DM/72/79

INTERNATIONAL MONETARY FUND

Fiscal Affairs Department

Tax Policy for the Utilization of Labor and Capital in Latin America

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October 2, 1972

Latin America's development, like that of other regions, has been characterized by relative scarcities of capital and surpluses of labor. I believe it can be shown that the tax structure in many of these countries not only fails to recognize this problem but may in fact intensify it. Although the source of the imbalance lies deep in the economic structure and is not easily amenable to improvement, tax policies should be reshaped so as to encourage greater utilization of both factors necessary for economic growth.

It seems hardly necessary to emphasize again the importance of capital formation to economic development--a matter that has received attention in the introductory papers of the conference. What may not receive enough attention, however, is the importance of more efficient use of the capital that is in short supply. By channeling it to those industries where in combination with labor it will produce the maximum output, it can best serve the ends of development. This implies its redirection not only toward industries--including agriculture as well as manufacturing and services--that are more labor-intensive but also are utilized at greater capacity.

The record of Latin America is replete with examples of underutilized industrial capacity.1/ Whatever the reasons for this situation, it reflects a wasteful use of limited resources that can be improved by appropriate government policies. Neither is it necessary to dwell on the problem of unemployment in Latin America. Although of worldwide concern,

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*Paper presented at III Inter-American Conference on Taxation, Mexico, D.F., September 3-8, 1972.

1/ See, for example, "Industrial Development in Latin America," Economic Bulletin for Latin America, Vol. XVI, No. 2, second half of 1969, pp. 12-16.

especially in the developing world, the high rate of growth of the labor force in Latin America makes it especially critical there.1/ One evidence of this concern is the intensive survey by the International Labour Office of the unemployment problem in Colombia.2/ Although Colombia's unemployment rate is exceptionally high, urban unemployment rates of 6-7 per cent are accepted as a norm in many countries.

It has long been a matter of concern that employment in manufacturing industries has lagged far behind the rapid growth of output in Latin America, and in a few countries has actually declined or leveled off.3/ Part of the explanation can be found in a natural increase in labor efficiency, but the major factor appears to be the adoption of relatively capital-intensive technology.

The capacity of the economy to absorb labor is a function both of the rate of growth of national output and the proportions in which capital and labor are combined to produce it. Efforts are therefore required to attract the necessary capital from domestic savings and from abroad and to encourage its employment in more labor-intensive industries. It is useful, then, to examine present institutional and governmental obstacles to the optimum utilization of both capital and labor, including whatever biases may be found in the tax structure, and to determine how the tax system may best be reformed so as to make it a more effective instrument for accelerating growth and reducing unemployment.

1. Tax policy and factor proportions

The proposition is generally accepted that an efficient allocation of resources will tend to promote economic growth. A necessary ingredient of such growth is capital formation, which when combined in the right proportions with labor and with land will tend to result in full employment of resources and produce rising per capita output. Although the scarcity of capital is commonly recognized as one of the most important constraints on the growth of developing countries, it is also true that structural factors inhibit economic development. Efficient utilization of capital,

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1/ Latin America's prospective growth rate of the labor force--2.6 per cent in the 1970's--is the highest of any region in the world. International Labour Office, Yearbook of Labor Statistics, 1970 (Geneva, 1970).

2/ Towards Full Employment: A Programme for Colombia, prepared by an Interagency Team organized by the International Labour Office (Geneva, 1970). On the unemployment problem in general, see David Turnham, The Employment Problem in Less Developed Countries: A Review of the Evidence (Paris, OECD Development Centre, 1970).

3/ Werner Baer and Michel E.A. Hervé, "Employment and Industrialization in Developing Countries," Quarterly Journal of Economics, Vol. LXXX No. 1 (February 1966), pp. 88-107.

for example, may be limited by the size of the market, highly protective tariffs, limited supply of skilled labor and managerial capacity; and underemployment of labor may be due in part to lack of training and institutional factors that limit its economical use.

One of the recognized obstacles to attaining the full use of resources is the distortion in prices for the use of capital and labor, that originates in governmental policy as well as institutional factors. Such price distortion refers to the difference between the market price of a production factor and its real cost to society, or its social opportunity cost. The latter is usually referred to as a "shadow" price or "accounting" price, as reflecting the underlying values that should be taken into account in appraising public policy, including taxation.1/

Price distortions, it is argued, affect the proportions in which capital and labor are combined in industry. An overvalued currency, or remission of customs duties, for example, may unduly cheapen the cost of capital imports and thereby favor capital-intensive industries. Minimum wages and other conditions of employment established by the government or artificially high wages resulting from labor unionization may contribute further to mechanization and lower employment.2/ Such biases may be reinforced by tax policy that favors the cost of capital as against labor and further tilts the factor mix toward relatively greater use of capital.

The degree to which the distortions in relative prices influence the factor proportions depends on the elasticity of substitution of capital for labor. If the elasticity of substitution of an industry is high, slight changes in the comparative prices of capital and labor may significantly influence their comparative employment. On the other hand, the technology of some industries may be relatively rigid and permit little or no elasticity of substitution.

Recognizing the need also for equity and administrative efficiency, one of the important objectives of tax policy should be to minimize such price distortions between capital and labor so as to encourage more efficient allocation of resources. This implies not only the avoidance of tax measures that tend to distort comparative costs, but also, where appropriate, to compensate by taxes or subsidies for price distortions due to structural or institutional imperfections in the market.

It should be apparent that tax policy is only one of many government policies that impinge on comparative factor costs. Among the most important affecting the cost of capital are policies governing interest

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1/ The term "accounting price" is employed in a recent standard work, Ian M.D. Little and James A. Mirrlees, Manual of Industrial Project Analysis in Developing Countries, Vol. II (Paris, OECD Development Centre, 1969), pp. 23-37.

2/ The theoretical basis for this proposition is well developed by Louis Lefeber, "Planning in a Surplus Labor Economy," The American Economic Review, Vol. LVIII, No. 3, Part I (June 1968), pp. 343-73.

rates, rationing of credit, and exchange rates. It is important, therefore, that all relevant measures should be coordinated and directed toward the same end if the market cost of capital is to be brought into better alignment with its social opportunity cost.

Against this background, I propose to examine how tax policy in Latin American countries may affect the comparative utilization of capital and labor, and to formulate guidelines to tax policy that may achieve a better balance between these factors in the future. It should be recognized in advance that this analysis takes a narrow view of the whole problem of balanced growth. Not only is it limited to one aspect of tax policy--that relating to capital and labor--but it does not embrace other relevant economic policies.

2. Taxation of labor

The diversity of conditions in Latin America precludes generalizing about the wage structure and the level of wages in relationship to their accounting or social opportunity cost. In many countries labor may be so organized as to maintain a level of wages above their social opportunity cost; and some countries maintain minimum wage levels, especially in urban areas, that lie above a free market rate. Other factors combine in many countries to raise the cost of labor, including severance pay, liberal vacation pay, and Christmas bonuses. In addition, absenteeism tends to run high. It is, of course, impossible to measure the disparity of wages with what would govern in a more freely competitive market. Harberger has attempted to define this in terms of differences between wages in what he calls the protected and unprotected sectors of the urban market, the latter lying somewhat above the level of farm wages and attractive enough to induce a steady stream of migration.1/

It might be agreed as a general proposition that government policies and institutional factors in Latin America tend to promote a higher wage level than that which would be found in a relatively competitive market--especially for industrial employment. As we have noted above, such a high level in combination with favorable capital costs contributes to the bias against employment of labor. Any fiscal measure that reduces the cost of labor--whether through reduced taxes on labor or subsidies for its employment--therefore should be examined for its contribution to fuller utilization of labor in attaining higher economic growth.

1/ Arnold C. Harberger, "On Measuring the Social Opportunity Cost of Labour," in International Labour Office, Fiscal Measures for Employment Promotion in Developing Countries (Geneva, 1972), pp. 3-24.

In the face of the wage distortions in urban areas, employers in most Latin American countries are confronted with high taxes on their payrolls to help cover the cost of social security programs. Employers' payroll taxes, generally levied on all wages and salaries, cover a wide range of rates in these countries; in 1971 they ranged from a minimum of 5 per cent, in Honduras, to over 40 per cent in Chile and Uruguay (Table 1). In 11 of 18 countries covered, rates on employers were in excess of 10 per cent, and in 4 countries the rates exceeded 20 per cent (Argentina, Bolivia, Chile, and Uruguay). In combination with levies on employees (generally at about one half the employers' rate), total social security taxes on payrolls ranged from 7.5 per cent to as high as 65 per cent. The combined payroll taxes were in excess of 10 per cent in all but two countries, most of them (11) falling between 10 per cent and 20 per cent, and 5 exceeded 20 per cent.

It is significant that social security taxes have been climbing steadily; comparison with rates effective in 1961, for example, shows that increases were registered in all but three countries (Bolivia, Nicaragua, and Peru).

Such payroll taxes play a significant role in the economy of these countries. Measured in relation to total compensation of employees (including social security taxes), in 1966 they averaged over 5 per cent in 9 of 14 countries for which data are available and were about 12 per cent in two (Chile and Uruguay) (Table 2). In only 5 countries were they lower than 2.5 per cent of payrolls. Moreover, their importance has been growing since the 1950's in most countries covered.

What are the implications of these high payroll taxes for economic growth? Do they penalize the employment of labor and tilt the balance in favor of more capital-intensive industry? Or are the taxes shifted backward to labor or shifted forward in higher prices of goods? It has been argued that in a closed economy the balance remains unaltered because capital goods are in fact embodied labor and their cost increases correspondingly with increases in the cost of labor.1/ But it can hardly be said that Latin American countries supply more than a small part of their capital goods; they are open economies, and capital costs can be minimized through importation of modern machinery and improvements in production methods. Increases in payroll taxes therefore may increase the disparities between the cost of labor and cost of capital goods, at least in the short run; in the long run adjustments may take place through devaluation of the exchange rate.

The question remains, however, of whether employers bear the cost of payroll taxes imposed on them or whether they are borne by labor. Payroll taxes are in fact an integral part of the cost of labor; since

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1/ Carl S. Shoup, Public Finance (Chicago, 1969), pp. 412-13. See also Paul A. Samuelson, "A New Theory on Nonsubstitution," The Collected Scientific Papers of Paul A. Samuelson, (The M.I.T. Press, 1965), Vol. I, pp. 520-35.

Table 1. Payroll Tax Rates on Employees and Employers in Latin America, 1961 and 1971

(In per cent)

	1961			1971		
	Employee	Employer	Total	Employee	Employer	Total
Argentina	5.0-11.0	11.0-20.0	16.0-31.0	6.0-11.0	22.0-39.0	28.0-50.0
Bolivia	7.5	34.0	41.5	7.5	33.0	40.5
Brazil	8.0	8.0	16.0	8.0	13.7-14.1	21.7-22.1
Chile	8.5-10.0	32.0-41.3	40.5-51.3	9.5-12.0	40.4-44.2	49.9-56.2
Colombia	2.0-2.5	8.0-9.0	10.0-11.5	3.5- 3.75	11.3-18.5	14.8-22.25
Costa Rica	4.0-6.5	4.0-7.5	8.0-14.0	6.5	7.5+	14.0+
Dominican Republic	2.5	5.0-7.5	7.5-10.0	2.5	7.0	9.5+
Ecuador	7.0-8.0	7.0	14.0-15.0	7.0	9.5	16.5
El Salvador	5.0	10.0	15.0	5.0	11.5	16.5
Guatemala	3.0	8.0	11.0	4.5	10.0	14.5
Honduras	+	+	+	2.5	5.0	7.5
Mexico1/	3.75	7.725-13.125	11.475-16.875	3.8	9.6-15.0	13.4-18.8
Nicaragua	3.0	7.5	10.5	3.0	7.5	10.5
Panama	4.0	4.0	8.0	6.0	8.0+	14.0+
Paraguay	5.0	11.0	16.0	6.0	13.0	19.0
Peru	5.5-6.0	12.5-16.0	18.0-22.0	4.0-5.0	9.5-12.0	13.5-17.0
Uruguay	10.0-16.0	11.5-17.3	21.5-33.3	21.5-22.5	43.0	64.5-65.5
Venezuela	2.9	2.9	5.8	4.0	7.0-9.0	11.0-13.0

Source: U. S. Social Security Administration, Social Security Programs Throughout the World, 1972.
1/ Additional 5 per cent payroll tax levied on employers, effective in 1972.

Table 2. Social Security Payroll Tax Revenues in Latin America, 1966

(In millions of national currency)

	Compensation of Employees	Contributions			
		Employee	Employer	Total	Per cent of employee compensation
Argentina	1,709,100	...	...	1,170.0	6.8
Brazil	...	816.8	808.7	1,625.5	...
Chile 1/	17,531	...	...	2,162.0	12.3
Colombia	26,754	119.2	475.4	594.6	2.2
Costa Rica	1,865	42.0	68.8	110.8	5.9
Ecuador	9,780 (est.)	317.0	346.0	663.0	6.8
El Salvador	...	3.2	21.5	24.7	...
Guatemala	606	6.0	8.1	14.1	2.3
Honduras	478	1.4	3.8	5.2	1.1
Mexico	92,910	1,595.6	4,454.4	6,050.0	6.5
Nicaragua	2,969	17.2	42.0	59.2	2.0
Panama	401	10.5	17.3	27.8	7.0
Paraguay	22,526	466.0	713.0	1,179.0	5.2
Peru	53,800	...	...	2,773.0	5.1
Uruguay	55,400 (est.)	3,635.0	3,247.0	6,882.0	12.4
Venezuela	17,380	98.9	172.9	271.8	1.5

Sources: International Labour Office, The Cost of Social Security (Geneva, 1972); United Nations, Yearbook of National Accounts Statistics, 1968; government reports.

1/ Private sector only.

the demand for labor is determined by its marginal productivity, wages would decline by the amount of the tax, the tax would be shifted in higher prices, or its incidence would be divided. In any event payroll taxes would not fall on capital: they are shifted either backward or forward ultimately unless employers are willing to accept a lower return on capital.

That payroll taxes tend to be shifted by employers appears to be confirmed by statistical studies of Brittain, based on a cross-section analysis of many industrial and developing countries.1/ According to Brittain "...the essence of the finding here is that given the level of productivity in a country, the presence of payroll tax on employers tends to reduce the wage...in response to imposition of the tax (backward shifting); it could be due to price increases reducing the real value of wages (forward shifting). More likely, the outcome is achieved through a combination of the alternative employer reactions."2/

As was indicated, the shifting process takes time to be resolved through a combination of wage lags and price adjustments. Little is known of the related effects on production and new investment, but such shifting may not be accomplished without short-term effects on employment and earnings. A detailed statistical analysis of the United Kingdom's selective employment tax (based on numbers employed), introduced in 1966, concluded that the tax (i) induced payroll reduction in order to improve efficiency and (ii) reduced profit margins.3/

If, in the long run, the incidence of payroll taxes is not on capital but on labor, they do not distort factor prices and so do not affect factor proportions. Although an increase in payroll taxes, if sufficiently large, may lead to an immediate reduction in profits and displacement of labor, in time the wage level probably would be stabilized at a point yielding expected returns on capital.

From the point of view of labor, resulting lower wage rates do not entirely represent a reduction in real wages. This is because payroll tax revenue is placed in a special fund and earmarked for their benefit. While social security schemes in Latin America vary widely, the benefits may be realized in the form of old age pensions, sickness and maternity benefits, work-injury benefits, family allowances, and sometimes unemployment benefits. There is not always, of course, a fine correlation between taxes paid and benefits, and in some countries benefits may be greatly depreciated by inflation. But there is an expectation of benefits measured by the amount of contributions plus interest earned by the social security fund, and in some countries supplements by government grants.

1/ John A. Brittain, "The Incidence of Social Security Taxes," The American Economic Review, Vol. LXI, No. 1 (March 1971), pp. 110-25.

2/ Ibid., p. 122.

3/ W. B. Reddaway, Effects of the Selective Employment Tax: The Distributive Trades (London, H.M.S.O., 1970), p. 124.

Even if they are shifted, one may nevertheless question the wisdom of relying so heavily on payroll taxes to finance such benefits, as most Latin American countries do. This is especially harsh on labor when the contributions are dissipated by inflation or when revenues are diverted to the government to meet operating needs. It would appear desirable to limit social security payroll taxes on employers to a reasonable limit of, say, 8-10 per cent of payrolls, and those on employees to, say, one half the employers' rate. Additional requirements to maintain the schedule of benefits could then be financed through income tax or general sales tax.

In view of the fact that the market price of labor in urban areas generally exceeds its social opportunity cost, theoretical support can be given to the provision of a subsidy per unit of labor in order to realize a more socially optimum pattern of development.[1/] Such a subsidy could be provided for each full time equivalent worker per year, equal to say, 10 per cent to 50 per cent of the wages of an unskilled worker, depending on the differential with respect to the shadow wage. However, because of the magnitude of the cost entailed, depending on the scope of its application, and the uncertainty of whether it would be reflected in higher wages, it would not seem prudent to embark on this course. Consideration nevertheless could be given to the provision of such a subsidy to businesses qualifying under a country's investment incentive plan, for a tax holiday period, the amount of the labor subsidy being creditable against the employer's social security payroll taxes. The government could finance from taxes on profits or sales the equivalent of the payroll taxes so remitted.[2/]

3. Taxation of capital

In carrying out their goals of industrialization Latin American countries have pursued exchange rate, credit, and tax policies that have tended to lower the cost of capital below its social opportunity cost. With reference to tax policy, I believe it can be demonstrated that tariff relief on capital goods creates unduly favorable terms for their importation, that normal tax rates on both capital investment and earnings are relatively low, and that investment incentive programs reduce or eliminate even this burden on capital. Such tax policies in conjunction with related exchange rate and credit policies favor the promotion of capital-intensive industries.

1/ Lefeber, op. cit., pp. 356-57. See also Ian Little, Tibor Scitovsky, and Maurice Scott, Industry and Trade in Some Developing Countries: A Comparative Study (London, Oxford University Press, 1970), pp. 145-48; 330-33.

2/ Lefeber makes a strong theoretical case for taxing profits under these circumstances, but practical considerations may militate against this policy. op. cit.

a. Customs duties

Exchange rate policy in Latin America, probably more than any other factor, tends to lower the cost of capital in relation to labor costs. Due to relatively inflexible exchange rates, in some countries labor costs often rise at a faster rate than the cost of capital and other imports; this creates a bias in favor of capital and encourages labor substitution. High import-duty structures have been erected in some countries to compensate for overvaluation, and even when devaluation is accomplished a legacy of high duties may remain. Such tariff structures follow a pattern of high rates on finished consumption goods as against lower rates on intermediate products and capital goods, and are designed largely to promote import substitution industries.

Such rate graduation in itself favors imports of capital goods and intermediate materials. But this advantageous position is further enhanced by the exemption of duties on capital goods imported by companies approved under the investment incentive laws of these countries. Typically such exemption is provided for imports of capital deemed necessary for the construction and equipment of new industries promoted for the production both of import substitutes and exports. Although Latin American countries differ in their preferential import policies, depending on the degree of essentiality of the industry and other considerations, it would be difficult to distinguish among them in the degree of discrimination in favor of capital goods imports.

Exemption of capital goods from import duties has long found justification as a means of lowering the cost of capital for domestic production and increasing its supply, largely to support the production of non-traditional goods that require modern technology. At the same time, imports at preferential rates of machinery for agriculture and processing of agricultural products, as well as for service industries, may displace labor in traditionally labor-intensive sectors. Proper trade and exchange policy under high unemployment conditions would seem to require not only frequent adjustment of exchange rates to rising domestic costs (as in Brazil, Colombia, and until recently, Chile), but also the removal or reduction of import subsidies implied by tax-free imports of capital goods. This is required to bring their import prices into line with real world prices.1/

It has long been clear that the import substitution policies of Latin American countries (implicit in the exemption of capital goods) have reduced the elasticity of import duty revenues. This is attributable to the shift of imports toward nondutiable (or low duty) capital goods and intermediate products necessary for domestic production, together with

1/ See Little and Mirrlees, op. cit.; International Labour Office, Towards Full Employment: A Programme for Colombia (Geneva, 1970), pp. 176-78.

tariff and other restrictions on imports of fabricated consumer goods. Because of the generally low rates, removal of import duty exemptions on capital goods is not likely to have a significant revenue effect. Therefore any such step should not divert attention from the necessity of strengthening other revenue sources to maintain elasticity of the tax system as a whole. This could be achieved not only by improved sales taxes but also by heavier taxes on business income and wealth.

b. Corporation taxes

Except in a few countries, taxes levied on income of corporations in Latin America are relatively moderate (Table 3). In all countries corporations are taxed as separate entities, and there is integration with taxes on individual shareholders in only a few countries that exempt dividends or provide a tax credit to domestic shareholders. Income tax rates are typically graduated and range to as high as 55 per cent, in Peru. Because of graduation and other complexities it is difficult to generalize as to the general level of rates. Small companies that comprise the majority of taxpayers are subject to rates no higher than 10 per cent or so in about half of the 18 countries covered; marginal rates reach a maximum of 40 per cent and higher in only 7 or 8 of these countries. It is probably fair to say that in only 3 countries (Chile, Mexico, and Peru) do average effective tax rates now exceed 40 per cent of taxable income for most medium-size and large corporations.

Income tax rates can be very deceptive if the tax base is attenuated by various reductions and allowances not normally recognized in arriving at commercial profits. Reductions may take the form, inter alia, of liberalized depreciation allowances, reinvestment allowances, and outright exemptions, all of which need to be considered in evaluating the tax burden on capital.

It appears most unusual in Latin America for depreciation to be allowed in excess of straight line charges necessary to amortize the investment over its normal life. Special accelerated depreciation may be authorized in a few countries (e.g., Bolivia, Brazil, Dominican Republic, Mexico, Venezuela) where the industry is held to be in the national interest. The depreciable lives of assets prescribed in Mexico are reported to be unusually short.

On the other hand, several countries provide for income tax to be remitted on earnings reinvested in plant expansion or modernization. Perhaps the most significant of these is Brazil's unique regime to stimulate investment in the Northeast and Amazon regions, which now provides for the deposit of up to 25 per cent (formerly 50 per cent) of company tax otherwise payable, for investment in projects approved by the regional development agencies. Such funds must be matched by capital from other sources in the financing of approved projects in these areas. Since such investment, except for some matching funds, costs companies nothing, it is not surprising that virtually 50 per cent of all company taxes has been diverted to this purpose. These "costless" funds have contributed greatly to new investment in Brazil.

Table 3. Corporation Tax Rates of Latin American Countries

Country	Standard Company Rates (Per cent)	Remarks
Argentina	33	Dividends on shares traded in market tax free.
Bolivia	25	Five per cent surcharge on industrial operations.
Brazil	30	Five per cent on distributed profits. Dividends of "publicly-owned" companies nontaxable.
Chile	35+5	For 1971 standard rate of Category 1 income increased by 15 per cent; housing tax of 5 per cent subject to 40 per cent increase, to 7 per cent.
Colombia	12-36	Also subject to moderate excess profits tax.
Costa Rica	1-30	Thirty per cent on income over 500,000 colones. Domestic shareholders not subject to tax on dividends.
Dominican Republic	10-38	Subject to 3 per cent surcharge and 2 per cent additional surcharge. Thirty-eight per cent rate applies to income over 60,000 pesos.
Ecuador	30-35	Foreign companies subject to 35 per cent rate; 20 per cent credit given domestic shareholders.
El Salvador	2.5-15	Fifteen per cent rate on income over 100,000 colones.
Guatemala	5-48	Forty-eight per cent rate on income over 500,000 quetzales. Domestic shareholders not subject to tax on dividends.
Honduras	3-40	Forty per cent rate on income over 1 million lempiras. Domestic shareholders not subject to tax on dividends.
Mexico	5-42	Forty-two per cent rate is applicable to 500,000 pesos and over.
Nicaragua	4-30	Domestic shareholders not subject to tax on dividends. Thirty per cent rate on income over 2,000,000 córdobas.
Paraguay	25-28	Domestic shareholders not subject to tax on dividends.

Table 3 (concluded). Corporation Tax Rates of Latin American Countries

Country	Standard Company Rates (Per cent)	Remarks
Panama	10-50	Fifty per cent rate on income over 500,000 balboas.
Peru	20-55	Fifty-five per cent rate applies to income over 1 billion soles.
Uruguay	20	Includes 10 per cent corporate tax and 10 per cent schedular tax on profits from industry and commerce.
Venezuela	5-50	Fifty per cent rate applies to income over 28 million bolívares.

Source: International Bureau of Fiscal Documentation, Corporate Taxation in Latin America, and country tax statutes.

Bolivia provides for exemption of up to 100 per cent of earnings (in Category 1 enterprises) devoted to new investment. In other countries tax reductions for reinvested earnings are more modest. In addition to various sectoral reinvestment allowances, Argentina's industrial and commercial corporations may reduce their tax rate from 33 per cent to as low as 27 per cent if more than 75 per cent of earnings are reinvested. Colombia provides annual deduction from taxable income for reserves of up to 5 per cent of earnings to increase production of raw materials and import substitutes. Peru exempts earnings reinvested in hotels and other tourist facilities, and for the manufacture of machinery and certain nontraditional products. Uruguay also provides for the exemption of up to 50 per cent of earnings (20 per cent for buildings) devoted to enlargement and renovation of facilities.

Of much greater impact are the income tax concessions provided by all Latin American countries for the promotion of import-substitute and export industries. It would go beyond the scope of this paper to describe and analyze the provisions of these laws, some of which are rather complex, with income tax exemptions differentiated according to the essentiality of the industry and other factors.1/

Income tax benefits are based on tax holidays, rather than investment allowances, that range up to 10 years in some countries; partial exemptions for various periods also are to be found in most countries, depending on the classification of the industry. It is significant that little explicit weight is given to employment, although the domestic value added is an import consideration in some countries.

1/ For a description of these laws see V Asamblea General del Centro Interamericano de Administradores Tributarios (CIAT), "Administración de Incentivos Tributarios en los Países Americanos" (CIAT, Panama), May 1971. See also George E. Lent, "Tax Incentives for Investment in Developing Countries," IMF Staff Papers, July 1967; Vito Tanzi, "Tax Incentives--Ecuador," Finanzarchiv, Bank 28 Heft 2 (March 1969); Alfredo Julio Lamagrande, "Los Incentivos Tributarios en la Década del Sesenta," Boletín de la Dirección General Impositiva, Vol. 35, Num. 212 (Buenos Aires, August 1971); Clark Joel, "Tax Incentives in Central American Development," Economic Development and Cultural Changes, Vol. 19, No. 2 (January 1971); A. Pimental-Rodriguez, Los Incentivos Fiscales y el Desarrollo Industrial de Guatemala (University of Guatemala, 1969); Ifigenia M. de Navarrete, Los Incentivos Fiscales y el Desarrollo Económico de México (Universidad Nacional Autónoma de México, 1967); Colombian Commission on Tax Reform, Fiscal Reform for Colombia, Malcolm Gillis, ed. (Harvard Law School, Cambridge, March 1971); United Nations, Economic Commission for Latin America, Office for the Caribbean, Report of the United Nations Expert Team on Harmonization of Fiscal Incentives to Industries in the Caribbean Free Trade Area, E/Cn.12/845 (1969).

c. Tax policy considerations

The foregoing analysis suggests that Latin American countries give undue tax preference to capital in implementing their development goals. While this policy can be understood in the light of the relative scarcity of capital in combination with the excess cost of labor, including high taxes on wages, it has failed to realize the fullest utilization of either of these factors, and in some countries has left a serious unemployment problem. Further thought therefore needs to be given to a reorientation of tax policy that will encourage not only a fuller utilization of capital but will, in concert with other policies, also induce the development of more labor-intensive industries.

(1) Taxation of companies

It is not believed that this purpose would or should be achieved simply by higher corporation income tax rates. Particularly in view of the taxation of companies as separate entities, and no integration with shareholders in most countries, high corporate rates may be a deterrent to risk taking and encourage relief measures that would undermine the tax base itself. Corporate income tax rates in the order of 30-40 per cent would appear to be reasonable, provided concessions are made for small and medium size companies that do not have ready access to credit on reasonable terms. A two-tier rate structure with a basic rate of 15 to 20 per cent and a surtax of 15 to 20 per cent on income in excess of a reasonable minimum would seem most appropriate.

Serious thought also should be given to the enactment of a supplementary tax on the capital of enterprises; an annual fixed charge based on the net worth of the business at a moderate rate of, say, 1.0-2.5 per cent would be indicated. This should also be graduated with the size of the net worth, the higher rate applying to those companies large enough to have their shares traded in the market.

Several Latin American countries already impose net wealth taxes, usually in the guise of a substitute for inheritance taxes. These may be summarized as follows:

	Rate (Per cent)	Type
Argentina	1.5	Substitute inheritance tax
Chile	0.5	Net wealth tax
Ecuador	0.16-0.2	On net working capital
El Salvador	0.05-0.22	Net wealth tax
	0.4 on amount over 1,000,000 colones	
Paraguay	0.5	Substitute inheritance tax
Peru	0.5	" " "
Uruguay	1.0	" " "
	2.25	Net wealth tax

A net wealth tax would increase the cost of equity capital, including retained earnings and paid-in capital. Retained earnings frequently are considered to be costless funds, and a tax on their retention would better assure their economical investment. Since borrowed capital would be allowed as a deduction from the value of total assets in arriving at net worth, its cost would not be affected. However, the cost of borrowed capital generally reflects market rates of interest, and there would be little or no difference between its accounting price and market price except in the case of special government financing.

For investment planning purposes a tax on capital would raise its opportunity cost in evaluating a new venture or the expansion of an existing one. In this way it would tend to influence the capital/labor proportions in favor of more labor-intensive methods. Moreover, once an enterprise is established, a fixed charge on net worth would provide an incentive for more efficient utilization of existing plant and equipment.[1/]

If a net wealth tax of the level proposed were adopted, a lower rate of corporation tax than suggested above would be indicated. A net wealth tax of 2.5 per cent, for example, would be equivalent to a 25 per cent rate on a 10 per cent rate of return on equity--a median rate of return. The total combined effective tax rate on earnings would depend, of course, on whether the net worth tax were deducted in computing taxable earnings.

(2) Investment incentives

If the economic development of Latin America is to realize maximum use of its resources that are in the greatest supply, it would appear necessary to continue to encourage the promotion of new investments so as to provide greater employment opportunities. While capital investment necessarily entails employment if it is to be productive, not only are some industries more labor-intensive than others but in some industries there are alternative techniques that entail different ratios of employment for capital investment of the same amount. Moreover, there is the risk that the introduction of modern technology may displace artisans and other workers in the more traditional trades and industries.

1/ See Noboru Tanabe, "The Taxation of Net Wealth," IMF Staff Papers, March 1967, pp. 124-68. For Spanish translation see "Tributación Sobre el Patrimonio Neto," in Publication No. 8 in the OAS/IDB series Cuadernos de Finanzas Públicas, January 1969.

Analysis of experience in many countries has raised considerable doubts about the efficacy of income tax exemptions in attracting new industry.[1/] It is generally agreed, I believe, that other considerations are of paramount importance, including the size of the market, availability and cost of labor of the necessary skills, freedom from government regulation and controls, exchange rate policy, absence of restrictions on remittance of earnings and repatriation of capital abroad, and reasonableness of the general tax structure. In the promotion of import substitution industries protective tariffs are usually an essential condition governing the profitability of a new business, provided the market is sufficiently large to realize economies of scale. From the point of view of taxation, tariff concessions on imports of raw materials and other intermediate products are an integral part of the effective protection.

It cannot be questioned that income tax relief enhances the prospective rate of return on capital investment and may play a critical role in the decision to invest in marginal projects, especially where risks are high. Moreover, the liberality of tax concessions in a country may influence the diversion of capital from others with minimal income tax benefits. For these reasons virtually all developing countries have found it desirable to provide income tax relief of one form or another as an inducement to private investment in various sectors of the economy.

Tax holidays of the nature and scope generally provided in Latin America for the attraction of new industries and expansion of existing industries are preferable to incentives based directly on capital investment, such as accelerated depreciation, investment allowances, and reinvestment allowances, in that they are not directly related to the amount of the investment. At the same time, many countries temper the size and duration of the exemption in accordance with the essentiality of the industry promoted or the relative amount of value added in domestic production.

1/ See, for example: Stanford G. Ross and John B. Christensen, Tax Incentives for Industry in Mexico, Harvard Law School (Cambridge, Massachusetts, 1959), p. 136, Paul L. Chen-Young, "A Study of Tax Incentives in Jamaica," National Tax Journal, Vol. XX, No. 3 (September 1967), p. 209; Federico J. Herschel, Comment on Nicholas Kaldor, "The Role of Taxation in Economic Development," in Fiscal Policy for Economic Growth in Latin America, papers and proceedings of a conference held in Santiago, Chile, December 1962 and issued by the Joint Tax Program of the Organization of American States, Inter-American Development Bank, and Economic Commission for Latin America (Baltimore, 1965), p. 89; Sheldon L. Schreiberg, "The United States Private Investor and the Central American Common Market," in U. S. Congress, Joint Economic Committee, Latin American Development and Western Hemisphere Trade, Hearings before the Subcommittee on Inter-American Economic Relationships (89th Congress, 1st Session), September 8-10, 1965, p. 272; George E. Lent, "Tax Incentives in Developing Countries," Rivista di Diritto Finanziario e Scienza delle Finanze, (March 1970), p. 12.

Investment allowances and tax holidays do not exhaust the incentive possibilities of the tax system. Consideration has already been given to payroll subsidies, and other techniques have been tried in some countries. One of the most interesting possibilities is that employed by Colombia to promote exports and the variant of this proposed by the Colombia Tax Commission to stimulate selected industries, especially for regional development.1/ This is based on the use of a negotiable Certificado de Abono Tributario (CAT), amounting to a specified percentage of gross export receipts (15 per cent in Colombia) of approved companies, which are creditable against income tax liabilities. As suggested by the Colombian Tax Commission, a strong case can be made for basing the tax credit on value added by the firm rather than its gross sales, provided possible administrative problems can be overcome. This would be in effect a negative value-added tax. The advantage claimed for a subsidy based on sales or value added is that it is neutral as between capital and labor.

Income tax incentives of the Colombian type would appear to be less suitable for import substitution industries than for export industries. This is because a tax benefit based on sales or value added only further enhances the effective protection provided under existing tariff decrees. While such a scheme might be introduced in lieu of these protective arrangements, its introduction would seem to require a drastic revision of tariff schedules now in effect.

To the extent that income tax incentives are employed by government to promote new industries, I believe that they should continue to be based on tax holidays. They are in widespread use and it would be impractical to replace them by novel techniques with which there has been little or no experience. It is suggested, however, that in approving new projects greater weight be given to employment in the businesses qualifying for the investment incentives. One guide to the percentage of profits exempted from tax and duration of the tax holiday period might be the planned ratio of investment per employee--the lower the capital/labor ratio the greater the tax exemption.2/ Another criterion, widely used in Latin America, is the percentage of domestic value added, including all domestic inputs of the enterprise, to gross sales; this is a broader measure that is independent of the capital/labor ratio and includes a substantial element of domestic labor cost as well as profits. This proposal should be considered in conjunction both with the levy of import duties on capital equipment and the provision of an employment subsidy credited against payroll taxes, as proposed earlier.

1/ Colombian Commission on Tax Reform, op. cit., pp. 94-95, 530-44.

2/ For a similar plan based on investment allowances see George E. Lent, "Tax Incentives for the Promotion of Industrial Employment in Developing Countries," IMF Staff Papers, July 1971, and International Labour Office, Fiscal Measures for Employment Promotion in Developing Countries, op. cit., pp. 147-62.

4. Conclusions

The proposals made here are intended to redress the present tax imbalance between labor and capital that I believe characterizes the tax structures of most Latin American countries. There is evidence that the drive to industrialize in most countries has dictated generally low corporate tax rates and other tax preferences that have lightened the burden on industry; at the same time, the needs for social reform have in most cases placed a heavy burden on wages through payroll taxes on both employees and employers. In addition, the cost of capital has been maintained at an artificially low level by import duty exemptions that find little or no economic justification, especially under conditions of overvalued exchange rates.

Favorable tax treatment of capital can, of course, be explained by the fact that it is in relatively short supply. On the other side, labor is in relatively surplus supply but various institutional and governmental factors, including taxes, tend to raise its price above that which would rule under less restricted market conditions; as a result, full employment tends to be impeded. If, by appropriate tax and other policies a more realistic relationship between the cost of these factors can be established, more balanced growth can be induced through better utilization of both labor and capital. The tax/subsidy program proposed to improve the alignment of these factors may be summarized as follows:

a. Moderately higher company tax rates in some countries, to a maximum of, say, 35-40 per cent (lower, if suggested net worth taxes are instituted).

b. A tax on the net wealth of companies ranging from, say, 1.0 per cent to 2.5 per cent, and graduated with size of net wealth.

c. A ceiling on employers' payroll taxes of, say, 10 per cent, and a limit of one half of this rate on employees.

d. Imposition of duties on imports of capital equipment, construction materials, etc., at moderate rates--say, 10-15 per cent, with no relief for ventures approved under investment incentive programs.

e. Reorientation of investment incentive programs under existing tax holiday regimes so as to provide greater income tax relief to ventures with low capital/labor ratios.

f. Employment subsidies for approved companies for corresponding periods of time, to be credited against social security payroll taxes.

Having made these proposals it is now necessary to evaluate their probable effectiveness and limitations in achieving their objective. It must be emphasized again that investment decisions involve many complex considerations and that tax/subsidy factors are usually of subordinate importance. Cost of capital, for example, is perhaps best measured by the level of interest rates in a country, and preferential rates offered through government agencies may offset higher tax costs.1/ Undue delays in the adjustment of exchange rates to rising domestic costs also provide a special advantage to capital. It is also true that unemployment may be largely structural in character, and that scarcity of skills, including management skills, may largely dictate the choice of techniques. Therefore it is important that government policies as to interest rates, exchange rates, training, and other relevant factors be coordinated with tax policies in the promotion of economic growth along certain desired channels.

There are, broadly, two major alternative policies that may be pursued in the promotion of new industries, that are calculated to achieve the fullest employment of labor and capital. One is to influence the adoption of techniques for the production of certain goods or services that maximize labor as against capital; the other is to promote industries that have the highest labor intensity.2/ Both policies of course can be carried out at the same time.

For many sectors a range of techniques for the combination of capital and labor is available in achieving production goals. For some, however, the most efficient technique is dictated by the latest technology, and the production function is relatively fixed; in manufacturing, chemical and heavy machinery processes fall within this category. For others, the opportunities for substitution of capital by labor are much greater, and comparative cost factors as influenced by tax/subsidy policies may play a much greater role.3/ This is true of agricultural production and processing generally, where mechanization can be arrested by raising the cost of capital goods. Similar flexibility exists in construction and service industries. One of the latter that has found increasing favor is tourism, which entails a complex of personal services for shelter, food, transportation, laundry, and other services.

1/ From a tax point of view, it might be said that tax postponement, or delinquency, frequently permits the businessman to borrow from the Treasury at low interest penalty rates.

2/ For a theoretical formulation and appraisal of these alternatives see Alan Peacock and G. K. Shaw, Fiscal Policy and Employment in Less Developed Countries, Part I (Paris, OECD Development Centre, 1970).

3/ Cf. International Labour Office, Towards Full Employment: A Programme for Colombia, op. cit., pp. 159-74.

From the viewpoint of labor absorption, the scope of investment incentive legislation in most developing countries is relatively limited.[1/] This consideration underscores the need for adoption of the more general tax measures proposed in this paper. As indicated above, agricultural processing and service industries, including tourism, are among those meriting greater attention.

One consideration that has militated against the fullest utilization of labor is the test of economic efficiency. In order to exploit the maximum profit possibilities for export and import-substitute industries, many believe that only the latest and most capital intensive techniques are to be adopted. The result has been a faster growth in capital investment than in labor employment, and a rise in the capital/labor ratios with the growth of the economy. Measures to improve labor intensity therefore may require a trade-off of employment for productivity, and entail a slowing down in the rate of economic growth. This is of course a question of social preference that has to be decided as a matter of national policy.

1/ See Lent, "Tax Incentives for the Promotion of Industrial Employment in Developing Countries," op. cit., p. 401.