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OPPORTUNITIES FOR IMPROVING TAX COMPLIANCE THROUGH INTERACTION AND COOPERATION

Topic 1.2

RELATIONSHIP BETWEEN THE AMOUNT AND DISTRIBUTION OF THE TAX BURDEN AND TAX COMPLIANCE

Luiz Villela

Fiscal Division

Inter-American Development Bank - IDB

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Case Study:

TOPIC 1.2 **LEVEL AND DISTRIBUTION OF THE TAX BURDEN: THE EFFECTS ON COMPLIANCE IN THE CONTEXT OF ECONOMIC INTEGRATION**

Luiz Villela
Tax Specialist, Fiscal Division
(Inter-American Development Bank - IDB)

INTRODUCTION

The economic approach to taxation is centered in three main aspects: efficiency, equity and sufficiency. The main function of a tax system is to transfer funds from the private to the public sector in order to finance the activities of the State. As this is done it affects the income distribution and changes the market signals that inform the decision-making private economic agents. The non-intentional negative effects of taxation result in inefficient use of production factors and results in a general loss of welfare. This is called deadweight loss, since it corresponds to resources that are extracted from society but are not converted into corresponding benefits. Equity is also an essential factor since society only accepts to be taxed if it feels that everyone is paying their fair share and the resources are used according to desired ends. And lastly, sufficiency is also paramount, since the tax system has to be able to raise the adequate amount of funds in order to finance the expenditures required by society.

The amount of tax that people effectively pay – the tax burden – is essentially related to the nominal or legal rates, the tax bases, and the level of compliance. It is important to note that the tax burden that we normally care about is the aggregate of all taxes for the whole economy, which by no means is evenly distributed among all citizens or taxpayers. The tax instruments that are used to extract funds from the private sector are of different kinds, and depending on their taxable base and relative size (rate) they will be more or less successful in this function. The success can be gauged by comparing sufficiency aspects (if the amount raised was enough to meet governments needs) with the various costs associated with the process: economic distortions and deadweight losses caused by administration and compliance costs, as well as evasion and avoidance, which are different forms of non-compliance.

The problem of compliance is as old as taxes themselves, and from the economic standpoint it can be viewed from many different angles: public finance, law enforcement, administration, design, ethics, or a combination of all of these.

Within the context of public finance, tax compliance has implications directly related to incidence, equity and efficiency. The tax system can be structured in such a way that the wealthy are taxed proportionally less than the poor (regressive), leading to an environment where high compliance is more easily achieved. In this case the tax incidence may lead to an efficient outcome but the system as written in the law is not equitable, and politically this might not be sustainable in the long run if democratic institution work. On the other hand, if the system is such that the wealthy can evade a larger share of their taxes than the poor can, the final outcome is that the effective system will be less equitable than the legislated one. This system might be as inequitable as the previous, but much less prone to change. Furthermore, since both tax evasion and compliance costs (including tax planning) result in deadweight loss, this system might be less efficient than the previous. When a tax system doesn't raise enough resources due to evasion and avoidance, new tax instruments will most probably be introduced to meet revenue requirements. This could mean that higher and more distortionary taxes on reported incomes are introduced, while unreported incomes continue to escape taxation. Cheating affects incidence because it is easier to evade taxes on certain incomes than others. On the other hand, it is seldom a generalized practice, even when law enforcement is lax and penalties are low, which introduces the ethical variable to the debate.

With the growing interdependency between world economies, promoted by globalization, the question of compliance and how it is related to efficiency, equity and sufficiency has acquired a whole new dimension. The design and the administration of a tax system no longer depend solely on a country's sovereign decision. The increased mobility of factors, especially capital, implies that flows to different nations become very sensitive to tax treatment differentials, and the growth of economic activities taking place outside a country's frontiers may hinder its capacity to properly levy its taxes as it wishes.

This paper will discuss the relationship between the amount and the distribution of the tax burden and the level of taxpayer compliance, giving special attention to a context of growing economic integration.

TAX POTENTIAL

The level of taxation is usually determined by a coefficient that relates the value of all tax revenues and the GNP, working as an indicator of relative capacity and a common denominator. This allows us to compare the tax burdens of different countries. Aside from this comparison, a simple percentage is not enough to indicate if the taxation level is high or low.

To assess if a country's level of taxation is proportionally or relatively high or low, one must compare tax level with the economy's potential tax paying capacity, not the GNP. Of a country's net production or income, a part is necessarily taken by basic consumption needs and another to insure minimum level of reproductive investment, at least to offset the effects of asset depreciation. Whatever is left constitutes a potential tax base.

In a rich country the part of the national income (or GNP) that is not committed to basic consumption or minimum investment is proportionally larger than in a poorer country, hence a higher tax potential. This means that if the two countries present the same level of taxation in respect to GNP, the poorer one is actually making a higher tax effort than the wealthier.

A country's tax potential is determined by many factors, and among the most important ones are the level of per capita income, the openness coefficient of its economy [(imports + exports)/GNP] and the importance of primary exports (agriculture and mining products), income distribution, and the level of urbanization.
The tax collection efficacy (Et) is determined by the relation between effective (T) and potential (Tp) tax revenues:

$$Et = \frac{T}{Tp}$$

When the amount of tax revenue actually raised (T) is close to the potential (Tp), it is said that the country presents a high tax effort. As a matter of fact, it is possible that some countries present a coefficient higher than one, which means that the actual revenues are higher than expected, given the country's characteristics. The estimation of the tax potential and hence of the tax effort is usually done through an econometric time series and cross-section exercises that correlate actual tax burdens or ratios (T/GNP or GDP) with a series of variables for many different countries over a period of time. This results in a "fitted curve" that indicates the expected tax burden of a country given its economic attributes or characteristics.

A recent study[1] estimates the tax effort index for a sample of 75 countries for the period 1985/95, at the central government level only. It incorporates the most recently available data and employs modern econometric techniques. The results suggest that per capita income, the ratio of trade to GDP, and the share of the agricultural sector in GDP are the most consistent explanatory variables of the tax ratios.

Tax Effort Indices – Selected CIAT Member Countries

Countries	Actual Tax Ratio	Fitted Tax Ratio	Tax Effort
Netherlands	44.273	27.228	1.623
France	37.808	25.785	1.466
Italy	37.482	26.176	1.432

[1] Piancastelli, Marcelo "Measuring Tax Effort of Developed and Developing Countries – Cross Country Panel Data Analysis, 1985-95". IPEA, TD 818, Rio de Janeiro, Brazil, September 2001

Uruguay	25.515	18.089	1.411
Portugal	28.667	24.307	1.179
Costa Rica	20.903	17.913	1.167
Spain	28.326	24.437	1.159
Brazil	17.103	16.273	1.051
Chile	18.801	19.451	0.967
Ecuador	14.836	16.819	0.882
Peru	10.728	12.223	0.878
Colombia	11.895	15.431	0.771
Mexico	13.742	18.431	0.746
United States	18.020	24.254	0.743
Argentina	11.401	17.434	0.654
Canada	18.008	27.743	0.649

Source: Piancastelli, Marcelo: "Measuring Tax Effort of Developed and Developing Countries"

Piancastelli's exercise was done considering only central government tax revenues, and that may cause distortions, especially in the case of federations where subnational tax revenues may be significant. This is probably what explains the relative position of countries like Canada and the US, where provinces and state raise a significant share of the countries' revenues. In the case of Brazil, where state governments are responsible for the country's most important tax[2], the fiscal effort index is probably also underestimated. The fact remains that there is a large variation concerning the capacity countries have to extract revenues to finance their governments.

The characteristics of a country's tax instruments and administration, as well as the level, distribution and quality of government expenditures are important to explain why some countries present higher tax effort indices and are able to proportionally raise more tax revenues than others.

EFFECTIVE TAX RATES

The tax burden measured as the ratio of total tax receipts to GDP is a very gross average that tells very little about the incidence of the various taxes that comprise a tax system. The nominal tax rates also tell very little since they are applied to different tax bases, and are directly influenced by the quality of the tax administration and enforcement. One way to have a better picture of the incidence of the tax burden is to use the effective tax rates on the different production factors and on consumption.

Calculations[3] done for EU countries, USA and Japan show that there are significant differences in tax incidence and that they are changing over the years. The

[2] The Imposto sobre Mercadorias e Servicos (ICMS) is a subnational VAT and alone responsible for almost ¼ of the tax burden.
[3] European Economy, Directorate-General for Economic and Financial Affairs, Brussels, 2000.

effective tax rate on labor is calculated considering all social security and payroll taxes as well as personal income tax attributable to labor income as a ratio to the total labor costs. The effective tax rate on capital considers the ratio of personal income taxes attributable to capital, taxes on corporate income and property taxes in respect to a tax base proxy that is the adjusted gross operating surplus. Lastly, the effective tax rate on consumption is the ratio between indirect tax revenues to the value of final consumption, excluding wages paid by general government.

Effective Tax Rates – 1999

Countries	***Labor Effective Tax Rate***	***Capital Effective Tax Rate***	***Consumption Effective Tax Rate***
European Union	37.6	23.6	20.8
United States	23.9	22.7	9.3
Japan	20.3	18.7	13.6

One can see that on the average the EU countries rely more heavily on taxes on labor, due mainly to the high social security benefits and an aging population. The US has a significantly lower consumption taxation than the others while Japan has the lowest effective taxation on both labor and capital. The differences within Europe are also significant. The capital effective tax rate varies from 16% in Germany to 34% in Luxembourg[4]. The labor effective tax rate varies from 24% in Ireland to 51% in Sweden. Moreover, the changes in the incidence pattern were significant over the last 20 years. The EU countries have experienced an average increase of 10 percentage points in their tax ratio (revenues to GDP), of which about 7% in labor, 2% in capital and 1% in consumption. The US has experienced only an average 2.5 percentage points increase in the last 20 years, with a 4% increase in labor taxes but a 1.5% reduction in consumption taxes, and almost no variation in capital taxation. In a significant manner, this tax incidence distribution helps to explain why the US economy has gained competitiveness in respect to other developed nations.

LIMITS TO TAXATION

The potentially taxable bases have finite dimensions, so any country's capacity to raise revenue has its limits. Depending on the level and the distribution of the tax burden, this capacity will vary, but there is a saturation point beyond which a high degree of tax aversion will come in place and further initiatives to raise tax revenue will inevitably fail.

Economists like to graphically show this taxing limitation with the Laffer Curve, which relates the increases in the tax rate with diminishing increments in the overall tax revenues, up to a point where no increases will occur. In fact, beyond this saturation point additional tax burden could reduce the revenue outcome.

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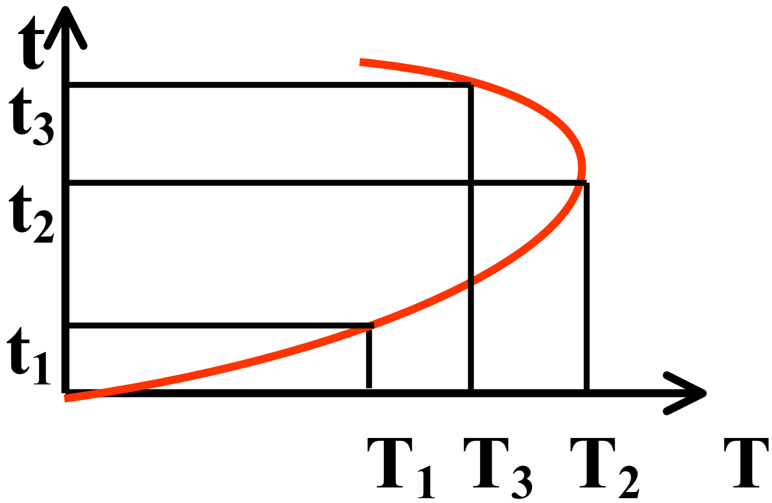
[4] This refers only to domestic capital income, in contrast with special treatment of income from non-residents.



LAFFER CURVE

The shape of this curve will change from country to country as well as from time to time within each country. Depending on the choice of taxes that are used, how the tax administration is managed and how society perceives government expenditure, the tax-aversion behavior that leads to avoidance and evasion (non-compliance) will give distinct formats to the Laffer Curve.

Tax aversion is a consequence of a high tax burden in absolute terms, as well as a perception that it is unfairly distributed. This could happen if the taxes are “bad” or if they are poorly managed or enforced, allowing cheaters to unfairly compete with honest taxpayers. A good tax system should reasonably distribute the burden between different taxable bases such as income, consumption and wealth. The various taxes applied should be equitable, free from arbitrariness, create minimum interference in the economic system, result in reduced administrative and compliance costs, and render adequate revenue proceeds. If a satisfactory balance of well distributed, efficiently and fairly managed “good” taxes are not in place or the level of tax revenues surpasses the amount that the economy allows and society accepts to pay, one can expect rising non-compliance as a normal behavior.

TAX AVERSION, EVASION AND AVOIDANCE

When inadequate taxing conditions prevail, citizens are averse to paying taxes. In the long run this could lead to tax reforms, but in the short run the response is reduced compliance through evasion. Of course, evasion happens under any circumstances, but is expected to be more intense when the tax burden is high, perceived as unfairly distributed, or there is no sustained social pact concerning proper government expenditure priorities. Enforcement, actual or perceived, is key to evasion. In highly competitive activities, if one player cheats and gets away with it, it is most likely that the others will pursue this alternative in order to maintain their competitiveness. It is always a matter of cost. Not paying taxes results in a benefit by reducing costs while on the other hand, fines, jail time and the probability of these sanctions result in costs. Taxpayers balance costs and benefits when deciding whether to cheat or not.

It is usually said that there are only two things unavoidable in life: death and taxes. Considering the latter, this is becoming less and less true. Tax avoidance, contrary to evasion, is a legal way to reduce the tax burden and increase net returns, so the balancing of costs and benefits is much more straightforward. Tax avoidance has to do with competition and opportunity. One does not have to estimate the cost of being caught cheating. Furthermore, in a competitive economic environment the inadequate taxing conditions that may lead to aversion and evasion probably do not have a significant influence in the decision to pursue tax planning to mitigate the tax burden.

Since tax avoidance is a legal procedure, it is made possible by breeches in the tax laws of a country or by the fact that different countries have different tax laws. Although the diverse legislation creates distinct opportunities for tax avoidance, it is within the income tax that tax avoidance most frequently occurs. This is because it is a direct tax and hence its avoidance schemes directly benefits those who promote and pursue it.

There are three basic principles[5] of tax avoidance within an income tax:

1) Postponement of taxes – given that the present value of a postponed tax could be significantly less than if it were paid now;
2) Tax arbitrage between individuals – if they are subject to different tax rates, leading to “tax induced transactions;”
3) Tax arbitrage across income streams subject to different tax treatments.

Among the most commonly known “tax planning” practices are borrowing to invest in assets yielding capital gains since the interest is usually deductible at ordinary rates and the gain, when taxed, is frequently subject to a favorable rate that, in any case, is due only upon realization. Without going into the multitude of ways that tax planning could avoid or mitigate tax liabilities, it is important to stress that with growing globalization and the increase of cross-border transactions and investments done by firms the possibilities are proliferating.

GLOBALIZATION AND ECONOMIC INTEGRATION

Globalization is the result of the growing integration of economies and societies around the world. Integration has resulted from reduced transport costs, lower trade barriers, rising capital flows and faster communication of knowledge and ideas. Although it has generated economic opportunities the integration process does not come without risks and problems. The growing interdependency among national

[5] Stiglitz, Joseph E., “The General Theory of Tax Avoidance”, in National Tax Journal, vol. XXXVIII

economies generates a smaller tolerance for divergence in domestic policies, which calls for stronger international coordination.

Particularly in tax matters, there is a potential conflict between greater transnational economic activity and the wish policymakers have to retain their sovereign ability to take whatever domestic decision they believe is proper. With increased economic integration it has become very difficult to separate domestic from international policies. Already in the present, and with more intensity in the future, national tax policies will have effects on other countries as well as be influenced by their tax policies.

A particularly well-known example is what happened in 1984 when the United States unilaterally decided to abolish the withholding income tax of 30% on foreign residents that earned portfolio interest income from sources within the US. This included interest on US government bonds, on bonds issued by US corporations and US bank accounts and certificates of deposit. This lead to a classic "race to the bottom," whereas one after the other, all the major economies abolished their withholding taxes on interest for fear of losing capital flows to the United States[6]. For Latin-American countries, the US portfolio interest exemption has resulted in a flight of an estimated[7] US$ 300 billion from the region to the United States in a short period of time.

The economic interdependency has deep implications for tax issues, especially in three areas:

1) The important increase in the mobility of factors, particularly of capital, that affects the tax base and makes them very sensitive to different tax treatments.
2) The growing difficulty in determining and taxing activities taking place outside a country's jurisdiction, especially in the case of intangible goods.
3) The increased complexity in the tax administration process that will demand new instruments and a greater level of information, requiring broad and intense cooperation between jurisdictions.

Capital mobility has increased dramatically with the advances in communication technology, the liberalization of exchange controls, and the development of new financial instruments. The competition between countries to attract capital has resulted in a race to reduce taxes to lower the cost of capital for investments, as well as to attract foreign savings while retaining the domestic savings. Ever more sophisticated tax planning mechanisms and financial instruments are put in place, increasing the possibilities of tax arbitrage and resulting in the growing erosion of the income tax base. The increase in transactions between associated or affiliated firms permits the determination of transfer prices in order to elude tax authorities and reduce revenues. Highly qualified professionals, key to a knowledge-based economy, are becoming more

[6] Avi-Yonah, Rueven. "Globalization, Tax Competition and the Fiscal Crisis of the Welfare State", in Harvard Law Review, Vol. 113, May 2000.
[7] Kant, Chander. "Foreign Direct Investment and the Capital Flight". Princeton Studies in International Finance, No 80, 1996.

and more sensitive to different tax treatments and consider this in their decision to migrate.

Capital volatility and fiscal planning with the use of offshore financial centers, hedge funds and intra-firm transactions, resulting from the competition between nations, have caused the erosion of traditional tax bases such as income and foreign commerce. In effect, increased trade liberalization and international capital flows in the last two decades have resulted in a 4% reduction in income tax revenues and 10% in trade taxes of a representative number of Latin-American economies[8]. This has been compensated for by increased taxation of payroll by 5% and on consumption by 11%. A similar trend was observed in OECD countries, with negative implications for equity.

The defenders of tax competition between nations argue that this prevents the creation of Leviathans, countries with oversized and inefficient governments. Available international data shows that the level of taxation is still growing, but with a more unfair and inefficient distribution among taxpayers. The overall level of taxation is dictated by financing needs, but the distribution of the burden has to do with the tax instruments in use.

In a globalized and competitive environment the possibilities of tax avoidance and evasion are clearly enhanced since the lesser degrees of freedom to apply the adequate taxes, creates both the stimulus and opportunity for these practices.

CONCLUSIONS

It is clear that the level and distribution of the tax burden affects compliance in a globalized world economy. Higher tax levels tilt the balance that taxpayers consider when confronting costs and benefits before deciding on evasion or avoidance measures. The types of taxes that are used and their incidence also matter since some activities are easier to evade or avoid than others.

As exemplified by the Laffer Curve, taxpayers have different levels of tolerance when confronted with taxes. Increasing tax burdens result in growing aversion and leads to higher non-compliance. This takes the form of evasion and avoidance. Evasion is very much determined by the risk of being caught and the magnitude of the sanctions applied. Tax avoidance is more related to competition and opportunity. What really matters is that both reduce tax revenues and cause a redistribution of the tax burden among the other taxpayers that are unable or unwilling to evade or legally avoid taxes.

With the growing interdependency of economies and rising cross-border activities, the opportunities for both evasion and avoidance are increasing. To mitigate this problem and continue to sustain the desired levels of revenues, countries are changing their tax instruments and this results in the redistribution of the tax burden.

[8] Barreix, Alberto and Alvarez, Daniel, “Cambios en el Contexto Internacional y sus Efectos en la Tributación de América Latina y el Caribe”, XIII Regional Fiscal Policy Seminar, ECLAC, Santiago, Chile, 2001.

Capital is one factor that is being less and less taxed at the expense of labor and consumption. This means that tax systems are becoming less equitable and are promoting more economic distortions. For this reason the quality of the tax systems is deteriorating in most countries.

This doesn't have to be this way. The main reason for the inability of most world economies to deal with this problem (this is being referred to as the "missing tax bases" or the "Fiscal Termites") is that very limited cooperative actions have actually been put in place in this field. International trade is a much older activity, and therefore countries have reached significant agreements on how to regulate it and avoid unfair or predatory competition. Taxation, as a symbol of national sovereignty, has advanced very little and most international agreements are bilateral and limited. The world doesn't have multilateral tax agreements or organizations to establish unified technical standards, promote coordinated harmonization efforts, significant and automatic exchange of information, and internationally agreed and applied sanctions. We are still in a phase of technical cooperation, natural convergence and limited exchange of information.

Lets hope we can increase our pace and advance more rapidly in a worldwide agreement on tax matters. Otherwise we run the risk of entering the next century limited to collecting poll taxes.

Luiz Villela
Tax Specialist, Fiscal Division
(Inter-American Development Bank - IDB)
E-mail: luizvi@iadb.org