

KEYWORDS

Fiscal policy
 Taxation
 Income tax
 History
 Tax revenues
 Tax reform
 Income distribution
 Public expenditures
 Uruguay

Strengthening a fiscal pillar: the Uruguayan dual income tax

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This paper presents the new system of dual taxation on income that has been introduced in Uruguay to replace the incomplete schedular system applying before. The new system strengthens a pillar of taxation defined as broadly based and capable of generating substantial and stable tax revenues in a country where 60% of fiscal income is consumed by pension and interest payments; in addition, the new system redistributes some 2.5% of total household income. The paper describes the development of the system for taxing income, focusing especially on the four changes it underwent during the twentieth century. It also compares the different models of income tax in use today: (i) the traditional synthetic model, based on the Haig-Simons definition of income; (ii) the flat rate model, derived from Hall and Rabushka's consumption tax; (iii) the Nordic dual model, which provides for separate taxation of capital income at a fixed rate and earnings at progressive rates; and (iv) the Uruguayan dual model.

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I

Introduction

Since July 2007, Uruguay has been applying a new income tax model that is dual in character. This article describes the new model, explains the need for it in Uruguay and analyses its redistributive capacity.

The subjects dealt with in the remaining sections of this article are as follows. Section II presents a brief historical review of income tax, whose structure was adapted to the political, economic and social changes of the twentieth century.¹ Section III analyses the different models of income tax currently in use: the traditional synthetic model, based on the broad Haig-Simons definition of income; the flat rate model, with its roots in the Hall-Rabushka consumption (cash

flow) tax; the Nordic dual model, which has separate taxation of capital income at a fixed rate and earned income at progressive rates; and, lastly, the “Uruguayan style” dual model, which takes this central idea of the Nordic dual model and incorporates elements of simplicity taken from the flat rate model. Section IV examines the redistributive capacity of the dual tax introduced in Uruguay. Section V, lastly, describes the pillars of taxation and analyses their potential in Latin America, concluding that there is an urgent need to renew the design of income tax, and especially its personal income component, in the interests of effective collection.

II

A brief historical review

No other tax has undergone the same degree of structural development as income tax (or more accurately, the taxation system applying to income) as it has adapted to changes in international trade and finance, different levels of economic and institutional development, political and cultural conditions, technological advances in the sphere of administration, and different fiscal policy models. This complex flexibility turned it into the largest revenue-raiser in history during the period of greatest revenue growth, the twentieth century.

Unlike value added tax (VAT), an instrument of efficient and fair trade² which was pioneered by a fledgling (continental) European community in the belief that economic integration would bring peace after a millennium of conflict, income tax was a result of war and social strain. Following its official introduction in Great Britain in 1799, for almost two centuries this tax was used as an extraordinary income source to defray the costs of war or alleviate social tensions, either directly as an instrument of income redistribution or indirectly for the financing of public expenditure at times of social upheaval. Even the most recent architectures of the late twentieth century, the dual and flat taxes, were motivated by the need to fight for savings and investment in an increasingly competitive globalized economy.

□ The authors are honorary members of the Uruguayan Tax Reform Commission and proposed the design for the “Uruguayan style” dual income tax in July 2005 in the document “Propuestas para la reforma tributaria de Uruguay 2005”. They are grateful to Vito Tanzi, Fernando Velayos, Fernando Díaz Yuberos, Martín Bes, Fernando Rezende, Ernesto Rezk, Bernal Jiménez, Peter Kalil and Luiz Villela for their valuable contributions, and to Patricia Abad for her efficient assistance. This paper does not necessarily represent the views of the Inter-American Development Bank.

¹ Section II summarizes a brief history of income tax included in Barreix and Roca (2006), annex 1.

² The idea of VAT can be traced to the papers of the German trader von Seimans in the 1920s and was applied for the first time in France, in the early post-war years. In the version of it where final consumption is used as the tax base following the destination principle, it is possible to avoid taxing investment, exporting taxes or concealing subsidies.

The other great difference from VAT, that other revenue-raising mainstay of our times, concerns simplicity of structure and objectives. In its more than seven decades of development, VAT has had to be simplified³ on a consumption and credit method basis, and while there are variations in rates and tax bases, the primary objective is still to raise revenue on an essentially neutral basis. Today more than ever, on the other hand, income tax types and rates present the most varied structures, ranging from the most complex comprehensive models to the simplest flat rate systems, with a similar diversity of tax breaks and incentives. These dissimilar formats reflect the unstable equilibrium between the goals of adequacy, efficiency and equity served by this tax.

It is for this reason that income tax was abolished and reinstated a number of times in various forms and in different countries during the nineteenth and twentieth centuries. Continuous wars to consolidate nation-States and expand empires, the pressure of political movements opposed to industrial capitalism, and social and technological change made it necessary to consolidate and renew the tax. During the twentieth century, therefore, income tax, which was the main revenue-raising resource, passed through four major reformulations.

The first was the “technical” introduction of the tax (with the progressive character and administrative form we are familiar with today) in the British budget of 1909 and in the United States federal Income Tax Act of June 1913. The second transformation was the “massification” of the tax during the Roosevelt administration, around the time of the Second World War, in parallel with the spread of democratic participation and public action through social welfare programmes. Sustained by the success of the New Deal and the reconstruction of Western Europe, and by a skewed interpretation of Keynesianism, public spending growth created a huge demand for fiscal resources. This pressure led to a spiral of increases in income tax rates, counteracted by a proliferation of exemptions and special treatment that distorted the structure of the tax. The third phase was a reaction, the

“counter-reform” of the Thatcher administration, and to an even greater degree the Reagan administration, in the 1980s, which restored the original composition of the tax by sharply reducing rates and expanding the tax base, without significantly affecting either the tax take or the factor burden. In the fourth reformulation of the early 1990s, lastly, innovations came “from the cold”: the dual model of the Nordic countries and the flat tax of the new market economies (countries of the former Soviet bloc) adapted income tax to cope with international competition for saving and investment while maintaining (in part) its progressive character.

1. The four adaptive mutations of income tax in the twentieth century

(a) *Conflicts of region, class and power: the birth of the progressive, personalized income tax*

In June 1913, when 42 states ratified the Sixteenth Amendment to the Constitution allowing the United States Congress to tax income at the federal level, the relationship between classes, between regions and between centres of authority in the country shifted. The approval of income tax marked the end of the “republican system” of taxation built up by the party Lincoln had founded. This system was based on protectionist customs tariffs favouring the industrialization of the country’s north at the expense of the south, which was where raw materials were produced. The south did not accept this, but was defeated in the Civil War.

As for class, tariffs represented a subsidy to the great industrial enterprises and a charge on farmers and consumers. In addition, large companies had integrated vertically and made technological advances, tapping a larger market than their European competitors’ and an unregulated labour supply fed by large flows of migrants; all this added up to copious profits (Brownlee, 2004; Steuerle, 2004). The “republican system” of taxation was a precursor of the import substitution model, except that the United States succeeded in consolidating a large economic space (market). Latin America, on the other hand, divided into numerous very different jurisdictions, has not succeeded in integrating even to the modest extent of creating subregional free trade areas.

On the other side of the Atlantic, industrialization brought greater democratization (influence of the House of Commons) within the peculiar British political system, leading to the overwhelming Liberal victory of 1906. Under the influence of David Lloyd George, a social reformer, old-age pensions were approved in

³ It is fair to say that VAT presents problems of (i) revenue reversal, as in the case of financial services or sales of second-hand items; (ii) administration in sectors such as real estate, agriculture and microenterprise; (iii) distribution to lower levels of government, given that it is by nature a national tax; and (iv) regressiveness, as it is a tax on consumption.

1908, and the famous 1911 budget brought in sickness and unemployment insurance of a Bismarckian hue. Politically, the influence of the House of Lords was reduced when the Liberals overcame its opposition to the income tax in the “people’s budget” of 1909.

Technically, income tax was driven throughout the twentieth century by the emergence of tax instruments (Tanzi, 2006) based on advances in other disciplines such as bookkeeping and administration. For example, advances with bookkeeping made it possible to record company revenue flows more accurately, and the appearance of large enterprises meant that deductions could be made from the incomes of a growing class of wage earners, reducing administration and compliance costs.

(b) *The new role of the State, the predominance of fiscal policy and the large-scale application of income tax*

President Franklin D. Roosevelt not only revived his country after the greatest crisis capitalism had experienced (the Great Depression) and set in train the military victory over corporative dictatorships around the world, but also expanded the goals and framework of State action, expressing them in a new social contract, the New Deal. One result was an expanded role for the State in stabilizing the economy and thus in running certain activities, and in providing benefits through a more comprehensive social security system.⁴ To these two drivers of public spending growth was added the military effort of the Second World War. To finance all this, income tax was applied on a massive scale.

Technically, Simons’ definition of economic income (consumption plus change in net wealth) prevailed from the 1930s onward, and this made it possible to establish progressivity with redistributive effects and horizontal equity.

Continually rising rates, accompanied by a shrinking of the tax base due to the introduction of tax breaks and loopholes (whose purpose was to avoid possible negative effects on saving, the labour supply and venture capital investment), were characteristic of the federal income tax during the Roosevelt administration and were to dominate the tax landscape of the developed Western economies for the next 40 years.

In summary, the (reactive) increase in fiscal revenues was once again a consequence of growing demand for public infrastructure and social services stemming from the political maturation of the industrial revolution, and of the war effort. Between 1920 and 1960, on average, fiscal pressure more than doubled in the developed countries, total public spending grew by over 50% and social spending trebled (table 1). And income tax responded once again, growing almost out of recognition but reaffirming its capacity to adapt to social changes and take advantage of technological innovation.

(c) *The “counter-reform”: a return to lower rates and a broader base*

From the immediate post-war period to the late 1970s, State activity expanded unceasingly with reconstruction in Europe and the “Great Society”⁵ project in the United States. Sustained by an exaggerated version of Keynesianism and the early growth of the planned economies, it took fiscal pressure to levels of close to 50% of gross domestic product (GDP) and upper marginal income tax rates to 90%. The reform of this tax in the United States in 1986, like the earlier reforms by the Thatcher administration in the United Kingdom, broadened tax bases and reduced tax expenditure, particularly “corporate welfare” for large enterprises, while at the same time lowering rates in what constituted a return of income tax to its roots.

One of the most important reasons for reducing very high tax rates in developed countries (averaging over 70% in the 1970s) was to sustain saving and investment in an increasingly open world. These countries had been liberalizing trade and finance for over a quarter of a century. Average customs tariffs were below 5% and trade diversion had also diminished, although there were still some non-tariff barriers affecting agricultural products in particular. Lower tariffs, especially for manufactures, led to a gradual deindustrialization of the developed countries, while at the same time international competition was increasing.

It is important to realize that trade and financial liberalization was also influenced by the need to support the new dynamic sectors (“new economy”). With liberalized trade and less customs protection, the profitability of the manufacturing sector declined. Broad-based income taxes with low rates favoured

⁴ The Roosevelt administration promoted the idea of State protection to provide individuals with at least a minimum level of welfare (in respect of poverty, unemployment and pensions) throughout their lives, adding functions to the Hamiltonian version of government that prevailed in the United States.

⁵ It aimed for an end to poverty and social injustice (Lyndon Johnson) to build on Roosevelt’s mass social security programme.

TABLE 1

**Developed countries: Government revenues and total and social public spending,^a
around 1870 and selected years of the twentieth century**
(Percentages of gross domestic product)

	Government revenue				Total public spending				Public social spending			
	Circa 1870	1920	1960	1996	Circa 1870	1920	1960	1996	Circa 1880	1920	1960	1995
Australia	17.8	19.4	24.4	35.0	18.3	19.3	21.2	35.9	1.1	2.8	7.4	14.8
Austria ^b	...	9.0	37.9	47.8	10.5	14.7	35.7	51.6	...	3.7	15.9	21.4
Belgium ^{b c}	11.6	17.0	30.3	49.8	...	22.1	30.3	52.9	1.3	2.6	13.1	27.1
Canada ^b	4.1	16.6	26.0	42.7	...	16.7	28.6	44.7	1.3	1.3	9.1	18.1
France	15.3	17.9	37.3	50.3	12.6	27.6	34.6	55.0	1.3	2.4	13.4	26.9
Germany ^b	1.4	8.6	35.2	45.3	10.0	25.0	32.4	49.1	2.0	7.5	18.1	24.9
Holland ^{b c}	...	11.8	33.9	47.3	9.1	13.5	33.7	49.3	1.5	2.5	11.7	25.7
Ireland	9.6	23.2	27.5	36.5	...	18.8	28.0	42.0	...	7.0	8.7	18.3
Italy	12.5	24.2	24.8	46.2	13.7	30.1	30.1	52.7	0.6	1.7	13.1	23.7
Japan	9.5	...	18.8	31.7	8.8	14.8	17.5	35.9	0.3	2.3	4.1	12.3
Norway	4.3	11.5	32.4	51.4	5.9	16.0	29.9	49.2	1.2	3.9	7.8	27.5
Spain ^{b c}	9.4	5.8	18.7	39.0	...	8.3	18.8	43.7	0.3	1.7	13.9	19.0
Sweden ^b	9.5	7.2	32.5	62.1	5.7	10.9	31.0	64.2	2.0	3.6	10.8	33.1
Switzerland ^b	...	3.8	23.3	36.4	16.5	17.0	17.2	39.4	2.8	2.2	4.9	18.9
United Kingdom	8.7	20.1	29.9	37.2	9.4	26.2	32.2	43.0	1.2	6.2	10.2	22.5
United States	7.4	12.4	27.6	31.6	7.3	12.1	27.0	32.4	1.1	2.2	7.3	13.7
Average	9.3	13.9	28.8	43.1	10.7	18.3	28.0	46.3	1.3	3.4	10.6	21.7
Growth %		49%	107%	50%		72%	53%	65%		160%	216%	105%

Source: Tanzi and Schuknecht (2000) and Lindert (2004).

^a Includes poverty and unemployment relief, education, pensions, health care and housing subsidies.

^b The figures for Austria, Belgium, Canada, Germany, Holland (later the Netherlands), Spain, Sweden and Switzerland are for central government only up to 1937.

^c The figures for Belgium, Holland (later the Netherlands) and Spain are for central government only up to 1920.

risk-taking in the new businesses: finance, knowledge technology and entertainment. Thus, investment opportunities increased for higher-income groups and bureaucracies became more active, winning acceptance for the abolition of particular incentives (privileges).

The rate reductions applied in the 1980s in these two leading, harmonized and growing markets led to a realignment of income tax around the world in an increasingly intertwined global economy. Thus, in one decade the average reduction in top marginal personal income tax rates was almost 34%, while the reduction for corporation tax was almost 28%. Yet the fiscal yield and the tax burden on factors of production remained virtually unchanged.⁶

In summary, the old principle of progressive taxation through income tax was asserted without loss of revenue during the Reagan administration, harmonizing with the revolt against the enlargement of the public sector.⁷ Although the growth of government was checked during the 1980s, however, fiscal pressure increased by 50% between 1960 and the end of the twentieth century, while public social spending doubled (table 1).

burden in the United States has risen since 1986 for both capital and labour, although the tax burden on labour grew by 13% more; in the United Kingdom, meanwhile, both rates fell up to 1997. In the other OECD countries, tax burdens on factors of production changed only very moderately. Data from the OECD and European Union (15 countries) also reveal a slight increase in the income tax take: between 1979/1980 and 1989/1990, it rose from 12.48% and 12.51% of GDP, respectively, to 13.1% and 13.8%.

⁷ The richest quintile in the United States paid an effective rate of 27.6% in 1980, falling to 25.5% in 1990, while its share of pre-tax income rose by 4.4% in the same period (from 31.7% to 36.1%).

⁶ Boscá, García and Taguas (2005) analysed average effective tax rates for capital and labour using a database for 21 countries of the Organisation for Economic Co-operation and Development (OECD) in the 1965-2001 period. What the analysis shows is that the tax

(d) *The innovation “from the cold”:
competitiveness without loss of equity*

In the last decade of the twentieth century, for reasons of efficiency and administrative convenience, the Nordic economies, which are among the world's most competitive, introduced a dual system of taxation giving different treatment to income from capital (both saving and investment), which has become increasingly mobile. The Nordic countries formalized “dual income tax”, but it is only fair to acknowledge, as will be seen, that most tax laws had already introduced some degree of duality, making the treatment of capital gains and interest more favourable.

In the new market economies, meanwhile, income tax was turned into a single rate (flat) tax for income of all kinds, with a high exemption threshold that conferred vertical equity upon the tax while releasing a large percentage of the population from the obligation of paying it. Combined with the small number of permissible deductions, this considerably facilitated the

work of newly created tax administrations. The flat tax was introduced in Estonia in 1994, but became more visible when the Russian Federation adopted it in 2001. Lithuania and Latvia followed their Baltic neighbour in the first wave of this tax and after 2004 it also spread to Slovakia, Georgia, Rumania and Ukraine.⁸

For the first time, change has been led not by the major powers but by small economies whose sights are set on international competitiveness rather than on some external or internal political enemy. The purpose of these changes is to maintain the progressivity of the tax and its ability to raise funds for the financing of social policies (especially growing pension spending) and to simplify compliance and administrative oversight (given the weakness of institutions and the disadvantages they work under by comparison with large multinational and regional corporations, since effective cooperation between jurisdictions is lacking). This latest development in the structure of the tax, in its dual and flat forms, will be analysed in greater detail in the following section.

III

Different models of income tax

In the world generally, and in Latin America in particular, a very wide range of income tax models coexist for all three components of the tax: personal, corporate and international. The range runs from Mexico with its Haig-Simons type income tax system that includes worldwide income, sophisticated taxation of inflation-adjusted capital income and full integration between personal income tax and corporation tax, to Paraguay with an almost flat tax presenting a rate of 10% on personal incomes (the same as the general VAT rate) and 20% on corporate income of Paraguayan origin.

There now follows a comparative analysis of the four income tax models in use: the synthetic (or comprehensive) model, the flat rate model, the Nordic dual model and, lastly, the Uruguayan dual model.

1. Synthetic income tax

This income tax structure, also known as integrated tax, combines (integrates) all the incomes of the taxpayer (the individual or family) and taxes them in accordance with a structure of progressive marginal rates applied

to income brackets. The tax follows the Haig-Simons broad definition of income: consumption plus change in wealth over a given period.

The theoretical advantages of this model are clear although, as will be seen later, serious doubt has been cast over them in practice. Among these advantages are: (i) including “all” income (Haig-Simons broad definition), giving equal treatment to income from employment and capital and allowing deductions in the tax base and reductions in the tax amount to be paid facilitates personalization of the tax and serves the interests of horizontal equity (i.e., taxpayers with the same payment capacity actually do pay the same amount) and (ii) conferring progressivity on the tax by means of progressive marginal rates (vertical equity), assuming the tax authority collects it effectively, even at high marginal rates.

⁸ Flat rates vary from country to country, ranging from 12% to 33% for personal income tax (with different personal deductions for the taxpayer and per dependent) and from 16% to 37% for corporation tax.

As we have said, though, the facts have cast doubt on these virtues of synthetic personal income tax. For example, its application has usually been associated with “pick and choose” deductions whose purpose is to encourage particular forms of behaviour. In other words, the government indicates what types of activities are to be favoured,⁹ in accordance with its policy decisions, and the individual chooses. Leaving aside the issue of whether it is right for the tax system to be used to encourage particular types of behaviour among economic agents, it is clear that a larger number of deductions means a smaller tax base, so that marginal rates have to be higher if revenue loss is to be avoided.

If account is also taken of the opportunities that financial liberalization provides for capital, the most mobile factor, then the stage is set for an outflow of savings. When financial capital (savings) is taxed at very high marginal rates (the marginal rate is what influences the decision to save), those receiving the income from it, who belong to the wealthiest strata, tend to shift savings to jurisdictions with low or zero taxes. This destroys both horizontal and vertical equity.¹⁰ As will be seen, the dual income tax model of the Nordic countries can be viewed as a response to this flight of savings associated with personal income tax.

This problem is compounded by the administrative complexity of synthetic personal income tax. For example:

- (i) the welter of deductions generates high administration and/or compliance costs;
- (ii) to prevent the unintended incentives of traditional taxation (double taxation of dividends, first at the corporate and then at the personal level), different mechanisms have been sought to integrate corporation tax and personal income tax, which creates administrative difficulties; and
- (iii) correcting excessive progressivity when incomes are irregular also creates difficulties in determining tax periods.

⁹ In our view, there are basically two types of deductions (or credits): those that aim to mitigate the effect of the income tax on saving, and those that give privileged treatment to activities believed to have positive externalities (health care, education, etc.), although targeted spending is acknowledged to be the most efficient option.

¹⁰ The special deduction for wage-paying employment applied in many countries is a form of compensation and an implicit acknowledgement of this inequity.

2. The response to the administrative complexity of synthetic taxation: the flat tax

Given the administrative complexity of synthetic personal income tax, and to correct the scope for arbitrage created by the difference between corporate and personal income tax rates, Hall and Rabushka (1983 and 1995) proposed a combination of two taxes with the same rate:

- (i) a tax on the real financial flows of companies (cash flow type), i.e., on sales (including exports) minus wages, inputs and investment (which can be deducted in full at the time it is carried out), and
- (ii) a tax on wages, with a non-taxable personal allowance to provide a degree of progressivity despite the tax being levied at a flat rate.

Saving is not tax-deductible at the time it is carried out, nor is the yield on it taxed subsequently. That is, there is no tax on interest, dividends or capital gains, and companies cannot deduct interest paid.¹¹ To put it more clearly, banks do not pay corporation tax under this system. It is easy to show that, from a life cycle perspective, this design taxes consumption.¹² Furthermore, it acts as a consumption base VAT working on the origin principle and calculated by the subtraction method.

The only major similarity between the flat tax introduced in some countries (Estonia, Lithuania, Latvia, Russia, Serbia, Ukraine, Slovakia and Rumania) and Hall and Rabushka's system is the existence of a flat tax on wages. The main differences, meanwhile, are in (i) the method of establishing the tax-exempt allowance; (ii) the fact that some have taxed capital income and others have not; and (iii) the fact that they have all kept the traditional corporation tax, and not necessarily at the same rate as the tax on earned income.

Although a long way from Hall and Rabushka's proposal, the flat tax applied does simplify administration. For example: (i) the application of withholding tax is more straightforward; (ii) the problem referred to earlier of excessive progressivity when incomes are irregular is done away with; (iii) there are fewer incentives to shift income between related taxpayers (spouses),

¹¹ Interest is a transfer that does not generate value added if it takes place between residents. When it is not deductible, taxation ceases to be a consideration in assessing the optimum financial mix.

¹² A tax on wages over the whole life cycle, assuming no stock of savings remains at the end, is equivalent to a consumption tax at present value. If savings do remain, this observation holds true if an inheritance tax is added.

although they do not disappear completely owing to the existence of the personal tax allowance; and lastly (iv) if the corporation tax rate is made the same as the rate for earned income (as in the Slovak Republic and Rumania), there is no longer an incentive for people to set up companies to reduce the tax burden on their economic activities.

As Keen, Kim and Varsano (2006) point out, the greater simplicity of income tax in these countries has nothing to do with its flat rate structure. What they have done is to set a personal allowance level that is high enough to leave a large percentage of the population outside the tax net, and allow only a limited number of deductions.

The main problem with the flat tax is that the rate needed to maintain the pre-reform tax take is too high for capital income. As a result, this flat tax, like the synthetic tax, displaces saving (i.e., causes capital flight).

3. The answer to capital flight: “dualization” of the synthetic tax and the dual tax of the Nordic countries

If Hall and Rabushka’s proposal can be seen as a response to the administrative complexity of synthetic personal income tax, the dual system of income tax applied by the Nordic countries can be seen as a response to the capital flight also associated with the synthetic tax. Strictly speaking, some degree of duality began to be applied in the treatment of capital gains and interest during the 1980s as a first response to this mobility of savings. In the case of capital gains, most countries established a differential rate below the top marginal rate of personal income tax. The United States is a typical case: capital gains made over a period greater than a year are taxed at a flat rate of 15%. As for interest, developing countries began to establish a schedular system with lower rates. This was done in Latin America by Argentina, Brazil, Costa Rica and Nicaragua, for example.

In the Nordic countries (Denmark, Finland, Norway and Sweden), the flight of savings was compounded by the problem that their integrated systems had much higher marginal rates than those of other countries (up to 73% in Denmark and Sweden), while at the same time the tax base was narrow because of special treatment and exemptions for certain types of capital income and full deduction of interest payments (mortgage interest in particular) at these high marginal rates. Special treatment for capital income was part of a (disorderly) attempt to make their tax systems more

attractive and prevent the flight of savings because of a lack of cooperation between tax administrations. But the integrated system thus designed contained strong incentives for avoidance through tax planning, produced a negative yield on capital income and was more progressive in theory than in practice (Picos Sánchez, 2003).

Consequently, between 1987 and 1993 the Nordic countries formalized the dual income tax. Basically, this gives separate tax treatment to earned income (taxed at progressive rates) and capital income (taxed at proportional rates), whether from business operations or passive investment. As figure 1 shows, the Nordic dual tax “anchors” the rate applicable to corporate income and capital income (around 30%), which in turn is the lower rate for the tax on earned income, this being taxed progressively up to rates of around 50%.

With this design there is no scope for arbitrage, either by abusing capital income to obtain business income (both taxed at the same rate) or by passing off business income as earned income (paying oneself a salary instead of collecting dividends). Nonetheless, physical persons with mixed incomes (own-account workers, sole proprietors and partnerships) do have a strong incentive to pass off their earned income as business income. Many experts regard this as the Achilles heel of the Nordic dual system.

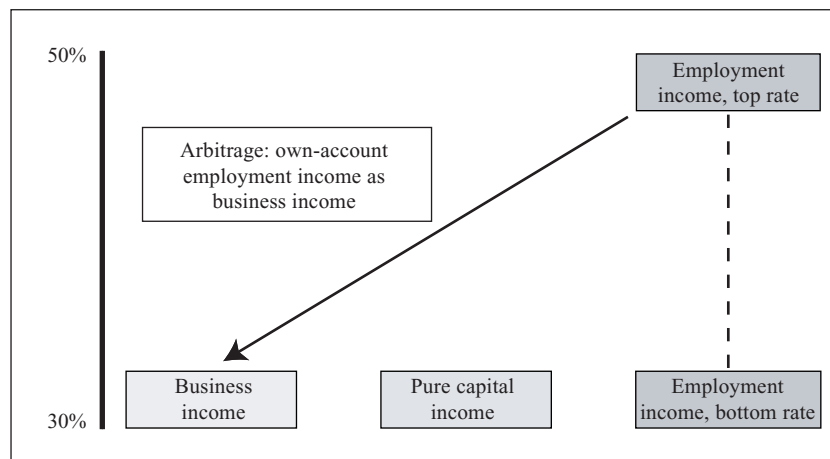
Something similar is true of Chile, where business income is subject to a system of taxation based on withdrawals: retained profits are taxed at 17%, while distributed profits, which are included in the synthetic personal income tax along with the taxpayer’s other income, may be subject to the top marginal rate of 40%. This large difference creates a strong incentive to retain profits. According to data from the Chilean Internal Revenue Service (SII), there are more than 30,000 investment companies created exclusively to administer retained profits, and over 50% of undistributed profits accumulate in companies of this type. This “deferral cost” (more crudely put, personal income disguised as business income) is over 2% of GDP, while the tax take from personal income tax is somewhat below that figure (SII, 2006). That so much tax should be foregone is surprising considering that tax expenditure is only 0.6% of GDP for corporation tax and 0.9% for VAT, which collects 8.5% of GDP.

4. The Uruguayan dual income tax

Contrary to what is usually claimed, Uruguay already had a personal income tax before the tax reform that

FIGURE 1

Nordic dual income tax



Source: Prepared by the authors.

came into force in July 2007; more precisely, it had an incomplete schedular type income tax system whereby different taxes were applied to particular types of income at different rates, leaving other incomes unaffected. For example, the personal receipts tax (*impuesto a las retribuciones personales*—IRP) affected wages, pensions and unemployment insurance; the commissions tax (*impuesto a las comisiones*) affected a large number of non-professional service providers (customs agents, currency dealers, salespeople, etc.); the income of sole traders was subject to corporation tax. However, other income, such as that from professional services, interest, rent and capital gains, was not taxed.

These taxes on income were supplemented by a number of lesser taxes that were inefficient (causing distortions) and/or expensive to administer and comply with. Many of them came out of the continual “fiscal reforms” of the 1990s—actually minor adjustments that worsened the quality of the tax system. In the 13 years from 1990 to 2002, 13 taxes were introduced, or exactly one a year.¹³ The introduction of the dual tax meant that most of them could be repealed.

¹³ To name a few: social security financing contribution tax (COFIS, a kind of wholesalers’ VAT), bank asset tax (IMABA), financial system oversight tax (ICOSIFI), credit card tax, sportsmen’s transfer tax, forced sales tax, lottery tax, tax on the sale of movable property by public auction.

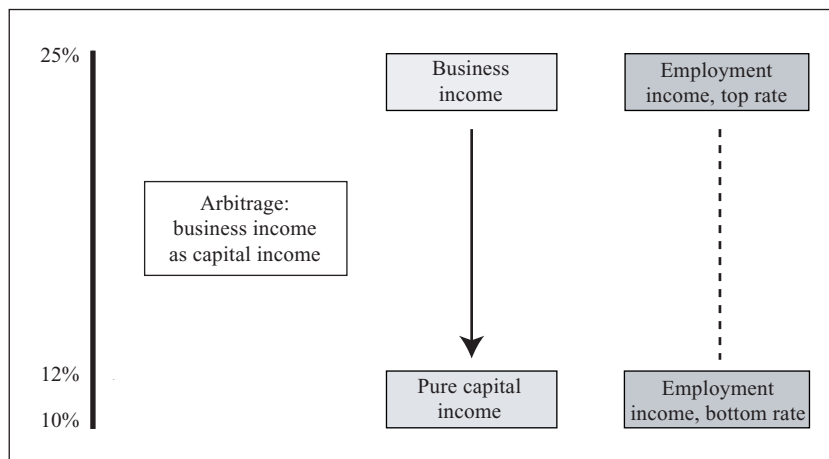
The need to resolve the design problems of the incomplete schedular income tax system was one of the reasons for overhauling it. These problems included the following:

- (i) the system was not comprehensive, i.e., did not cover all income. This was a clear violation of the principle of horizontal equity (same treatment for taxpayers with the same ability to pay);
- (ii) it did not attain vertical equity, since most earned incomes, including income from businesses, were taxed at high rates, while most types of capital income, going predominantly to the higher-income strata, were exempt.
- (iii) because the system consisted of an assortment of taxes with different bases and different rates, it created numerous opportunities for arbitrage, one example being back-to-back loans whereby business owners lent money (interest exempt) through a third person to their own company (interest deductible). This is reflected in the ratio between corporate income and assets in 1993–1997: while this ratio averaged about 3.5% for industry and services, the average for banks was 0.08%, i.e., less than 1% (Barreix, 2003).

The new Uruguayan dual income tax takes from the Nordic dual system the core idea of taxing earned income separately (at progressive rates) from capital income (proportional rate). In other words, it establishes a lower tax rate for capital yields (interest, dividends and profits, rents, capital gains) which is the same as

FIGURE 2

Uruguayan dual income tax



Source: Prepared by the authors.

the bottom marginal rate for earned income. This rate is the “anchor” of the system, the lowest rate at which income begins to be taxed.¹⁴ In turn, the top marginal rate on earned income is the same as the rate for (net) business income.

The political debate in Uruguay led to the decision that the single all-in tax rate¹⁵ on capital incomes would be 12%, and would thus not be the same as the 10% bottom marginal rate on earned income (figure 2). Taxes on earned incomes range up to 25%, which is also the rate for business income.

The Uruguayan dual rate, therefore, limits the scope for arbitrage offered by the Nordic dual system, to the point where physical persons providing professional services or obtaining business type incomes are free to choose whether to pay corporation tax or personal income tax. The system is designed so that, for example, self-employed taxpayers can choose between paying as businesses at a nominal rate of 25% on net income (after deduction of all admissible

business expenses) or paying as physical persons under the system of earned income brackets, whose top marginal rate is also 25%; in this latter case, they cannot discount business expenses but only personal expenses (social security contributions, payments for their children’s health care and a set percentage of 30% for expenses). Self-employed taxpayers who are “large” (employing professionals and having a substantial infrastructure, for example) will undoubtedly choose to pay tax as corporations to be able to deduct their expenses. Those who are “small” may be better off paying as physical persons, something that makes economic sense given that labour is bound to be the main factor of production in their work (and the system does not set out to punish them by taxing them as though they were acting predominantly as employers). This is not arbitrage; for arbitrage to exist, there has to be a dominant strategy whereby the taxpayer always gains by dissimulation.

Meanwhile, the possibility of arbitrage between business income and gross capital income is resolved by the customary rules of corporation tax.¹⁶ The solution the reform opted for to prevent arbitrage when interest (taxed at 12%) is deducted to calculate

¹⁴ It is recognized that capital gains and royalties are not gross income. Accordingly, Barreix and Roca (2005) proposed that they should be taxed at a higher rate (15%), but administrative considerations, particularly as regards international income, led to a flat rate being adopted. It was also proposed that technical assistance from non-residents and dividends paid abroad should likewise be taxed at this rate.

¹⁵ The deduction at source is final and releases the taxpayer from any obligation of declaration or identification.

¹⁶ By applying the payment credit method to retained capital income, together with thin capitalization rules for interest and/or deduction limits for capital income when business income is calculated.

business income (taxed at 25%) was to require that the deduction matched the proportion between the all-in withholding tax rate applied to capital and the business income rate (i.e., 12/25).

Lastly, the Uruguayan dual system follows the flat tax in setting a tax allowance that leaves a large proportion of the population (60%) outside the tax net and in allowing only a small number of deductions, thereby facilitating administration and preventing the erosion of the tax base (and the lobbying) that are a feature of the synthetic model, especially in Latin America.¹⁷

The reform of personal income tax in Spain, which was formulated in 2006 and came into force on 1 January 2007, implemented a dual model closer to the “Uruguayan style” dual tax than to the Nordic dual tax. The lowest rate at which income begins to be taxed is for capital income (18%), and is close to the bottom marginal rate for earned income (24%). The top marginal rate on earned income, meanwhile, is 43%; given the deductions allowed and the tax on dividends, this rate discourages physical persons from setting up as companies (taxed at 30%) to conduct their economic activities. Regarding the possible abuse of interest in obtaining business income, reliance is placed on thin capitalization rules.

At this point in the analysis of taxation models, it is worth asking why a dual system was chosen for Uruguay. The answer is that the decision was influenced by reasons of an administrative nature and by considerations of efficiency.

Among the administrative reasons are the following: first, at a time when MERCOSUR is still incomplete, Uruguay is obliged to follow a “small country” strategy that aims to capture external savings, by contrast with the “big country” strategy followed by Argentina and Brazil, whose aim is rather to secure foreign direct investment. This strategy does not permit high marginal rates like those of the traditional synthetic model. Similarly, the flat rate necessary to generate the same amount of income tax revenue

(from companies, individuals and non-residents) as the Uruguayan dual tax is expected to yield would be around 19%; for capital income this rate would be too high, encouraging the flight of savings.

Second, the low quality of tax administration in Uruguay means that the new income tax system has to be straightforward. The model approved is easy to comply with and oversee because:

- (i) capital income, whether received by residents or non-residents, is taxed at a flat all-in withholding rate;
- (ii) 60% of the total population are left outside the income tax net, so that a fifth of the population that was affected by the personal receipts tax (IRP), now abolished, will be unaffected by the dual tax; in addition, 80% of this tax will be paid by the wealthiest 20% of the population;
- (iii) it allows few deductions (just three: social security contributions, health insurance contributions and deductions per child or dependent), which are easy to calculate;
- (iv) it prevents tax arbitrage between taxpayers’ different income types and/or legal status, thereby reducing incentives for evasion or tax-driven changes in saving portfolios; and
- (v) it raises more revenue than the incomplete schedular tax, making it possible to do away with inefficient taxes (IMABA, COFIS and others) and thus simplifying the system.

Third, the proposed design allows Uruguay to retain bank (tax) secrecy without being regarded as a tax haven.

It should be stated here that we are not supporters of bank secrecy. It creates information asymmetry, leading in turn to market failure (Stiglitz and Grossman, 1980), by depriving partner countries of the ability to apply taxes or combat fiscal fraud and thereby finance part of their public spending. In essence, this means exporting a tax base (Tanzi, 2001). However, we believe that the current situation in MERCOSUR forces Uruguay to use tax (bank) secrecy as a negotiating tool. The fact is that as long as MERCOSUR is not perceived as a consolidated customs union (it does not have a common trade policy, it lacks a serious dispute resolution system and customs controls are abused), investment will tend to go to the largest market, chiefly Brazil and then Argentina, and this will be reinforced by the incentives offered by these countries. For this reason, Uruguay’s share of foreign direct investment (about 3%) is significantly lower than its share of the bloc’s GDP (about 5%).

¹⁷ In the tax base constituted by earned income, the personal tax allowance is approximately 70% of per capita GDP, i.e., more than twice the value of the basket used to calculate the absolute poverty line. There is no provision for a tax-exempt allowance in the capital income tax base and nor, for reasons of bank secrecy, is offsetting of capital income allowed (other than rents). The deductions authorized in the earned income tax base are contributions to pension plans (both compulsory and voluntary) and health expenditure by the taxpayer and the taxpayer’s children while minors, up to a certain limit.

The main criterion used by the Organisation for Economic Co-operation and Development to define tax havens is that they impose low or no taxes on saving income (OECD, 2005). By taxing capital income at substantial all-in rates, the Uruguayan dual tax makes it impossible for Uruguay to be regarded as a tax haven, since it does not meet this criterion. This provides a reaffirmation of legal security, while the all-in tax allows the depositor's identity to remain confidential. The result is to make the country even more attractive for domestic or external savers, who take decisions by assessing the trade-off between returns and security.

Regarding considerations of efficiency, Feldstein (2006) argues that taxing capital income at high rates gives rise to two types of problems:

- (i) the loss of efficiency associated with a tax on saving should be measured not by the reduction in its current level but by the drop in the future consumption that today's saving will be able to buy, meaning that it is substantially greater than the loss usually estimated; and

- (ii) high taxes on capital income lead to inefficiencies in the allocation of capital. For example, a high rate of tax on dividends discourages their distribution (lock-in effect), with the following consequences: first, it results in a loss of efficiency in investment choices; second, it is a disincentive to discipline for managers, who have privileged access to internal financing; third, it can even lead to a lower tax take than would be obtained by taxing investment (or consumption).¹⁸

As pointed out earlier, Chile is a case study in this respect. The strong incentive represented by the difference between the rates on undistributed profits (17%) and distributed profits (up to 40%) has led to a situation, according to estimates by the tax administration (SII), in which retained profits total 2% of GDP (SII, 2006). Furthermore, Cantalupo, Jorrot and Scherman (2007) state that retained profits are more heavily concentrated than other income, revealing the loss of vertical equity associated with this design.

IV

The progressivity and redistribution capacity of the Uruguayan dual tax

The need to maintain a tax burden of about 30% of GDP means that indirect taxes (15% of GDP in 2005) and pension contributions (7%) account for a large share of the tax structure, making it regressive. The need to temper these adverse effects on equity is a second reason for introducing a comprehensive, progressive personal income tax, especially given that the limited fiscal revenues available¹⁹ leave very

few resources free for financing redistributive public social spending, which is the most suitable instrument. Available fiscal revenue in the country, defined as tax revenues (30.4% of GDP in 2005) minus "inflexible obligations", i.e., social security expenditure (11.4%) and interest payments on the public debt (4.5%), is currently 14.6% of GDP, having been as low as 10% of GDP in 2003.

Some observations should now be made, therefore, on the progressivity and redistributive effect of the new dual personal income tax (*impuesto a la renta de las personas físicas—IRPF*). The figures given in table 2 are the results of a static microsimulation exercise without behaviour functions, carried out using 2004 microdata from the Continuous Household Survey (INE, 2004). The methodological details of this exercise can be found in Barreix and Roca (2006).

The average rates for both the personal receipts tax (IRP) and the dual personal income tax (IRPF) rise as we move up the income scale from the poorest to the wealthiest deciles. This rise is far more pronounced

¹⁸ Broadway (2005) summarizes the following arguments in favour of reducing the tax on capital income: (i) there is a positive externality when investment is linked to innovation, according to the studies available on endogenous growth; (ii) there is a systematic tendency for saving to be suboptimal, which seems irrational (in practice, it is possible that individuals are acting strategically, anticipating that the government or a philanthropist will come to their aid); (iii) taxing capital income discriminates against households with fluctuating incomes that use saving as a way of flattening out their consumption. In theory, taxing capital income at a lower rate is equivalent to applying different rates to present and future consumption.

¹⁹ See Villela, Roca and Barreix (2005).

TABLE 2

Uruguay: Personal receipts tax (IRP) and dual personal income tax (IRPF), by decile

	Effective average rate (%)		Proportion of tax's revenue paid by each decile (%)	
	IRP	Dual IRPF	IRP	Dual IRPF
Decile 1	0.23	0.10	0.3	0.1
Decile 2	0.70	0.22	1.3	0.2
Decile 3	1.05	0.48	2.4	0.5
Decile 4	1.36	0.91	3.5	1.0
Decile 5	1.60	1.31	4.7	1.7
Decile 6	1.84	1.89	6.4	2.8
Decile 7	2.13	2.73	8.6	4.8
Decile 8	2.51	3.94	12.5	8.5
Decile 9	2.89	6.22	19.1	17.8
Decile 10	3.21	11.23	41.3	62.7
<i>Kakwani index</i>	0.1973	0.3887		
<i>Reynolds-Smolensky index</i>	0.0047	0.0222		
Transfer from wealthiest 10%	0.27%	1.86%		
Transfer from wealthiest 20%	0.35%	1.99%		
Transfer from wealthiest 50%	0.24%	1.11%		

Source: Barreix and Roca (2006).

in the case of the dual tax, however, something that is well borne out by the Kakwani index which, unlike the progression of the average rate, is a comprehensive indicator of progressivity.²⁰ As table 2 shows, the fact that the Kakwani index is higher for the IRPF (0.3887) than for the IRP (0.1973) shows that the former is more progressive.

As regards redistribution capacity, this can be measured using the Reynolds-Smolensky index, a comprehensive indicator of redistribution capacity (table 2).²¹ The index value associated with the dual tax (0.0222) is higher than that associated with the

IRP (0.0047), meaning that the former causes an improvement in income distribution of more than 2 points of the Gini coefficient, which is greater than the half point improvement in the Gini caused by the IRP, allowing the IRP to be identified as (quasi) neutral. The introduction of the dual tax results in a transfer of 2% of total income (after the IRPF) from the richest 20% of households to the other 80%.

The substantially greater redistributive capacity of the IRPF as against the IRP is also seen when the respective percentages of the tax take from each decile are compared. While the poorest 40% of households pay 7.4% of the IRP, they will pay 1.7% of the new IRPF. Meanwhile, the richest 20% of the population pay 60.4% of the IRP but will pay 80.5% of the IRPF. While the IRP collects 0.87% of GDP, the IRPF will collect about 2.4%.

Following this analysis, we shall conclude with two observations. First, estimation of the effect of the tax system in the European Union (15 countries) on income distribution for 2001 gives an improvement of 2.5 points in the Gini coefficient. When comparing this with the dual tax in Uruguay, which, as we have seen, entails a drop of 2.2 points in this coefficient, it is important to emphasize two aspects that are striking in their own right: the higher tax burden entailed by personal income tax (progressive and redistributive as

²⁰ Kakwani index = quasi-Gini (personal income tax) - Gini (income prior to fiscal policy). Income prior to fiscal policy, also known as autonomous income, is income that has not yet been affected by taxes or public transfers. The quasi-Gini for tax is calculated much like the Gini for income, but from the tax concentration curve, whence the semantic distinction. If $K > 0$, i.e., if the personal income tax is distributed more inequitably than income prior to fiscal policy, the effect of tax is to reduce inequality in income distribution and it is therefore progressive. If $K < 0$, on the other hand, the tax is regressive.

²¹ Reynolds-Smolensky (RS) index = Gini (income prior to fiscal policy) - Gini (income after personal income tax). If $RS > 0$, inequality in income distribution has diminished since the introduction of the personal income tax and this tax will therefore be progressive. The opposite holds if $RS < 0$.

it is) in the European Union, and the large contribution made by it to the total tax revenues of that bloc. The redistributive effect of the new dual tax in Uruguay should therefore not be underestimated.

Second, given that the reduction in indirect taxation resulting from the tax reform²² will be financed from the proceeds of the Uruguayan style dual tax, what matters is the overall effect of the reform on equity. While the pre-reform tax system was regressive

(Kakwani index = -0.0088), the post-reform system is progressive (Kakwani index = 0.0993). Again, while the pre-reform tax system worsened income distribution (Reynolds-Smolensky index = -0.0012), the new tax system clearly improves it (Reynolds-Smolensky index = 0.0167). In other words, the introduction of the Uruguayan dual tax makes the tax system as a whole progressive and redistributive (Barreix and Roca, 2006).

V

The pillars of taxation in Latin America: the need to collect income tax

1. A simple typology of current tax systems

Tax structures are determined essentially by three factors: (i) the country's paradigm of insertion in the international economy; (ii) the level, quality and sustainability of public spending; (iii) the performance of the tax administration in a broad sense.²³ To establish a typology of the different tax systems in operation today, we propose to identify their main pillars (plus complements), by "main pillars" being meant taxes that are capable of generating substantial, stable revenues and are broadly based, as this enhances their neutrality and elasticity.

This typology is dynamic. Thus, for example, import taxes were a pillar of taxation after the crisis of the late 1920s (the Great Depression) in both developed and underdeveloped countries. At that time they collected some 25% of tax revenues, but in today's open economies their revenue-raising capacity has diminished.

In our view, there are now three pillars of taxation and three complements. The three pillars are: (i) income tax (strictly speaking, the system of taxation on income);

(ii) general consumption taxes (VAT and other retail taxes); (iii) pension contributions (with the variant of private-sector and mixed systems). The complements, meanwhile, are: (i) taxes on renewable and non-renewable natural resources; (ii) taxes on property (particularly real estate), personal assets and the transmission of wealth (mainly inheritance taxes); and (iii) specific consumption taxes.

2. Strengthening the pillars of taxation

To guide our analysis, we may compare the main taxes underpinning fiscal sustainability in Latin America on the one hand and the Organisation for Economic Co-operation and Development (OECD) on the other. Table 3 shows that the greatest differences between these two groups of countries are in the areas of personal income tax and social security contributions; VAT and corporation tax, conversely, look fairly alike, despite the large disparities in development and income levels between the two groups.

We shall not go into the considerations that, in our view, rule out any prospect of the taxes we have called "complements" becoming pillars of the tax system in Latin America. We shall merely note that natural resource taxes are highly variable (Jiménez and Tromben, 2006), there is a worldwide trend towards the abolition of corporate asset taxes and inheritance taxes, and selective taxes are severely constrained by the scope for smuggling and/or are regressive (the exception being vehicle fuel taxes). And while Latin America still has work to do in developing taxes on property,

²² Abolition of the COFIS (wholesale VAT of 3%), reduction of the basic rate of VAT from 23% to 22% and of the lower rate from 14% to 10%.

²³ The term "tax administration" is used here in a broader sense than the traditional one, referring to what we may call a "system of tax institutions". This system encompasses not only the internal revenue agency and customs but also other institutions ranging from land and property registries to the judiciary.

TABLE 3

Organisation for Economic Co-operation and Development (OECD) and Latin America: Pillars of taxation, 2004

(Percentages of gross domestic product)

	OECD	Latin America ^a
Tax revenue ^b	35.9	20.2
Value added tax (VAT) ^c	6.7	5.8
Income tax	12.5	3.8
Corporation tax	3.4	2.6
Personal income tax	9.1	1.2
Social security contributions ^d	9.3	2.8

Source: Organization for Economic Co-operation and Development (OECD), Economic Commission for Latin America and the Caribbean (ECLAC), Inter-American Development Bank (IDB) and International Monetary Fund (IMF).

^a Includes oil revenues in Colombia, Ecuador, Mexico and the Bolivarian Republic of Venezuela, minerals in Bolivia and Chile and hydroelectricity in Paraguay.

^b Includes social security (pensions).

^c Includes the tax on goods movements and service provision (ICSM) in Brazil.

^d Includes contributions to public systems.

particularly real estate and vehicles, the amount these can raise is limited (1% or 2% of GDP).

3. Payroll taxes to finance pensions have no future

We believe that the revenue-raising potential of payroll taxes to finance pensions is almost nil in Latin America. In open, competitive economies with high and rising rates of chronic unemployment (around 10% on average), the non-capitalizable element of pension contributions is just another charge on labour that bears down on wages and/or employment.

In the first place, if the results of the Heckscher-Ohlin theorem are borne out by trade liberalization, the prices of tradable inputs will tend to equalize and countries will export goods that use their abundant factor intensively and import goods that use their scarce factor intensively. At the same time, the Stolper-Samuelson theorem states that a rise in the relative price of a good will lead to a rise in the return to that factor which is used most intensively in the production of the good and to a fall in the return to the other factor. For the Latin American countries, the result in practice is growth in the commodity sector (agricultural

commodities and non-renewable natural resources) and a partial decline in the industrial sector, dominated by the Asian countries where labour is abundant.²⁴ The economic sectors that have traditionally generated jobs in the region, namely industry and formal commerce, have seen their share in the composition of GDP decline in the last 35 years (4.2% and 6.6%, respectively). The factor that has gained is capital (capital-intensive primary sectors) and returns on labour have experienced a relative decline.

At the same time, there is a tendency to replace labour by technology (IMF, 2007). In particular, advances in agriculture, information technology and robotics are reducing the number of unskilled workers. It is clear that workers in Latin America, a region where public education spending is low (less than 3% of GDP) and investment in research and development is paltry (0.3% on average), will find it harder and harder to compete for work and wages with more highly skilled workers not only in the OECD countries but also in the new market economies of the former Soviet bloc and India.

In view of this, and of the past and potential crises in the unfunded pension systems of certain countries, the (public) principle of (intergenerational) solidarity has been supplemented by a (private) system of strict equivalence between contributions and pension levels (individual funded system), with a number of countries opting for mixed or parallel systems. Although pension system pressure is not yet a problem in some Latin American countries whose population pyramid still has a wide base, there must be concerns about the future.

The fact is that, over the course of two generations (1950-1955 period compared to 2000-2005), the gross birth rate has fallen by almost 50% (from 42 to 21 per 1,000 inhabitants) while life expectancy at birth has risen by 38% (from 51.8 to 71.9). The result is that the labour component in the composition of taxpayers will diminish while at the same time the proportion of potential recipients (pensioners) will increase exponentially, and this will be compounded by the burden of pension system debt and the (gross) financial debt of the non-financial public sector, estimated to average 86% and 48% of gdp, respectively.

²⁴ And which apply policies such as managed exchange rates and investment incentives, among others, and have lower levels of unionization.

To sum up, the tendencies referred to make it very unlikely that payroll taxes to finance pensions can attain the level of revenue required to make them a pillar of the fiscal structure.

4. VAT: good at raising revenue, bad at distributing it

In Latin America, quite a number of attempts have been made to use exemptions and differential rates to give VAT an income redistribution role. In our view, the outcome of these efforts has not only been marginal but has resulted in high tax expenditure that favours

the wealthiest deciles, wasting resources that could indeed have had redistributive effects if targeted on public social spending.

The case of Mexico is very revealing in this respect (table 4). Mexico's VAT is progressive even when income is taken as an indicator of well-being. In the richest deciles, for example, 60% of spending is subject to the general rate and just 10% to the zero rate, while for the poorest deciles these proportions are 41% and 38%, respectively. Although the tax expenditure implicit in this design is 2% of GDP, however, its redistributive capacity is slight: after tax there is a transfer of just 0.15% of total income from the richest 50% to the

TABLE 4

Latin America (nine countries): Equity of value added tax (By per capita income decile)

	Colombia	Ecuador	Argentina	Uruguay	Mexico	Honduras	Costa Rica	Guatemala	Panama
<i>A. Progressivity</i>									
Effective tax/income rate (%)									
Poorest decile	10.8	4.6	11.7	9.5	1.1	12.7	5.4	20.2	4.6
Second poorest decile	8.6	4.2	9.2	8.9	1.6	3.7	4.2	9.1	2.2
Second wealthiest decile	5.4	4.9	7.8	6.8	3.6	2.7	3.5	5.4	1.7
Wealthiest decile	4.7	5.2	6.8	6.1	3.7	2.3	3.0	4.9	1.7
Gini income inequality coefficient, prior to VAT	0.537	0.408	0.549	0.317	0.433	0.570	0.577	0.596	0.636
Quasi-Gini after VAT	0.469	0.445	0.507	0.254	0.547	0.480	0.489	0.460	0.533
Kakwani index (if < 0 => regressive; if > 0 => progressive)	-0.068	0.038	-0.042	-0.063	0.113	-0.090	-0.089	-0.136	-0.104
<i>B. Redistribution</i>									
Gini income inequality coefficient, after VAT	0.541	0.406	0.555	0.322	0.430	0.575	0.580	0.604	0.638
Transfer from poorest 50% to wealthiest 50% (or from wealthiest 50% to poorest 50%)	-0.20%	0.09%	-0.30%	-0.25%	0.15%	-0.25%	-0.16%	-0.40%	-0.09%
Losers	1 to 6 and 9	9 and 10	1 to 9	1 to 6 and 8	8 to 10	1 to 8	1 to 9	1 to 9	1 to 7
<i>C. Who pays the tax</i>									
Poorest 40%	14%	14%	11%	24%	8%	13%	12%	15%	10%
Wealthiest 20%	55%	52%	62%	35%	59%	54%	56%	53%	58%
Wealthiest 20%/poorest 40%	4.0	3.7	5.4	1.5	7.4	4.2	4.8	3.5	5.6
<i>D. Tax expenditure</i>									
As % of GDP	6.0	2.6	1.6	3.2	2.0	2.3	...	2.4	...

Source: For equity: in Colombia, Zapata and Ariza (2006); in Ecuador, Arteta (2006); in Argentina, Gómez Sabaini, Santieri and Rossignolo (2002); in Uruguay, Barreix and Roca (2006); in Mexico, Ministry of Finance and Public Credit (2004); in Honduras, Garriga (2007); in Costa Rica, Trejos (2007); in Guatemala, ICEFI (2007); in Panama, Rodríguez (2007), Barreix and Roca (2007). For tax expenditure: in Colombia, 1999 data, Simonit (2002); in Ecuador, 1999 data, Roca and Vallarino (2003); in Argentina, 2001 data, Simonit (2002); in Uruguay, 1999 data, Rossa and Roca (2001); in Mexico, Tax Administration Service (2005); in Honduras, Gómez Sabaini (2006); and in Guatemala, DevTech (2002).

poorest 50%. By contrast, personal income tax, which collects about 2.4% of GDP, has a redistributive effect more than 10 times as great and the “Progres-Oportunidades” programme of public spending targeted on poverty alleviation achieves a similar redistributive effect to VAT but at one eighth of the fiscal cost. Furthermore, the “progressivity without redistribution” of VAT has a cost: 54% of the benefits of the zero rate go to the highest-income decile and just 3.5% to the poorest. It seems clear, for one thing, that abolishing this benefit would substantially increase revenues, so that the losers could if necessary be compensated out of public spending, preventing any major deterioration in equity.

Section A of table 4 shows that the regressive effect of VAT is moderate, section B that its redistributive effect is almost nil despite strong revenues, and section C that because consumption is concentrated in the highest deciles, exemptions have a very high fiscal cost.

In summary, VAT is a revenue-raising tax and not a redistributive one, which means that it should tend to the greatest neutrality and simplicity possible to ensure compliance and thus establish itself firmly as a pillar of the system, while it needs to be recognized that personal income tax excels all others in its redistributive potential.

5. Income tax: the great shortfall

As was shown in table 3 earlier, the amount raised by corporation tax in Latin America is close to the OECD average: 2.6% and 3.4% of GDP, respectively. As already pointed out, however, revenue from income tax on sole traders is included in this category in Latin America, while in the developed countries it is categorized as personal income tax.

Where corporation tax is concerned, it is a fact that capital mobility has not only brought down nominal rates around the world, but forms of special treatment designed to attract capital have proliferated and these, in combination with tax planning, have eroded the tax base. Economic liberalization and the integration of markets have produced some structural changes in the tax that are not going to be reversed. For example, in 1918 corporation tax in the United States yielded four times as much as personal income tax, which only affected the wealthiest; around 1950 both taxes yielded the same; but by 1980 physical persons were paying about four times as much as businesses, and this remains the case to this day. What we seem to be looking at is a global phenomenon, with relatively weak and non-

cooperating national States in a very poor position to tax corporate income.

By contrast, personal income tax in Latin America raises barely 1.2% of GDP on average (see table 3 above). This tax, which is predominantly synthetic, riddled with exemptions and “dualized” in an inconsistent way to the benefit of capital income, is highly progressive but has a very limited capacity for redistribution, as the low revenues yielded by it would indicate. For example, only in Mexico does it bring down the Gini income inequality coefficient by more than 1 point of that coefficient (table 5).

When we are dealing with countries where the income share of the richest 20% is more than five times that of the poorest 40%, it seems clear that a reformulation of the tax, taking into consideration the new forms discussed here, would raise more revenue and thus allow greater redistribution. Indeed, in Uruguay, where income distribution is relatively equitable by regional standards (the share of the richest 20% is 3.6 times that of the poorest 40%), it is estimated that the new dual tax will reduce the Gini coefficient by 2.2%, in line with the developed countries (the transfer from the richest 10% is almost 2% of total income).

It is clear, then, that the great taxation shortfall in the region derives from the situation with personal income tax. It is only fair to acknowledge that it will be impossible to attain the levels of revenue raised by the mass taxes in the developed countries, where average per capita income at purchasing power parity is four times that of Latin America, while financial income is almost eight times as high. It must be realized, however, that our proposal for Uruguay concentrates the tax burden on the two wealthiest deciles, making it appropriate for a region where, as we have pointed out, the richest 20% across Latin America receive some 60% of total income while the poorest 40% receive an average of barely more than 10%. Since open regionalism was implemented in the early 1990s, furthermore, this average ratio of 5.5 to 1 has remained unchanged, even as income has increased by almost 60%.

As a corollary to the considerations set out in this section, there is a vital need for efficient collection of the revenue from the income tax system, especially the personal income component. This component is essential not just as a revenue-raising pillar with the potential for growth to finance ever-increasing physical and social infrastructure needs, but also as the tax with the greatest redistributive capacity. That is a crucial consideration in a region where the world’s longest-standing and acutest

TABLE 5

Latin America (10 countries): The equity of personal income tax^a

	Uruguay (2004)	Colombia (2003)	Ecuador (2003)	Peru (2000)	B.R. of Venezuela (2003)	Honduras (2004)	Costa Rica (2004)	Guatemala (2000)	Panama (2003)	Mexico (2003)
Gini income inequality coefficient prior to the tax	37.6	53.7	40.8	53.5	42.3	56.9	60.2	59.6	63.6	43.3
Gini coefficient after the tax	35.4	53.4	40.3	53.5	42.1	56.4	59.4	59.5	63.1	39.6
Change in Gini coefficient	2.22	0.30	0.45	0.03	0.19	0.50	0.74	0.11	0.53	3.71
Wealthiest decile: % of income prior to the tax	30.00	44.5	29.9	41.2	41.9	45.1	49.4	49.3	51.3	33.1
Wealthiest decile: % of income after the tax	28.20	43.7	29.4	41.1	41.7	44.4	48.7	49.2	50.1	29.7
Change	-1.80	-0.80	-0.50	-0.10	-0.20	-0.76	-0.68	-0.13	-1.18	-3.40
Revenue from the tax, 2004 (% of GDP)	2.4	1.2	...	1.2	0.4	1.3	1.3	0.4	2.0	2.4

Source: Uruguay, Barreix and Roca (2006); Colombia, Zapata and Ariza (2006); Ecuador, Arteta (2006); Peru, Haughton (2006); Bolivarian Republic of Venezuela, García and Salvato (2006); Honduras, Garriga (2007); Costa Rica, Trejos (2007); Guatemala, ICEFI (2007); Panama, Rodríguez (2007); Mexico, Ministry of Finance and Public Credit (2004) and Barreix and Roca (2007).

^a The years in brackets below the names of the countries are those of the surveys used to prepare the estimates.

income inequality coexists with a high level of poverty.²⁵ Personal income tax, then, can be an important element of social cohesion in Latin America, since inequality prior to fiscal policy is worsening both in developing countries and in those of the OECD. Tax revenue raised from the highest deciles can be used to finance targeted spending on the lowest, thereby providing opportunities for the least privileged. At the same time, payment of such an individual tax not only strengthens taxpayers'

relationship with the State but legitimizes their demands for better public services.

To sum up, in the medium term the taxation basis for fiscal sustainability in Latin America will have just two pillars: VAT and the system for taxing income. To show responsibility, therefore, the region ought to renew the mainstays of its tax system, particularly income tax, during the very favourable upturn stage of the cycle.

(Original: Spanish)

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²⁵ It is important to realize that while average poverty and indigence levels in Latin America have fallen from 48.3% and 15.3% in 1990 to 41.7% and 12.4% in 2004, the size of the populations living in disadvantaged and critical situations remains very large and places severe constraints on growth and social cohesion (ECLAC, 2005).

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