

TAX POLICY AND THE INCIDENCE OF
TAXATION IN PERU*

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Tax Policy and Incidence

Purpose

Tax reform has been a staple ingredient of redistributive programs in Peru. This chapter will examine two questions related to the advocacy of tax reform. First, how is the burden of taxation distributed amongst the population, and, in particular, is the tax system in fact regressive, as is generally claimed? Second, what happened to tax incidence under the (relatively) redistributive governments of Belaunde (1963-1968),^{1/} and of Velasco (1968-)?

The lack of statistical measures of tax incidence has not prevented a generally unquestioning acceptance of the proposition that Peru's tax system is regressive. Regressivity is, after all, a corollary of oligarchic or elite government. And if evidence is needed, it is readily available in the large share of indirect taxes in government revenues - during the sixties this share averaged 60.2%.^{2/} Moreover, "regressive" direct taxes, in the form of payroll taxes and social security contributions, provided an additional 7.8%.^{3/} In all, over two-thirds of government tax revenues could be classed as "regressive." Government documents continually identify regressivity with indirect taxes.^{4/}

^{1/} There was so much continuity between the economic and social policies of the Junta Militar de Gobierno (1962-1963), and of Belaunde (1963-1968), that it makes sense to examine the two together. In pp. 13-19 below, data on the 1961-1969 period is used to indicate the effects of Belaunde's policies.

^{2/} See Table 4.1.

^{3/} Table 4.1.

^{4/} e.g. Instituto Nacional de Planificación, Bases para un Programa de Desarrollo Nacional a Largo Plazo (Lima, Oct. 1968) pp. 104-105. A section entitled "La regresividad del sistema tributario," after presenting statistics on the shares of various direct and indirect taxes, concludes, "Las cifras anteriores son bien significativas de la alta regresividad que ha llegado a tener en los años recientes el sistema tributario peruano y de la urgencia de revisar las tendencias que acusa."

Table 4.1

Composition of Tax Revenues, by Type Tax, 1950-1971
(percentages of total tax revenues)

| | <u>1950</u> | <u>1961</u> | <u>1963</u> | <u>1966</u> | <u>1969</u> | <u>1971</u> |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 1. Income taxes (excl. payroll) | 54.0 | 35.4 | N.A. | 20.9 | 28.3 | 27.4 |
| 2. Indirect | 39.5 | 60.1 | 59.1 | 64.3 | 59.4 | 59.2 |
| 3. Payroll | 6.5 | 4.5 | N.A. | 14.8 | 12.3 | 13.4 |
| 4. Profits taxes | 51.3 | 27.7 | 25.2 | 16.0 | 21.7 | N.A. |
| 5. (4) as % book profits | 33.5 | 33.1 | 29.2 | 17.4 | 26.6 | N.A. |
| 6. Import duties | 14.4 | 21.0 | 18.5 | 25.4 | 22.0 | 19.5 |
| 7. (6) as % imports | 11.2 | 18.1 | 18.3 | 30.6 | 42.3 | (39.0) |

Notes

1. Source for 1950-1969 tax revenue data was BCR, Cuentas Nacionales. 1971 figures are extrapolations of 1969 data based on changes in Central Government tax revenues obtained from 1972 unpublished Ministry of Finance estimates.
 2. Coverage of tax categories is that of BCR source, and differs from that of Tables 4.8-4.10: "profits tax" is gross of tax on profit remittances and of estimated forward shift; also "income" and "indirect" tax categories contain minor differences from Table 4.8-4.10 definitions.
- Line 7 Imports are unadjusted customs cif values, excluding food, which is the main category of duty-exempt goods.

Some recent estimates support the regressivity thesis. A study by a Joint Tax Program mission to Peru considered that "...it is very likely and in fact appears to be the case that the distribution of income in Peru is more unequal after taxes, than before."^{1/} Earlier, Musgrave had estimated the distribution of the tax burden in ten Latin American countries.^{2/} His results, including those for Peru, "partially confirm the belief that the incidence of taxation in South America is regressive in the lower income groups." In Peru, the highest tax burden was found in the second lowest quartile.^{3/}

One exception was Hunt's study,^{4/} which, after making several adjustments to Musgrave's rather crude estimates, concluded that "the Peruvian tax system has no noticeable redistributive impact one way or the other." Instead it "exhibits what is best described as wandering proportionality."^{5/} Both Musgrave and Hunt stress the highly tentative nature of their figures.

The estimates of tax incidence presented here (Table 4.2) reveal a significant degree of progression. Like previous estimates however, they are statistically weak and are arrived at as much by "a quantification of theoretical deductions"^{6/} as by a use of empirical evidence. What may be claimed for the

^{1/} Programa Conjunto de Tributación de la Organización de los Estados Americanos y el Banco Interamericano de Desarrollo (Joint Tax Program), Estudio Fiscal del Peru (Washington: Union Panamericana, 1969) p.25. No statistics are cited to support this conclusion.

^{2/} Richard Musgrave, "Estimating the Distribution of the Tax Burden," in Conference on Tax Administration, Problems of Tax Administration in Latin America, for the Joint Tax Program (Baltimore, John Hopkins Press, 1965)

^{3/} Ibid, p. 63, See Table 4.2 below.

^{4/} Shane Hunt, "Distribution, Growth, and Government Economic Behavior in Peru," in G. Ranis (ed.) Government and Economic Development (New Haven: Yale University Press, 1971).

^{5/} Ibid, p. 339. See Table 4.2 below.

^{6/} Musgrave's phrase, in describing his methodology in, op. cit., p. 31.

Table 4.2

Tax Incidence, by Percentiles
(in percentages)

| | Peru | | | | Colombia | Brazil | Peru: other estimates | |
|------------------------|------|------|------|----------|----------|--------|--------------------------|----------|
| | 1961 | 1966 | 1969 | % Change | 1966 | 1962 | Hunt | Musgrave |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| <u>Quartiles</u> | | | | | | | | |
| I (poorest) | 3.9 | 5.1 | 5.2 | 33 | 13 | 8 | 19.5 | 5.4 |
| II | 5.8 | 9.7 | 9.2 | 59 | 11 | 10 | 17.4 | 12.3 |
| III | 8.3 | 15.0 | 15.6 | 88 | 13 | 16 | 20.6 | 6.6 |
| IV | 17.5 | 22.9 | 23.0 | 31 | 15 | 15 | 16.9 | 9.2 |
| <u>Top Percentiles</u> | | | | | | | | |
| 75th - 90th | 12.0 | 17.9 | 17.5 | 46 | | | | |
| 90th - 99th | 14.0 | 23.5 | 22.4 | 60 | | | | |
| top 1% | 23.5 | 25.4 | 26.2 | 11 | 17 | | | |
| Total | 14.5 | 19.9 | 20.0 | 38 | | | | |

Notes

4.8 -

Cols. (1)-(3)

From Table 4.10, Col. (9) and Table 3.3. Total tax burden differs from that shown in BCR, Cuentas Nacionales because it excludes taxes on profits earned by non-residents, and taxes paid by government itself.

Col. (5)

From C. McLure, op. cit., p. 32.

Col. (6)

From G. Sahota, op. cit.

Cols. (7)-(8)

From S. Hunt, op. cit., p. 388.

new estimates is that they are based on a more detailed allocation of different taxes and, it is thought, on more correct assumptions regarding the composition of urban and rural consumer expenditures at different income levels, and also regarding the indirect tax content of different types of urban and rural consumer expenditure. In particular, allowance is made for the fact that subsistence, and much small-scale output outside the large cities, is not taxed in practice, or is taxed indirectly at lower rates.

To answer the second question - what changes have Belaunde and Velasco wrought in the distribution of the tax burden - separate estimates of tax incidence were made for 1961, 1966, and 1969, and the principal tax changes since 1969 were studied. "Tax reform" was an announced goal of the Belaunde government, and the sharp increase in the total tax burden between 1961 and 1968 provided the opportunity to make substantial changes in its distribution. The military government since 1968 has also repeatedly announced its desire for a more equitable tax structure, and it has had the administrative power to make changes in that direction.

Before studying the statistics on tax incidence however, a brief description of the statistical procedure will be given in the section below.

Sources and Methods

The distribution of the tax burden by income classes was calculated separately for 1961, 1966, and 1969, (Table^s 4.8-4.10). A tentative estimate of the degree and direction of change in tax incidence between 1969-1971 was also made.

"Taxes" were defined in a relatively comprehensive fashion; they include both central and local government, the net profits of public enterprises (chiefly the tobacco monopoly), and social security contributions. The

justification for including the latter is that the tax incidence data are primarily intended to be used in conjunction with an allocation of government expenditures to arrive at net budget incidence, and it was preferable, therefore, to start with gross measures of transfers.

The source of most tax statistics was the fiscal accounts office of the Banco Central de Reserva which considerably facilitated the estimation by providing a uniform set of tax statistics for all years since 1950. The statistics on income distribution are taken from chapter 3.^{1/}

For allocation, taxes were grouped according to the categories of factor income or domestic expenditure affected. The allocation of each major category of taxes is explained below.

(a) Profits taxes

The twenty separate taxes classified as "profits taxes" are listed in the notes to Table 4.3. They include various 'indirect' taxes on exports since, except in the case of fishmeal, Peruvian exporters are price-takers. Peru's dominant position in the fishmeal industry (about 60% of world supplies) suggests that some domestic taxes could be passed on by that industry, but the possibility of shifting taxes on fishmeal is limited by the sensitivity of fishmeal prices to the prices of substitute protein sources, particularly soya. For this reason, and because it would have proved statistically difficult to separate fishmeal from other export taxes, all levies on exports were classified as profits taxes.

Taxes paid by non-resident owners of capital in Peru are not part of the national tax burden. Since the bulk of foreign-owned investments are in the export sector, a percentage of profit taxes on the export sector was deducted. The

^{1/} Available in R. Webb, The Distribution of Income in Peru, Discussion Paper No. 26, Research Program in Economic Development. Woodrow Wilson School, Princeton University, September 1972.

Table 4.3

Allocation of Profits Taxes

| | <u>1961</u> | <u>1966</u> | <u>1969</u> |
|-----------------------------------|-------------|-------------|-------------|
| 1. <u>Total</u> | <u>2596</u> | <u>3644</u> | <u>8351</u> |
| 2. <u>on non-resident profits</u> | <u>1163</u> | <u>602</u> | <u>3563</u> |
| 3. <u>on national income</u> | <u>1433</u> | <u>3042</u> | <u>4788</u> |
| 4. : shifted forward | 523 | 1420 | 1800 |
| 5. : on national profits | 910 | 1622 | 2988 |

Notes

- Line 1. Covers following taxes: capital movable, adicional al capital movable, utilidades industriales y comerciales, a cuenta de, recargo, and adicional a las utilidades industriales y comerciales, complementario tasa fija, Ley 17044, a cuenta utilidades compañías seguro, a cuenta productos exportación (L. 16710), utilidades exportadores (petróleo, minerales etc.), capitalización utilidades, revaluación activos fijos, contribución empresas mineras, patrimonio accionario, alcabala and plusvalía, 'otros' a la renta (according to BCR classification), a la exportación (ad valorem FOB, petróleo, algodón, azúcar recargo and melaza caña), al algodón y derivados, terrenos sin construir, and canones y regalías. Source: BCR.
- Line 2 Non-resident profits, which corresponds to profits earned in Peru by non resident owners, were assumed to equal 75% of profits earned in export industries. The ratio is based on BCR profits data by industry.
- Line 3 Line 1 minus line 2.
- Line 4 Assumed to equal 50% of profits earned in non-export industries.
- Line 5 Line 3 minus line 4.

proportion used was 75%, based on a sectoral allocation of remitted profits by the national accounts office of the Central Bank.^{1/}

In the case of income taxes on the profits of non-export industries, it was assumed that 50% were shifted forward. Though empirical studies for the USA have produced conflicting estimates of profits tax shifting,^{2/} the highly oligopolistic and protected nature of Peru's non-export industry suggests a greater amount of shifting than occurs in the USA. The 50% assumption^{3/} however, is clearly debatable, and weakens the overall incidence estimates.

(b) Other taxes on income

These consisted of various payroll taxes, the personal income tax and real estate taxes. The payroll taxes, including social security contributions, were assumed to fall entirely on wages. Since government and the medium and large firms that generate the bulk of these taxes constitute a protected and mostly unionized labor market, payroll taxes are less likely to affect profits. Some forward shifting onto prices may occur however, transferring part of these taxes onto consumers of modern sector output. Payroll taxes were allocated according to wage and salary income.

Revenue from the personal income tax is small, amounting to some 5% or less of total revenues over the period. Though tax return data was not available,

^{1/} Banco Central de Reserva del Peru; unpublished national accounts worksheets.

^{2/} Peter Mieszkowski, "Tax Incidence Theory: The Effects of Taxes on the Distribution of Income," JEL, Vol VII, No. 4, (Dec. 1969) pp. 1116-1120, cites the high-shifting findings of Krzyzaniak and Musgrave, and several with opposite conclusions.

^{3/} The 50% assumption was also used by Charles McLure, for the Colombian incidence estimates published in Malcolm Gillis, ed. Fiscal Reform for Colombia, (Cambridge, 1971. Harvard University, International Tax Program.), and by Shane Hunt, op. cit., p. 389.

allocation by income brackets was simplified by the exceptionally high exemption level: in 1964 it was about US \$5200 p.a. for a family of four.^{1/} The tax was therefore entirely allocated to the top 1%.

Real estate taxes have also been a minor source of revenue in Peru: in both 1961 and 1969 they amounted to 6.9% of all tax revenues. They were allocated according to rental income, including imputed rents.^{2/} Somewhat more correct would have been an allocation that assumed lower effective tax rates for rural and poor urban families.

(c) Indirect Taxes

The most complex section of the incidence procedure was the allocation of indirect taxes, chiefly sales taxes, and import duties, to various expenditure categories, and to income classes within those categories. These taxes account for close to two-thirds of all tax revenues and any measure of their incidence is complicated by the proliferation of tax exemptions, the considerable discrimination in rates between products, and by the taxation of intermediate and capital goods.

The assumption made here is that the entire burden of indirect taxes is shifted forward onto buyers. In practice, incidence may be somewhat more progressive to the extent that there is some inelasticity in the supply of modern sector output (roughly equivalent to the taxed sector), and some trade between the modern and traditional sectors, causing a relative fall in modern sector producer incomes.

^{1/} Joint Tax Program op. cit. p. 59.

^{2/} Used to derive chapter 3 estimates. See Webb, op. cit., p. 18.

Table 4.4

Average Consumption Shares, Urban and Rural, 1961
(percentages)

| | Selected Income Classes ('000 soles) | | | | | | | | | | | |
|----------------------------------|--------------------------------------|--------------|---------------|-------------|---------------|-------|--------------|--------------|---------------|-------------|-------|----|
| | Urban | | | | | | Rural | | | | | |
| | 5.0- -2.0 | 12.5- 7.5 | 30.0- 50.0 | 100- 150 | 500+ Total | Total | 5.0- -2.0 | 12.5- 7.5 | 30.0- 50.0 | 100- 150 | Total | |
| <u>Food</u> | 70 | 55 | 46 | 35 | 29 | 44 | 80 | 63 | 53 | 40 | 34 | 60 |
| Processed | 35 | 27 | 23 | 17 | 14 | 22 | 10 | 10 | 13 | 15 | 16 | 10 |
| Unprocessed | 35 | 28 | 23 | 18 | 15 | 22 | 70 | 53 | 40 | 25 | 18 | 50 |
| <u>Rent</u> | 4 | 6 | 8 | 9 | 10 | 9 | 2 | 4 | 5 | 7 | 7 | 5 |
| <u>Goods</u> | 19 | 30 | 35 | 39 | 42 | 30.5 | 16 | 27 | 34 | 42 | 43 | 27 |
| Beer and Tobacco | 2 | 4 | 4 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |
| Coca, Chicha, and Aguardiente | - | - | - | - | - | - | 8 | 7 | 5 | 3 | 2 | 5 |
| Cars | - | - | - | 5 | 15 | 10 | - | - | - | - | - | - |
| Electric appliances | - | 2 | 3 | 3 | 4 | 3 | - | - | - | - | - | - |
| Imports | 2 | 3 | 3 | 5 | 7 | 4 | - | - | 1 | 2 | 3 | 1 |
| Other: modern | 14 | 20 | 24 | 21 | 11 | 14.5 | 1 | 6 | 13 | 22 | 26 | 7 |
| : traditional | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 12 | 13 | 13 | 10 | 12 |
| <u>Services</u> | 7 | 9 | 11 | 17 | 19 | 16.5 | 2 | 6 | 8 | 11 | 16 | 8 |
| Domestic servants | - | - | - | 3 | 7 | 3 | - | - | - | 3 | 5 | 1 |
| Entertainment | 1 | 1 | 1 | 2 | 2 | 1.5 | - | - | - | - | - | - |
| Transport | 4 | 6 | 8 | 8 | 6 | 8 | 1 | 3 | 5 | 5 | 5 | 4 |
| Other: modern | 1 | 1 | 1 | 2 | 2 | 2.5 | - | - | - | - | 3 | - |
| : traditional | 1 | 1 | 1 | 2 | 2 | 1.5 | 1 | 3 | 3 | 3 | 3 | 3 |

Note

These estimates are based on results of household budget surveys for nine cities carried out by the DNEC and CEMO, on approximate cut-off income levels for some expenditures (cars, domestic servants and electric

Note (continued)

appliances), and on general knowledge concerning the differences between rural and urban consumption habits.

See text, pp. 8-9 for a list of key assumptions.

Table 4.5

Incidence of Indirect Taxes, by Type of Expenditure, 1961 and 1966
(soles figures in millions)

| Expenditure Category | 1961 | | | 1966 | | |
|---------------------------------|-------------|---------------------|-------|-------------|---------------------|--------|
| | Expenditure | Percentage Tax Rate | Taxes | Expenditure | Percentage Tax Rate | Taxes |
| 1. Personal Consumption | 38.7 | 8 | 3128 | 83.3 | 12 | 10,306 |
| 2. Food: processed | 6.9 | 4 | 270 | 14.6 | 5 | 730 |
| 3. : unprocessed | 13.0 | 1 | 130 | 22.7 | 2 | 460 |
| 4. Rent | 2.9 | 2 | 55 | 6.0 | 2 | 120 |
| 5. Beer and Tobacco | 1.3 | 42 | 550 | 2.9 | 40 | 1180 |
| 6. Coca, Chicha and Aguardiente | 0.8 | 9 | 170 | 1.5 | 13 | 200 |
| 7. Cars | 0.8 | 38 | 303 | 2.0 | 45 | 890 |
| 8. Electric appliances | 0.7 | 30 | 210 | 2.0 | 40 | 800 |
| 9. Imports | 0.6 | 30 | 180 | 3.1 | 50 | 1550 |
| 10. Other goods: modern | 4.5 | 29 | 900 | 15.0 | 30 | 3035 |
| 11. : traditional | 2.0 | 5 | 100 | 5.2 | 8 | 420 |
| 12. Domestic servants | 0.8 | 1 | 8 | 2.1 | 2 | 42 |
| 13. Entertainment | 0.3 | 15 | 46 | 0.5 | 13 | 65 |
| 14. Transport | 2.5 | 8 | 210 | 6.0 | 10 | 600 |
| 15. Other services: modern | 0.4 | 2 | 9 | 1.5 | 10 | 150 |
| 16. : traditional | 1.2 | - | - | 3.2 | 2 | 64 |
| 17. Private Investment | 10.9 | 11 | 1174 | 17.9 | 19 | 3361 |
| 18. Housing construction | 3.9 | 4 | 156 | 5.2 | 5 | 290 |
| 19. Other construction | 0.4 | 7 | 23 | .8 | 12 | 96 |
| 20. Net Machinery and equipment | 4.7 | 15 | 705 | 7.0 | 25 | 1750 |
| 21. Change in inventories | 1.9 | 15 | 285 | 4.9 | 25 | 1225 |
| 22. Exports | 15.3 | 4 | 570 | 24.3 | 2 | 600 |
| 23. Government | 2.3 | 9 | 209 | 6.3 | 10 | 642 |
| 24. Construction | 1.1 | 4 | 44 | 3.7 | 6 | 222 |

Table 4.5 (continued)

| Expenditure Category | 1961 | | 1966 | |
|------------------------------------|-------------|---------------------|-------------|---------------------|
| | Expenditure | Percentage Tax Rate | Expenditure | Percentage Tax Rate |
| 25. Machinery and equipment | 0.1 | - | .5 | - |
| 26. Consumption goods and services | 1.1 | 15 | 2.1 | 20 |
| 27. Total | | 5081 | | 14,909 |

Notes

Expenditure: Total consumption from Table 4.7. All other expenditure categories except the breakdown of personal consumption were obtained from BCR, Cuentas Nacionales. Breakdowns of personal consumption are approximations based on: (a) worksheets prepared in an attempt to build up estimate of total consumption from components (Lines 2-3, 12-15), (b) industrial production data published in Dirección de Industrias, Estadística Industrial (Lines 3, 7-8, 10) (c) import statistics published in BCR, Cuentas Nacionales, Anexo Estadístico, Tomo. II, 1970 (Lines 2-3, 7-10) (d) chapter 3 income statistics for self-employed workers and non-reporting firms (Lines 11, 12, 16). Line 20 is net of estimated depreciation on private stock of machinery and equipment, using BCR depreciation estimates. Line 9 excludes food (Lines 2-3) and medicines (Line 10), which are largely duty-exempt.

Tax Rates:

Total tax revenue on these items was obtained directly from fiscal accounts data available in BCR. Lines 2-3; though food is generally tax exempt, some indirect taxation is incurred in the importation of equipment or the purchase of taxed raw materials (e.g. packaging) or in transport and sale. Line 4: the low tax on rent consists of municipal charges and tax content of depreciation arising from taxes on construction materials.

Lines 7-10, 18-26: import duties actually paid (tariff rates less exemptions), by industrial sector, from Eduardo Seminario. Protección Efectiva a la Industria Manufacturera, 1966, mimeo, BCR, 1969. Other indirect taxes from unpublished BCR tabulations of sales and tax data for reporting firms. Lines 11 - 12, 14 - 16: traditional sector manufacturing was assumed to incur some taxation through the purchase of tools and raw materials: modern sector services pay the

Notes (continued)

13.

sales tax and some tax on equipment; tax rate on domestic servants represents tax content of payment in kind; the higher rate on transport covers taxes on fuel, and imports of equipment and spare parts.

At the outset, it was thought that an attempt could be made to trace these taxes through the productive structure to arrive at the "tax content" of each type of final expenditure. This would have involved developing a commodity flow table with the aid of a recently available input-output matrix. The attempt was given up however, because some of the key statistics -- particularly household budget data outside of Lima -- were too fuzzy to warrant a very detailed and complex processing of other statistics.

The approach adopted here instead is less detailed and hinges on the broader contrasts that exist between (a) the consumption patterns of different income groups, and of urban and rural families, and (b) the indirect tax rates on different types of goods and services. One can make approximate calculations and plausible assumptions about these major differences, without working through the cumulative addition of various import, sales, excise and other indirect taxes to each type of output. This allows one to consolidate all indirect taxes and estimate directly the total indirect tax content of each expenditure category.

The procedure consisted in the construction of two tables: Table 4.4, a matrix of consumption shares by income brackets, and by urban and rural families, and Table 4.5, a breakdown of domestic expenditure, and indirect taxes, by category of domestic expenditure, (using the same detail for consumption categories as in Table 4.4). Table 4.5, which was calculated for only one year, 1961, was considered representative of consumption patterns throughout the period. Table 4.5 yielded tax rates, or the "tax content" of each item of expenditure. It was estimated for 1961, 1966, and 1969 using national accounts, and a variety of other statistical sources, such as fiscal, import and manufacturing data. Multiplying the tax rates on consumption expenditure by the consumption shares yielded the amount of indirect taxes paid on consumption by income level.

The key features of Table 4.4 are that:

- (i) non-food expenditures, as a proportion of total expenditure, rise with income;
- (ii) low-income rural families obtain most of their non-food goods and services from local, small-scale producers who pay few indirect taxes; (some tax enters most local products e.g. smalltown tailors use factory cloth, or a local barber uses imported, duty-paying clippers, but small shops generally escape the sales tax on their own sales, and a larger proportion of their raw materials are local, non-taxed products;)
- (iii) cars and electrical appliances are bought by urban consumers only;
- (iv) consumption of imported consumer goods (excluding food) is highly income-elastic; and
- (v) at given income levels, consumption of beer and tobacco is higher in cities and towns than in the countryside (though rural families consume more aguardiente), and further, that over most income levels expenditure on these items is a constant fraction of income; in fact, the fraction may fall as income rises, but this error is offset by not allowing for higher tax rates on "quality" cigarettes and alcohol.

Table 4.5 shows the expenditure categories used to allocate indirect taxes, and explains the sources for each allocation. In some cases, such as alcohol and entertainment, the indirect tax burden was obtained directly from fiscal statistics. In others, tax rates were estimated from various sources; these estimates could be checked because they were constrained to yield the known total of indirect tax revenues. The "tax content" of different

expenditure categories is markedly different. In 1966, some 61% of all indirect taxes on consumption was collected on sales of imported and domestic factory-produced manufactures, though these goods amounted to only 18% of total consumption expenditures.

It is important to note that some indirect taxes were allocated to non-consumption expenditures. A small amount, for instance, is paid by government itself on its purchases of both consumption and investment goods. These were excluded from the incidence analysis. Some indirect taxes, such as import duties on imported machinery, are paid by export industries; like the export levies that were identified above these indirect taxes were allocated to profits. Following the same procedure, 75% was allocated to remitted profits, and was therefore excluded from the incidence estimates.

Finally, some indirect taxes are borne by investors. Taxes on current purchases of investment goods can only be shifted forward to consumers gradually, in proportion to annual depreciation allowances against the cost, including taxes, of those purchases. Since net investment is usually positive, and since tax rates on investment goods (particularly import duties) have risen over time in Peru, investors in most years pay more indirect tax than they shift forward through depreciation allowances. Taxes on net investment were allocated according to property income.

Tax Incidence in 1969

The degree of progression of the Peruvian tax system in 1969, as shown in Table 4.2, is strong evidence against the supposition that a reliance on indirect taxes implies regressivity. The tax burden rises from 5.2% for the poorest quartile to 23.0% for the top quartile; it also rises within the top

quartile, from 17.5% for the lower 15% to 26.2% for the richest 1%. The tax burden for the top 1% is thus five times larger than that of the poorest quartile.

If one distinguishes modern and traditional sectors, there is also significant progression, from a rate of 4.5% on the rural subsistence population to 24.0% on the modern sector.^{1/}

The progression is greater than that found in recent studies on Colombia^{2/} and Brazil,^{3/} (Table 4.2), and in the earlier study on several Latin American countries by Musgrave.^{4/} Sahota's Brazilian data shows more progression than the others; tax rates rise from the first to the third quartiles. The lack of progression between the third and fourth quartiles in Sahota's data is directly attributable to the exclusion of much profit taxation by the questionable allocation of coffee taxes to foreigners, and by the use of personal rather than national income, thereby leaving corporate profit taxes out of the incidence data. Upper percentile tax rates were also lowered by assuming high rates of tax avoidance and evasion.

The relative neutrality of Colombia's tax system on the other hand, hinges on some highly speculative assumptions in McLure's procedure: first, that

^{1/} Table 4.6

^{2/} Charles McLure, The Incidence of Taxation in Colombia. Paper No. 14, Program of Development Studies, Rice University, 1971, pp. 22 and 32.

^{3/} Gian Sahota, The Distribution of the Tax Burden in Brazil, mimeo, 1968.

^{4/} Richard Musgrave op. cit. p. 63.

| Taxes, by Modern and Traditional Sectors | | | | | | | | | |
|--|-------|--------|---------------|-------|--------|---------------|-------|--------|---------------|
| (millions of soles) | | | | | | | | | |
| Sectors | 1961 | | | 1966 | | | 1969 | | |
| | Taxes | Income | % Tax Rate | Taxes | Income | % Tax Rate | Taxes | Income | % Tax Rate |
| Modern | 5338 | 27884 | 19.1 | 14835 | 61987 | 23.9 | 21910 | 91059 | 24.0 |
| Urban Traditional | 947 | 9205 | 10.2 | 3875 | 20810 | 18.6 | 6277 | 30570 | 20.5 |
| Rural Commercial | 822 | 11909 | 6.9 | 1858 | 19403 | 9.6 | 2520 | 25074 | 10.1 |
| Rural Subsistence | 61 | 1534 | 3.9 | 109 | 2614 | 4.2 | 258 | 5708 | 4.5 |
| Total | 7168 | 50532 | 14.1 | 20677 | 104814 | 19.7 | 30965 | 152484 | 20.3 |

Notes

1. Sectors are defined in Table 3.4.
2. The allocation of taxes by sector is based on the following assumptions:
 - (a) Profits, personal income, (Cols (1) + (3), Table 4.8), and government pension fund tax are all modern sector; 4.10
 - (b) Other payroll taxes are paid by 100% of modern sector employees in all years, by 5% of urban traditional and rural commercial employees in 1961 and by 10% of latter two sector employees in 1966 and 1969;
 - (c) Rental income taxes paid according to rental income in each sector;
 - (d) Indirect taxes on investment paid according to savings;
 - (e) Indirect taxes on urban consumption allocated according to tax rates by income bracket (Table 4.8) and sectoral income in each bracket.
3. Tax revenue totals from Tables 4.8-4.10.

absolute expenditure on alcohol and tobacco is almost constant at all income levels ^{1/} (along with an implicit assumption that the tax content of a poor man's bundle of alcohol and tobacco products equals that of the rich man); since the poor are mostly rural, the former assumption implied that rural per capita consumption of tobacco and taxed alcohol products (chiefly beer) equals that in urban areas; second, that the poorer 90% of the population dissaves as a whole - the bottom 50% dissaves at a rate of about 24% of their income - implying very considerable financial transfers and debt accumulation^{2/}, and third, that the rich, who save some 20-30% of their income, incur no taxation on their investment expenditure. Furthermore, the Colombian data implicitly assume a high degree of commercial integration of the rural sector, since the tax content of non-food expenditures by the rural poor is assumed equal to that of the urban population i.e. either the rural poor buy mostly factory-made and imported goods, or their local artisans pay the same taxes as factories. More evidence on these assumptions appears to be necessary before one can conclude that Peru's tax system is markedly different from others in Latin America.

Much of the progressivity in Peru's tax system is evidently built into the structure of indirect taxes. The exemption of food from most indirect taxation (some creeps into via processing and marketing) excludes about one-third

^{1/} His figures reveal an implicit income elasticity of demand of about 0.1. From McLure, op. cit., p. 29.

^{2/} This assumption appears to be based on urban household survey data (McLure, op. cit., p. 23); the saving behavior of urban poor however, is not likely to be representative of that of rural poor; and the short reference period typical in household surveys exaggerates saving and dissaving rates at income extremes.

of the budget of upper decile families from indirect taxation, but about two-thirds in the first quartile families. The rate structure is also progressive, particularly in the case of imports, or goods produced with a high imported raw material content. "Luxury" goods such as cars, electrical appliances and imported brands of some goods have much higher tax content than clothing or low income housing. Better quality cigarettes and tobacco pay higher rates. And though the tax rate on aguardiente is high, the total yield from this tax is small in relation to total rural income,^{1/} implying either low average propensity to consume, or considerable evasion of the tax.^{2/}

Another source of progressivity is the limited "reach" of much taxation: small-scale and subsistence production is largely outside the administrative domain of the tax system. The rural and small town population in particular (i.e. about half the total population) can supply a substantial proportion of its nonfood expenditure from nontaxed local artisanal or service output. A large share of all indirect taxes on consumption is concentrated on imported and factory-made goods. The "economic integration" of the countryside, meaning a penetration by such factory-made, tax-bearing goods, is thus a major vehicle for raising the tax burden of groups at the base of the income pyramid. Farmworkers in Coastal valleys for instance, who live in a largely cash economy, and depend on city products to a much greater extent than do Sierra rural farmers, have a correspondingly higher tax burden in each income bracket.

^{1/} Under 1%. See Table 4.5.

^{2/} The revenue from the equally regressive tax on coca is even less significant: in 1969 it was 30 million soles, or 0.5% of rural subsistence sector income; in 1968 it was only 17 million.

The rising tax burden curve tends to flatten out at the upper end of the distribution. Before the 1968 tax reforms, tax rates within the top decile did not differ significantly, and even after 1968, the difference in rates is mild in contrast to the great absolute jumps between the wages of skilled factory workers and government clerks for instance, and the incomes of top professionals and property owners. Equal (or almost equal) treatment of these classes -- though both belong in the top decile -- may well be the "regressivity" noted by many commentators. Since indirect taxes are too clumsy to differentiate strongly at these income levels, the absence of stronger progression is attributable to very low property taxes, and to the exceptionally high exemption levels and moderate ceiling rates of the personal income tax.

The evolution of tax incidence during the Belaunde period

One of the redistributive planks in Belaunde's program was tax reform, understood principally as a substitution of consumption taxes by taxes on income. This objective however, was hemmed in from the start by powerful constraints: Congressional opposition, the promotional approach chosen to stimulate industrial investment and decentralization, the priority given to financing a higher level of public expenditure, the willingness to accept a cost squeeze on export/ ^{profits} rather than devalue (which amounted to another form of redistributive policy), and finally the unconscious class bias of government officials. It was in short, a case of a willing spirit but weak flesh belieing the professions of faith and it is not suprising, therefore, that the tax structure of 1969 could be considered more regressive (or less progressive) than that of 1961.

The changes in tax incidence by percentiles between 1961 and 1969 may be seen in Table 4.2. All groups suffered an increase in their tax burdens, but

the increments were greatest for the middle groups - 59% for the second quartile, 88% for the third, and 60% for everyone in the upper quartile except the richest 1%. The smallest increase, 11%, was that for the richest 1%, while taxes on the "middle class", defined as the 95th to 99th percentiles, rose only 34%. A happier result however, was the moderate increase of 33% in the tax burden on the poorest quartile, though this figure may be slightly understated since no allowance was made for any shift in the consumption propensities of this group towards city goods. In sum, these various changes are not unambiguous, but they clearly do not add up to a redistributive tax reform.

A clearer understanding of tax history under Belaunde can be gained by an account of the history of tax legislation over this period. The story has two well-defined stages, corresponding to two bursts of fiscal legislation, one at the very start, and another at the very end of the Belaunde regime.

The first stage was primarily an attempt to provide development finance. Between January 1963 and August 1964 the general sales tax rate doubled, rising from 2.5 to 5.0%, and import duties, as a percentage of import value, rose by over 50%. The sales tax was part of a package of seven new tax bills, presented to Congress in August 1963, and enacted the following November. The other measures included a tax on fishmeal exports, and higher rates on profits and dividends, but their effects were swamped by the growth of import and sales tax collections. Moreover, the stage of "tax exemptions" began in earnest in 1964: the additional levy on fishmeal was rescinded, several promotional measures, granting tax exemptions for industrial reinvestment and for regional diversification, were passed, the exemption levels for the personal income tax were raised and the schedular 5% tax on wage and salary income over

30,000 soles (about \$1000) was replaced by a more regressive 1% tax on wage and salary income over 2,400 soles (about \$85). The net effect of all these measures was a substantial increase in the tax burden of middle groups. In 1965, profits tax collections, in real terms^{1/} were almost 10% lower than in 1962, whereas import duties had risen by 81%, and sales taxes by 69%.^{2/}

After 1964 there was considerable reluctance to press for new tax legislation. A government proposal to lift import duties, raise income tax rates, introduce a real estate tax, and apply a levy on the share capital of enterprises was successively voted down by Congress in 1966 and 1967, despite the growing fiscal deficits. The Congress moreover, began to capitalize on an aroused public sensitivity to the issue. In 1966, Enrique Chirinos Soto, a journalist for the conservative newspaper La Prensa, ran for a congressional seat on a one-plank platform -- "no more taxes" -- and won. The Belaunde government did not press the issue.

The severity of the 1967-68 economic crisis eventually swamped political reluctance and brought on the second stage of fiscal legislation. In April 1967, the most politically acceptable of the government proposals -- a new increase in import duties -- was accepted by Congress. This measure offered not only the path of least political resistance (there is something unpatriotic about attacking a law that "protects national industry," and "defends the balance of payments,") it also promised a more immediate and larger

^{1/} Deflated by the GNP implicit deflator, obtained from BCR, Cuentas Nacionales del Peru 1960-1969, Table 9.

^{2/} Ibid., Table 12.

revenue yield than the total yield from the income and property tax proposals. Also, changes in import duties are less visible to the general public, and can be disguised, as they were in 1964, as an "administrative updating"^{1/} of import categories. Finally, the executive had the power to grant selective tariff exemptions with which it could de-fuse particularly severe sources of opposition to the tariff increases.

The crisis brought on by the devaluation of August 1967 however, forced the acceptance of additional taxes. The specific taxes chosen--import duties and a mix of property and income taxes -- were more the product of immediate fiscal and political opportunity than of established policy guidelines. Thus, the devaluation itself opened up some new tax possibilities. The most obvious and politically attractive was the windfall gain of exporters. A 10% ad valorem levy on exports was introduced in November of that year. Also, it became possible to tax the increases in corporate property after allowing revaluation of book values to reflect the new exchange rate. On the other hand, the critical state of the balance of payments made an even further rise in import taxes seem desirable and politically acceptable. Import duties were therefore raised, first, by imposing a 10% surcharge on the sale of foreign exchange for imports,^{2/} and second by temporarily suspending some of the tariff exemptions granted to manufacturers and other producers under various promotional investment laws.^{3/}

^{1/} The term used was "actualización."

^{2/} Imports of food, medicine, and paper were exempted.

^{3/} See BCR, Resena Nos. 20-22 for ^{an} account of 1967-1968 tax legislation.

These measures however, fell short of closing the fiscal deficit, and therefore of making possible a stabilization of the exchange rate. In June of 1968 therefore, Congress chose a face-saving way to authorize new taxes: it delegated its legislative power to the Executive for a period of sixty days. During those two months the Minister of Finance, Manuel Ulloa, generated an almost uninterrupted stream of fiscal and financial legislation; most of the resulting revenue increase was progressive in its impact.

The principal direct tax changes introduced by Ulloa were: (a) higher rates for most brackets of the personal income tax (though exemption levels were not lowered), (b) higher rates on both interest income and profits, (c) a new real estate tax and (d) a tax on corporate net worth. An administrative reform of income tax legislation, which created a unified income-reporting system in place of a schedular system (different types of income were reported separately and taxed at different rates) and eliminated bearer shares, improved the control of tax evasion. The largest source of new revenue however, was an increase in the gasoline excise tax. Though this was attacked as a "regressive" tax (and later reduced by the Velasco government) it is in fact relatively progressive since about a third of the revenue comes from private car owners, who belong in the upper 5% of the income distribution. Much of the rest taxes middle strata in towns and cities, who are the principal customers for taxis and "colectivos" (cars used as buses). Most bus transport now uses diesel, or gasoline with the lowest octane rating and lowest tax rate. Low octane gasoline is also standard consumption in the Sierra since altitude lowers the required octane rating. The tax paid on gasoline consumption by trucks is spread out very thinly over a majority of the population. The other major

tax change was an increase in the excises on alcohol, soft drinks and tobacco. Since the gasoline plus income and property taxes accounted for 75% of the projected revenues from new taxes, Ulloa's fiscal measures should have improved the distribution of the overall tax burden.

Why did Ulloa choose relatively progressive taxes? In part, these were measures that had been on the books since the start of Belaunde's term, but always vetoed by Congress. There was also some pressure for these taxes from aid-giving institutions. An important factor however, was fiscal opportunity. By June of 1968, the standard sources for indirect taxes appeared to be saturated. The recent tariff increases seemed to have passed the optimum revenue point. The combined effect of sharp cost of living increases and recession suggested that public tolerance of a higher sales tax would be minimal. A new sales tax also conflicted with the price stabilization program. On the other hand, both real estate and gasoline consumption were felt to be relatively "under-taxed" in Peru.

The incidence statistics of Table 4.2 show small increases in the tax burdens of the top percentiles / between 1966 and 1969. For the richest 1%, it rose from 25.4% to 26.2%. The increase in tax rates on the rich however, was clearly greater than that shown by their tax burden. One reason for this discrepancy is the very low level of private net investment in 1969: by saving and not investing the rich avoided taxes normally paid on investment goods. The year 1969 therefore underestimates the full progressive impact of the 1968 measures since return to normal investment levels would raise the tax burden on top percentiles further, though the total increase would nevertheless be moderate.

Other statistics bear this out: the profits tax rose from 16.0% of total revenues in 1966, to 21.7% in 1969; and as a percentage of profits, they rose from

17.4% to 26.6% over the same period. On the other hand, both these ratios were lower in 1969 than in 1963; in fact, they were below the average level for the 1950-1959 decade. This suggests that the progressive effect of the 1968 measures did not fully compensate for the erosion of the tax burden on the top deciles that occurred between 1962 and 1968.

The combined effect of tax policy under Belaunde was not an improvement in the pattern of incidence. The study of specific tax measures during the period suggests that the desire for greater equity was an always present factor acting on tax policy, but that the decisions taken were the resultants of various other forces, at times coincident with the desire for equity but more often tending towards a less progressive pattern of incidence.

The evolution of tax incidence under Velasco

The military government, like that of Belaunde, has repeatedly stated its determination to correct the "regressive" pattern of taxation. According to a 1970 Planning document the tax structure then "showed a high degree of evasion and regressivity..."^{1/} This rather harsh judgment underlies the continued insistence on tax reform. Though it is too early to make a calculation of incidence comparable to those for 1961 and 1966, one can deduce the direction and degree of change from the specific tax measures of the military government.

A large volume of legislation bearing on taxes has appeared since 1969. Much has come out as part of comprehensive laws regulating one or another sector of the economy. The fiscal content of these laws has generally been promotional.

^{1/} Instituto Nacional de Planificación, Lineamientos Basicos de Política de Desarrollo a Mediano Plazo, 1970 p. 79.

The specific tax measures can be characterized as being a mixed batch of minor adjustments, with a probable net regressive effect on the pattern of incidence.

In a first category, consisting of the more obviously progressive fiscal legislation, was a higher ceiling on the personal income tax, which rose from 42% to 55% for income over five million soles. Most income over one million soles however, is dividend income, which is taxed separately at a maximum rate of 35%. The more relevant changes were therefore those in the upper "middle class" brackets: thus the marginal tax rate on income between 700,000 - 1,000,000 soles (\$15,000 - 22,000 in 1971) rose from 38% to 45%. A second progressive modification was an increase in the ceiling rate on profits, from 35% to 45% and 55% on profits over 50 million and 1000 million soles respectively.

The handful of firms earning profits over 50 million soles however, are mostly foreign. This change thereby raised taxes on remitted profits, but barely affected the distribution of taxes on national income. A third measure, consisting of a 10% tax on foreign travel expenses, was clearly progressive. Yet, it is revealing of the political sensitivity of this government to "middle class" opinion that the Minister of Finance found it convenient to defend this measure by announcing that all revenue from the travel tax was to be earmarked for slum projects, contradicting his previous denunciations of earmarking, and his energetic effort to consolidate all government revenues.

Another decree raised excise taxes on a list of luxury goods. Like the travel tax, this measure seems to have been motivated primarily by concern for the balance of payments, and, to some extent, by an attempt at distributive window-dressing: the list consists largely of imported goods (e.g. jewelry, perfumes, furs, photographic equipment). Since the thin market for these

these goods is to a ^{large} / extent supplied by returning travellers, and by the duty-free imports of diplomats and others, the additional revenue produced by this measure is probably minimal.

The final case of direct tax legislation was the imposition of an export tax on fishmeal, early in 1970, with a sizeable expected yield in the order of 600 million soles. Early in 1972 however, one of the recurring "crises" in the cyclical fishmeal industry led the government to rescind the tax, and moreover, to grant generous financial assistance to producers. Behind this retraction lay another policy constraint: the determination to avoid a devaluation, even at the cost of overvaluation and thus, of a squeeze on taxable export earnings. Here, the military government was following a well-trodden path of the Belaunde years.

In sum, the category of progressive tax changes since 1969 is not large and has added little to the total tax burden of the rich.

A second category of measures consists of changes in indirect taxes that would tend to raise the tax burden on middle groups and on the poor. These include higher excises on alcohol and tobacco. Thus, what is perhaps the most regressive of all taxes - the excise on aguardiente - was raised by 38%. The concern for fiscal equity may have been overridden in this case by a moralistic desire to reduce consumption of this product.

On the other hand, two progressive indirect taxes - that on gasoline, and tariffs on car parts for local assembly --- were reduced.^{1/} The latter was

^{1/} One may plead ignorance in defence of the gasoline tax reduction, since it is a firm conviction of most officials that this tax is regressive. (It was argued above, p. 15, that this is not the case). A second defence is the political motive - the reduction occurred shortly after the coup and was a useful political gesture announcing repudiation of Ulloa's policies.

especially revealing of what could be called the middle-class bias of government officials, a bias rooted more in a failure of perception than in insincerity. During 1969, the Minister of Industry announced plans for the assembly of an inexpensive "auto popular."^{1/} The very low price was to be made possible by minimizing both tariffs and local content requirements! Early in 1972, the total exoneration of tariffs on the "people's car" was reconsidered, and raised to 17.5%, but, at the same time, tariffs on most other cars were reduced.^{2/}

A third category of fiscal legislation - that contained in sectoral laws such as the Ley de Industrias, Ley de Pesquerias etc., - has granted profits and other tax exemptions to investors. Though the exact effect of these promotional measures is hard to predict, since the laws allow considerable administrative leeway in determining the amount of tax exemption granted to each investor, two general statements can be made concerning that legislation. First, it opens the door to a very favorable treatment of high incomes: if the laws are successful, and generate much reinvestment of profits, the tax rate on the rich could fall below that on middle income groups. Most industrial firms, for instance, are allowed to reinvest between 47% and 62% of profits free of profits tax.^{3/} Additional tax deductions can be earned by

^{1/} "Popular," which is often used as a synonym for "cheap," suggests products accessible to the masses.

^{2/} For the lower-priced cars--V.W. and Datsun -- tariffs on components fell from 25% to 7.5%. For the middle price range (Toyota and Hillman) they fell from 55% to 45%.

^{3/} Decreto Ley No. 18350 (Jan. 1971) Art. 17.

placing the non-reinvested funds in some types of bonds,^{1/} or investing them in some other priority areas, such as new mining or tourism enterprises. Second, the heavily bureaucratic approach of these tax-incentive laws has a built-in regressive nature in that only large or modern sector firms will normally be capable of surviving the required bureaucratic obstacle race.^{2/}

The statistical effects of fiscal legislation under the Velasco government cannot, as yet, be added up. One figure which may be indicative of broad trends is the ratio of income taxes to total revenues, (Table 4.1), which shows no significant change since 1969.^{3/} The preceding appraisal of fiscal legislation since 1969 however, suggests that the distribution of the tax burden has not improved, and may even have become less equitable. The results, in fact, appear to be quite similar to the trend in incidence under Belaunde: more of the burden has been shifted on to middle groups -- ranging roughly from the second quartile up to the 90th percentile. Yet the

^{1/}The purchase of COFIDE (Corporación Financiera de Desarrollo Economico: a government investment bank) bonds, up to 200,000 soles, can be deducted from taxable income.

^{2/}A request for tax-exempt reinvestment permission must include: (a) a general statement of purpose, (b) an explanation of when and how it will be financed, (c) short run and/or medium run investment programs, (d) an economic and technical feasibility study, (e) an engineering plan, (where relevant), (f) an itemized purchasing program of domestic goods and imports, and (g) a production program with details on the technology to be used. The preparation of this material normally requires professional assistance. All this documentation must then be nursed through the bureaucracy. In a highly administered or bureaucratic society, (particularly one with a dualistic economy), administrative costs thus become a prohibitive two-way barrier: the government cannot afford to tax or control the small entrepreneur, who, in turn, cannot afford to obtain governmental privileges.

^{3/}This statistic is not strictly comparable to the 'income taxes' shown in Tables 4.8-4.10; e.g. it fails to include 'indirect' taxes on the export sector.

redistributive leanings of the military government are at least as pronounced as those of Belaunde, and no congressional opposition has been present to veto progressive tax legislation. In a government that seems to have the will, and the power, to reform everything in sight, why has there been no tax reform?

Two kinds of answer may be given to this question: one is technical, the other political. The technical answer is that taxation is an overdetermined policy instrument; it can be used to do too many things. So, in practice, taxes are applied to whatever economic problem is uppermost at the moment.

Since the 1968 coup, the military government has used taxation to deal with several pressing economic problems. To strengthen the balance of payments it raised taxes on imported luxury goods and imposed a travel tax on the one hand, but also granted tax rebates to exporters of non-traditional goods and gave generous income tax exemption to investors in tourist facilities. To stimulate business activity, it exempted housing costing less than 700,000 soles from all taxes on construction activity and from the rental income and real estate taxes for a period of ten years,^{1/} thereby undermining one of the most hard-won progressive taxes of the Ulloa reforms - the real estate tax. And to promote growth, it offered a generously low tax burden to capitalists willing to accumulate and accumulate.

From 1969 to early 1972, the government was not faced with a problem of fiscal need. Need was greatest perhaps, just after the coup in 1968, but the then recent saturation of the economy with new taxes, as well as a desire to differentiate their political product, constrained the government from

^{1/} Houses costing under 500,000 soles were exempted from rental income and real estate taxes for a period of 30 years.

creating additional taxes through 1969. And 1970 was a year of fiscal windfall made possible by the partial recovery of business activity and an export boom, along with an administrative lag in spending programs. Revenues grew little in 1971, but the need to raise taxes was checked because public investment programs were still lagging, and because the government was able to siphon off a large volume of idle private savings: business recovery and the export boom generated more profits than the public was willing to invest in a still unsettled political atmosphere. But the period of relative lack of fiscal pressure seems to have ended in 1972.

It is entirely possible, therefore, that the military government will shortly begin to use tax increases to fulfill its spending plans, much as Belaunde did in 1963-1964.^{1/} If so, it is very probable that the type of taxes chosen will be largely determined by short run revenue potential, whether this goal conflicts or coincides with that of equity. The government could justify new regressive taxes/arguing that it is redistributing incomes in other, more efficient ways.

One may prefer however, a more straightforward, and political explanation of the lack of tax reform. The principal taxes that have been under consideration as part of a possible tax reform are those on personal income and real estate. But any significant changes in either would bite deeply into the "middle class." One of the most visible gaps in the current income tax, for instance, is the exemption of a large part of the earnings of government officials.

^{1/} For the first time since 1968, the government has publicly admitted that it is considering new taxes.

The proposed tax reform would close this gap. Also, real estate makes up a large part, if not most, of "middle class" wealth. It is significant in this respect, that another "reform" that was never carried out was the "reforma urbana", which proposed the forced sale of most rental housing to tenants.

The above-mentioned tax reform proposal was discussed but rejected by the Cabinet at the time of the 1970 budget debate. The reappearance of a fiscal deficit in 1972 has brought the proposal back. Certainly the political problems that would be created for the government by an economic crisis could make a higher tax burden the lesser evil. But if the government's effective constituency is essentially the "middle class" (including of course the rest of the military), then it may not be easy to make an enlightened decision between the lesser of two evils, since one of the evils - the possible loss of power - would loom large for only part of the "middle class".

The technical and the political answers suggested above may of course co-exist. Both add to an understanding of the apparent dilemma posed by the absence of tax reform under the Velasco government, though applying different weights to each can lead to different predictions of how the military government would react to a fiscal crisis.

Conclusion

The two questions raised at the beginning of this chapter - how is the tax burden distributed, and how was it modified under the Belaunde and Velasco governments - both gave rise to surprising answers. The tax burden, throughout the period between 1961 and 1972, has been distributed much more progressively than was commonly believed. On the other hand, the strong redistributive intent of the Belaunde and Velasco governments has done nothing to improve that distribution and it could be argued that both have contributed to a slight worsening by raising taxes most on middle groups and least on the

very rich. This conclusion has a paradoxical corollary. The significant degree of progression found here necessarily dates from the more conservative governments of the fifties or earlier. This paradox was pointed out earlier by Hunt, who noted that "tendencies toward regression in the last twenty years represent a backsliding from a longer-term trend toward somewhat greater progression in the tax system."^{1/} His explanation is on the lines of the political answer given above: "...legislative attacks on the rich hit even more effectively at the salaried middle classes, the group that now challenges the oligarchy's traditional power most seriously. For this reason, in Peru as in so many other countries, the use of taxation as an instrument for achieving distributive equity has ground to a halt."^{2/}

^{1/} Shane Hunt op. cit., pp. 407-408.

^{2/} Ibid, p. 409.

Table 4.7

National Income, Disposable Income, and Personal Consumption by Size Income, 1966
(millions of 1966 dollars)

| Income Class ('000 1966 dollars) | National Income (1) | Disposable Income (2) | Personal Savings (3) | Personal Consumption | | |
|-------------------------------------|---------------------------|-----------------------------|----------------------------|----------------------|--------------|--------------|
| | | | | Total (4) | Urban (5) | Rural (6) |
| - 4.0 | 1797 | 1797 | | 1797 | 245 | 1552 |
| 4.1 - 6.0 | 1451 | 1451 | | 1451 | 203 | 1248 |
| 6.1 - 9.0 | 2794 | 2792 | | 2792 | 616 | 2176 |
| 9.1 - 12.0 | 4017 | 4011 | | 4011 | 2142 | 1869 |
| 12.1 - 15.0 | 2815 | 2691 | | 2691 | 1192 | 1499 |
| 15.1 - 20.0 | 6473 | 6162 | | 6162 | 4342 | 1820 |
| 20.1 - 25.0 | 7213 | 6902 | 345 | 6557 | 4590 | 1966 |
| 25.1 - 30.0 | 5197 | 4859 | 243 | 4616 | 3623 | 992 |
| 30.1 - 40.0 | 10641 | 9973 | 499 | 9474 | 6914 | 2560 |
| 40.1 - 50.0 | 9595 | 8987 | 449 | 8538 | 6186 | 2352 |
| 50.1 - 70.0 | 9189 | 8459 | 423 | 8036 | 6326 | 1710 |
| 70.1 - 100.0 | 6961 | 6155 | 616 | 5539 | 5004 | 535 |
| 100.1 - 150.0 | 6116 | 5393 | 539 | 4854 | 4214 | 640 |
| 150.1 + | 29613 | 27943 | 11177 | 16766 | 16766 | - |
| TOTAL | 103672 | 97575 | 14291 | 83284 | 62363 | 20380 |

Notes

Col. (1) From Table 1 . Total is 8% less than BCR national accounts estimate of national income as explained in R. Webb, op. cit., p. 7.

Col. (2) Equals Col. (1) less non-rental income taxes (sum of Cols. (1) - (3), Table 4.9.)

Notes (continued)

- Col. (3) Total personal savings from BCR Cuentas Nacionales, Table 5, sum of "personal saving" and "undistributed profits." Allocation by size income assumes (a) highest saving rates are in top brackets, (b) only upper one-third of income distribution has positive savings, and (c) no dissaving.
- Some authors [c.f. McLure op. cit., p. 23; S. Swamy, and E. Mueller and J. Sarma "Comments" to Qjha and Bhatt, AER Vol. LV, No. 5 (Dec. 1965) pp. 1173-1188.] assume high rates of dissaving at lower income levels. The only evidence cited however, consists of urban, cross-section surveys which are biased by (a) observational errors, (b) the greater short-period variability of income than of consumption, and (c) the special circumstances of the urban poor, particularly migrants seeking jobs, that make dissaving more likely than amongst the urban poor. Further, the frequency of indebtedness amongst the rural poor is not strong evidence of net dissaving in the lower income groups as a whole (i.e. the poorer 50% of the population), since (i) debt may persist with little net change from year to year, and (ii) rural creditors are commonly villagers with very low absolute incomes.
- Col. (4) Col. (2) less Col. (3).
- Cols. (5) and (6) Urban and rural income from income distribution worksheets (chapter 3). All income taxes were allocated to urban income (though a small amount of payroll and rental income taxes are rural). Saving rates were assumed equal, within each income bracket, in rural and urban groups.

Table 4.8

| Income Level ('000 soles) | Taxes, by Size Income and Type Tax, 1961 (millions of soles) | | | | | | | | | | |
|------------------------------|---|--------------------------------|-----------------|-------------|--------------|--------------------|-------------------------------------|--------------|--------------|--------------------------------------|------------------|
| | Profits (1) | Income Taxes Payroll (2) | Personal (3) | Rent (4) | Total (5) | Consumption (6) | Indirect Taxes Investment (7) | Total (8) | Taxes (9) | Total National Tax Income (10) | Rate (%) (11) |
| - 2.0 | | | | 3 | 3 | 20 | | 20 | 23 | 643 | 3.6 |
| 2.1 - 3.0 | | | 4 | 4 | 4 | 26 | | 26 | 30 | 751 | 4.0 |
| 3.1 - 5.0 | | 1 | 9 | 10 | 10 | 74 | | 74 | 84 | 1772 | 4.7 |
| 5.1 - 7.5 | | 9 | 17 | 26 | 26 | 166 | | 166 | 192 | 2984 | 6.4 |
| 7.6 - 10.0 | | 24 | 20 | 44 | 44 | 178 | | 178 | 222 | 2891 | 7.7 |
| 10.1 - 12.5 | | 36 | 19 | 55 | 55 | 171 | | 171 | 226 | 2784 | 8.1 |
| 12.6 - 15.0 | | 62 | 18 | 80 | 80 | 175 | | 175 | 255 | 2567 | 9.9 |
| 15.1 - 20.0 | | 145 | 31 | 176 | 176 | 314 | | 314 | 490 | 4431 | 11.1 |
| 20.1 - 30.0 | | 272 | 54 | 326 | 326 | 542 | | 542 | 868 | 7291 | 11.9 |
| 30.1 - 50.0 | 8 | 275 | 82 | 365 | 365 | 515 | 10 | 525 | 390 | 6064 | 14.7 |
| 50.1 - 70.0 | 16 | 84 | 48 | 148 | 148 | 192 | 20 | 212 | 360 | 2098 | 17.2 |
| 70.1 - 100.0 | 24 | 80 | 34 | 183 | 183 | 178 | 31 | 209 | 392 | 1830 | 21.4 |
| 100.1 - 150.0 | 16 | 60 | 90 | 197 | 197 | 105 | 20 | 125 | 322 | 1202 | 26.8 |
| 150.1 + | 846 | 102 | 121 | 89 | 1158 | 576 | 1079 | 1655 | 2813 | 11979 | 23.4 |
| TOTAL | 910 | 1150 | 245 | 470 | 2775 | 3233 | 1160 | 4392 | 7167 | 49237 | 14.5 |

Notes

Col. (1) Total from Table 4.3. It was assumed that most was earned within the top income bracket, though token amounts were allocated to income classes under 150,000 soles.

Col. (2) Consists of social security contributions, government employees pension fund, and stamp tax on payroll. Allocated according to wage and salary income. Source: BCR.

Notes (continued)

- Col. (3) Consists of the personal income, inheritance and "foreigners' taxes. Exemption level of personal income tax was used to fix floor in allocating by size income. Source: BCR.
- Col. (4) Consists of taxes on rental income, real estate property value, capital gains in sale of real estate, plus all municipal "direct" taxes, (since most are based on property values) and some "indirect" taxes incurred by consumer expenditure on rent. Source: BCR. Allocation, according to rental income, probably overestimates tax on lower percentiles who escape most real estate taxation.
- Cols. (6)-(7) See text pp. 6-8 and Tables 4.5 and 4.4 for coverage and method of allocation.
- Col. (9) Sum of Cols. (1) - (4), (6), (7).
- Col. (10) From Table 3.3.
- Col. (11) $\text{Col. (9)} \div \text{Col. (10)} \times 100$.

Table 4.9

Taxes, by Size Income and Type Tax, 1966
(millions of soles)

| Income Level ('000 soles) | Profits | | Income Taxes | | Rent | Total | Indirect Taxes | | Total | Total National Tax | | | |
|------------------------------|---------|---------|--------------|-------------|------------|-------|----------------|------|-------|--------------------|--------|----------|------|
| | (1) | (2) | (3) | (4) | | | (5) | (6) | | (7) | (8) | (9) | (10) |
| | | Payroll | Personal | Consumption | Investment | | | | | Taxes | Income | Rate (%) | |
| - | 4.0 | | | | | 7 | 7 | 84 | | 84 | 91 | 1797 | 5.1 |
| 4.1 - | 6.0 | | | | | 6 | 6 | 83 | | 83 | 89 | 1451 | 6.1 |
| 6.1 - | 2.0 | 2 | | | | 12 | 14 | 181 | | 181 | 195 | 2794 | 7.0 |
| 9.1 - | 12.0 | 6 | | | | 18 | 24 | 358 | | 358 | 382 | 4017 | 9.5 |
| 12.1 - | 15.0 | 124 | | | | 15 | 139 | 250 | | 250 | 389 | 2315 | 13.8 |
| 15.1 - | 20.0 | 311 | | | | 34 | 345 | 649 | | 649 | 994 | 6473 | 15.4 |
| 20.1 - | 25.0 | 311 | | | | 38 | 349 | 713 | | 713 | 1062 | 7213 | 14.7 |
| 25.1 - | 30.0 | 338 | | | | 32 | 370 | 540 | | 540 | 910 | 5197 | 17.5 |
| 30.1 - | 40.0 | 668 | | | | 65 | 733 | 1087 | | 1087 | 1820 | 10641 | 17.1 |
| 40.1 - | 50.0 | 586 | | | | 59 | 667 | 975 | 100 | 1075 | 1742 | 9595 | 18.2 |
| 50.1 - | 70.0 | 630 | | | | 81 | 811 | 1030 | 100 | 1130 | 1941 | 9189 | 21.1 |
| 70.1 - | 100.0 | 566 | 40 | | | 78 | 884 | 811 | 200 | 1011 | 1895 | 6961 | 27.2 |
| 100.1 - | 150.0 | 323 | 100 | | | 58 | 781 | 662 | 300 | 962 | 1743 | 6116 | 28.5 |
| 150.0 + | | 370 | 300 | | | 179 | 1849 | 3003 | 2572 | 5575 | 7424 | 29613 | 25.1 |
| TOTAL | | 1622 | 4235 | 440 | 682 | 6979 | 10426 | 3272 | 13698 | 20677 | 103672 | 19.9 | |

Note: See notes to Table 4.8.

Table 4.10

Taxes, by Size Income and Type Tax, 1962
(millions of soles)

| Income Level ('000 soles) | Income Taxes | | Indirect Taxes | | Total (8) | Total National Tax | | | | |
|------------------------------|----------------|----------------|-----------------|-------------|--------------|--------------------|--------------------|------------------------|--------------|-------------------------|
| | Profits (1) | Payroll (2) | Personal (3) | Rent (4) | | Total (5) | Consumption (6) | Invest- ment (7) | Taxes (9) | Income Rate (%) (11) |
| - 5.9 | | 1 | | 4 | 3 | 124 | | 129 | 2638 | 4.8 |
| 6.0 - 8.8 | | 1 | | 3 | 4 | 115 | | 119 | 2130 | 5.5 |
| 8.9 - 13.0 | | 3 | | 10 | 13 | 249 | | 262 | 4102 | 6.3 |
| 13.1 - 18.0 | | 7 | | 43 | 50 | 498 | | 548 | 5897 | 9.2 |
| 18.1 - 22.0 | | 177 | | 26 | 203 | 348 | | 551 | 4132 | 13.3 |
| 22.1 - 29.0 | | 435 | | 92 | 527 | 865 | | 1392 | 9502 | 14.6 |
| 29.1 - 37.0 | | 437 | | 102 | 539 | 1010 | | 1549 | 10589 | 14.6 |
| 37.1 - 44.0 | 50 | 473 | | 96 | 569 | 763 | | 1332 | 7629 | 17.4 |
| 44.1 - 59.0 | | 927 | | 184 | 1161 | 1635 | | 2796 | 15621 | 17.8 |
| 59.1 - 73.0 | 100 | 800 | | 165 | 1065 | 1475 | 100 | 2640 | 14085 | 18.7 |
| 73.1 - 103.0 | 150 | 864 | | 240 | 1254 | 1527 | 100 | 2881 | 13489 | 21.3 |
| 103.1 - 147.0 | 188 | 771 | 38 | 281 | 1278 | 1318 | 100 | 2696 | 10219 | 26.3 |
| 147.1 - 220.0 | 300 | 435 | 50 | 273 | 1058 | 1237 | 200 | 2495 | 8978 | 27.7 |
| 220.0 + | 2200 | 495 | 150 | 610 | 3455 | 6960 | 1695 | 11575 | 43472 | 26.6 |
| TOTAL | 2938 | 5826 | 238 | 2129 | 11181 | 17583 | 2195 | 30965 | 152484 | 20.3 |

Note: See notes to Table 4.8.