effects. In turn, investment allowances and tax credits on gross investment over and above regular depreciation do not affect the choice between long-lived and short-lived investments (Boadway, 1978, p. 480).

IV Effects of the Policies Applied

(c) Combined effects of factor and product market distortions

Table 1 shows the effects of distortions in product, labor and capital markets on the prices of labor and capital in the countries of the NBER study during the period spanning the early 1960s and the early 1970s. It is shown there that capital market distortions (credit allocation and tax preferences) were by far the largest in Pakistan, where the average cost of capital was reduced by 58 percent as a result. It was followed by the Ivory Coast (15 percent), Korea (10 percent), Argentina (9 percent), Tunisia (6 percent), and Brazil (4 percent), with no distortions observed in Hong Kong.

The relative importance of distortions in labor and in capital markets also varies among countries, with the former being more important in Argentina, Brazil, the Ivory Coast, and Tunisia and the latter in Pakistan and Korea. However, Brazil shifts into the second group if account is taken of reductions in capital costs due to trade policy.

Further interest attaches to the relative effects of trade policies and of factor market distortions on wage-rental ratios. Apart from Chile and Tunisia, factor market distortions predominated during the period under consideration, often by a large margin. This was the case also in Pakistan, where both trade policy-induced distortions and factor market distortions were the largest among the eight countries, but the latter was much more important than the former.
It follows that the combined effects of distortions in product and factor markets on the wage-rental ratio were the largest in Pakistan (316 percent). These distortions increase the wage-rental ratio in all other countries as well, the exception being Hong Kong that was free of product and factor market distortions. The ranking was Tunisia, 87 percent; the Ivory Coast, 45 percent; Argentina, 38 percent; Brazil, 31 percent; and Korea, 11 percent (for lack of information, estimates could not be made for Chile).

The ranking changes if the employment effects of product and factor market distortions are considered (Table 2). At the same time, comparability between the two sets of estimates is reduced by reason of the fact that for several countries (Brazil, Ivory Coast, Pakistan, and Korea), the estimates refer to a different year. And, the effects of distortions on employment have also been estimated for Colombia and Indonesia (no estimates are provided for Hong Kong, where there are no product or factor market distortions).

In both import-competing and export industries the impact of factor market distortions on employment was the largest in Pakistan. It was followed by Tunisia, Indonesia, and the Ivory Coast as far as the first, and by Brazil, Colombia, and Indonesia as far as the second, group of industries is concerned. Finally, differences in labor coefficients between import-substituting and export industries were the largest in Indonesia, followed by Brazil, Colombia, and Pakistan.

(d) The effects of factor market distortions on product markets

Following Gottfried Haberler's pathbreaking contribution, a large number of articles in economic journals have dealt with the implications of factor market distortions for product markets. It has been shown that, under certain conditions, these distortions can lead to the wrong pattern of
specialization, in the sense that the "wrong" commodity, i.e. which does not correspond to the country's factor endowment, will be exported and the "wrong" commodity imported.

As we have seen, to a greater or a lesser extent, policy-imposed factor market distortions in the developing countries will cause the wage-rental ratio to rise. At the same time, available evidence suggests that, on the average, this has not led to factor reversal in the sense that a developing country would import labor-intensive and export capital-intensive commodities. 1/

This does not mean, however, that factor reversal would not have occurred in regard to particular commodities, with the country importing some labor intensive and exporting some capital-intensive commodities as increases in wage-rental ratios raised the cost of the former and reduced the cost of the latter. Also, international trade is discouraged as a result of policy-imposed distortions in factor markets, which raise wage-rental ratios.

Another way to approach the issue is to consider the loss of exports that may occur owing to distortions in factor markets. This possibility has been investigated by Anne Krueger who has tested for the existence of a statistical relationship between labor market distortions and exports in a comparative framework.

Krueger has taken the ratio of the U.N. daily per diem allowance to per capita incomes as a proxy for the realism of the real wage, on the grounds that the former reflects largely the cost of labor-intensive nontraded goods

1/ In the case of Chile, preferential trade with other Latin American countries, rather than factor-market distortions, appear to have given the perverse result noted above.
and hence that of labor -- in the country concerned. She has subsequently correlated this variable with per capita exports, taken as an indicator of a country's success or failure to exploit its export potential.

The tests for 33 countries in four benchmark years show a high degree of statistical significance for the real wage proxy while the coefficient of determination is in the 0.17–0.24 range. The elasticity is about 0.5, indicating that a one percent increase in the real wage relative to per capita incomes would reduce exports by one-half of one percent (1986, pp. 36-39).

The procedure applied may be improved upon by e.g., taking the difference between actual and hypothetical exports, defined with respect to per capita incomes, population, and natural resources as the dependent variable 1/ and by replacing the U.N. per diem allowance by purchasing power parity calculations for nontraded vs. traded goods, adjusted for per capita incomes. Nevertheless, the calculations do provide a useful indicator of the effects of labor market distortions on product markets.

Concluding Remarks

This paper has provided evidence on the unfavorable effects factor market distortions have on the efficiency of resource allocation and on employment in developing countries. It has further been shown that policy-imposed distortions in product markets tend to aggravate these adverse effects in the countries concerned.

Rationing in the product, labor, and capital markets also contributes to inefficiency in resource allocation by generating rent-seeking

1/ For the use of such an equation, see Balassa, 1985.
activities. Such activities misdirect productive energies and tend to lead to excess investments in activities that stand to benefit from rationing.

Inefficiencies in resource allocation, in turn, will have adverse effects on economic growth. For one thing, less is saved and invested as the distortions lower income levels. For another thing, the efficiency of investments is reduced as capital is directed into industries that do not correspond to the country's comparative advantage.

It may be objected that there will also exist endogenous distortions (factor market imperfections) in developing countries that the policy makers will wish to remedy. Thus, it had long been argued that in a number of these countries the marginal productivity of labor is low, and even nil, because of the existence of surplus labor, and that the prevalence of informal credit markets provides evidence of imperfections in capital markets. The validity of these propositions has increasingly been brought into question, however.

To begin with, drawing on macroeconomic as well as on microeconomic evidence available by the mid-1970s, Berry and Sabot concluded that "labor markets functions at a comparatively high level of efficiency" (1978, p. 1230). Also, subsequent review of rural labor markets has disproved the contention that the marginal product of labor in agriculture would be nil (Binswanger and Rosenzweig, 1984, ch. 1). These and other pieces of evidence have led Anne Krueger to conclude that "if earnings do not more-or-less appropriately reflect trade-offs and relative scarcity values of different types of labor, the observed distortion is more likely to be a consequence of government intervention than it is of inherent 'market failure'" (1986, pp. 17-18).
In fact, to the extent that wages overstate the opportunity cost of labor, as has been alleged, government intervention raising the price of labor have aggravated these imperfections. Correspondingly, public interventions in labor markets have had the opposite of the desired effect.

Finally, it should be understood that informal credit markets in the developing countries are often the result of policy distortions that limit the scope of financial intermediation. And, in cases when this was not the case, informal credit markets should be regarded as a normal phase of the development of financial intermediation, which permits bringing together lenders and borrowers in cases when the cost of doing so through formal channels would be overly high for lack of information, distance, and other factors.
References


Wijnberger, Sweder van, "Interest Rate Management in LDC's," Journal of Monetary Economics, 1983.
Table 1

Percentage Distortions in Labor and Capital Costs from Various Sources

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Percentage Increase in Labor Costs</th>
<th>Percentage Reduction in Capital Costs Owing to Trade Regime</th>
<th>Factor Market Distortions</th>
<th>Allocation Preferences</th>
<th>Total</th>
<th>Percentage Increase in Wage-Rental Ratio, due to Factor and Market Product Market Distortions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1973</td>
<td>15</td>
<td>8</td>
<td>9</td>
<td>n.a.</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Brazil</td>
<td>1968</td>
<td>27</td>
<td>0</td>
<td>4</td>
<td>n.a.</td>
<td>4</td>
<td>431</td>
</tr>
<tr>
<td>Chile</td>
<td>1966-68</td>
<td>n.a.</td>
<td>37</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1973</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>1971</td>
<td>23</td>
<td>0</td>
<td>3</td>
<td>12</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1961-64</td>
<td>0</td>
<td>38</td>
<td>53</td>
<td>10</td>
<td>58</td>
<td>76</td>
</tr>
<tr>
<td>Korea</td>
<td>1969</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>2</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1972</td>
<td>20</td>
<td>30</td>
<td>6</td>
<td>n.a.</td>
<td>6</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Anne O. Krueger, 1983, Table 7.1.
### Table 2

**Sources of Potential Increase in Labor Coefficients**

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Observed Labor Coefficient (1)</th>
<th>Increase (Percentage) with</th>
<th>Potential Labor Coefficient (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Direct (2)</td>
<td>No Domestic Factor Market Intervention (3)</td>
<td>No Trade Strategy Distortion (4)</td>
</tr>
<tr>
<td>Argentina</td>
<td>1973</td>
<td>100</td>
<td>16</td>
<td>-6</td>
</tr>
<tr>
<td>Brazil</td>
<td>1970</td>
<td>100</td>
<td>15</td>
<td>n.a.</td>
</tr>
<tr>
<td>Chile</td>
<td>1966-68</td>
<td>100</td>
<td>n.a.</td>
<td>7</td>
</tr>
<tr>
<td>Colombia</td>
<td>1970</td>
<td>100</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1971</td>
<td>100</td>
<td>n.a.</td>
<td>66</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>1972</td>
<td>100</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1969-70</td>
<td>100</td>
<td>271</td>
<td>0</td>
</tr>
<tr>
<td>Korea</td>
<td>1968</td>
<td>100</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1972</td>
<td>100</td>
<td>17</td>
<td>38</td>
</tr>
</tbody>
</table>

**Import-Competing Industries**

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Observed Labor Coefficient (1)</th>
<th>Increase (Percentage) with</th>
<th>Potential Labor Coefficient (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Direct (2)</td>
<td>No Domestic Factor Market Intervention (3)</td>
<td>No Trade Strategy Distortion (4)</td>
</tr>
<tr>
<td>Argentina</td>
<td>1973</td>
<td>130</td>
<td>25</td>
<td>-6</td>
</tr>
<tr>
<td>Brazil</td>
<td>1970</td>
<td>207</td>
<td>15</td>
<td>n.a.</td>
</tr>
<tr>
<td>Chile</td>
<td>1966-68</td>
<td>80</td>
<td>n.a.</td>
<td>7</td>
</tr>
<tr>
<td>Colombia</td>
<td>1970</td>
<td>170</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1971</td>
<td>209</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>1972</td>
<td>135</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1969-70</td>
<td>142</td>
<td>271</td>
<td>0</td>
</tr>
<tr>
<td>Korea</td>
<td>1968</td>
<td>100</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1972</td>
<td>128</td>
<td>17</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Anne Krueger, 1983, Table 1.

Notes: The table shows potential increases in direct labor coefficients in the event of the elimination of (a) factor market distortions; (b) the factor price effects of protection; and (c) product market distortions within import-substitution and export industries.
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