1. Factors that influence tax systems

I. INTRODUCTION

Darwin accustomed us to thinking that biological changes follow evolutionary laws. Living organisms adjust to reflect and to take advantage of the ecological or environmental conditions in which they exist and operate. As those conditions change, so must the organisms if they are to continue to exist and prosper. Species that are at odds with those conditions, and do not adjust sooner or later, disappear. Tax systems are much like living organisms. They too live in an environment that is always changing and that, for particular countries, reflects local and, in recent decades, increasingly global conditions. The systems must evolve if they are to survive. No system can be optimal for all conditions. The required evolution is not without difficulties and conflict.

Tax systems do not just raise revenue for the governments, but increasingly they have become policy instruments that modern governments use to pursue various goals. When these goals require the establishment of systems that are not in harmony with the "natural" environment, conflicts are bound to arise. We may, at times, observe taxpayers' increasing resistance, or even tax revolts or tax revolutions; or simply governments' attempt at reforms, aimed at bringing the tax systems closer to the social environment.

To understand why tax systems change over time, we must consider the forces that shape them. On the one hand, these are the governments' demands on the tax system, which may change. In other words, what the governments expect the tax system to do. In recent decades, these demands have often transcended the traditional and limited objective of revenue generation. On the other hand, there are more objective forces such as (a) changes in the structure of the economy; (b) major macroeconomic imbalances; (c) technological developments in the field of taxation; (d) globalization; and (e) other developments that also influence tax developments. These could be called the supply forces, since they largely determine the kind of tax system that is feasible in a country, given the existing environment. Among these forces there may be effects coming from globalization and, within countries, from decentralization movements associated with fiscal federalism.

When governments attempt to have tax systems that are at great variance with what is feasible, they are likely to face disappointment. This does not mean that governments do not have any degrees of freedom. Within certain limits they can choose various tax systems that can vary as to their levels or their structure. These limits can be stretched by actions of the government in improving the tax administration, in simplifying tax laws, in educating taxpayers to increase their tax compliance, and so forth. However, limits are still there.

II. TAX SYSTEMS AND GOVERNMENT'S ROLE

We start this discussion with what we could call the forces that shape tax systems. We associate these forces with what the government in charge at any one time expects from the tax system. What society expects is assumed to be closely tied to the role of government in the economy, and with the extent to which that role requires a given level and structure of taxation. The more extended and ambitious that role becomes, the more demands will be made on the tax system.

What society expects from the government changes with time and has changed dramatically over the past century (see Tanzi, 2018). It is also different from one region of the world to others. This role occasionally changes dramatically, in response to particular political forces or other events. There was a time when the government was expected to fulfill only basic or fundamental functions, such as the defense of the country, the provision of justice, the provision of basic institutions, and the financing of public works necessary for an organized society. These were the main functions identified by Adam Smith in *The Wealth of Nations*, in 1776. If the function of the government is as limited as was outlined by Adam Smith, the level of taxation need not be high, and the structure of taxation can more or less passively reflect the prevailing supply conditions. Taxes can be as neutral as possible (to satisfy a basic requirement dear to economists), and they can be collected from the most accessible, or most visible, tax bases.

Historical statistics indicate that until World War I the level of taxation in industrial countries was generally very low, say around 10–15 percent of national income, and the structure of taxation was heavily dependent on easily accessible sources, such as foreign trade, land values, and licenses. A famous French public finance scholar, Paul Leroy-Beaulieu, in a classic two-volume treatise on public finance, published in 1888, wrote that the level of taxation would be considered "moderate" when the ratio of all taxes (including provincial and local taxes) in the national income was 5 or 6 percent. He considered the tax level "heavy" when the ratio rose to 10 or 12 percent. He went on to say that beyond 12 percent the level of taxation would become exorbitant and would have serious consequences for the growth of the economy and the liberty of the citizens (see Leroy-Beaulieu, 1888, pp. 127–128). At his time only few countries had tax levels that exceeded 10 percent of gross domestic product (GDP).[1] By comparison, the level of taxation of Organization for Economic Co-operation and Development (OECD) countries today averages close to 40 percent of GDP, and that of developing countries about 18 percent. Although some argue that these new levels have serious consequences for the growth of the economies and for the liberty of the citizens of the countries, there is no sign of a bandwagon in support of reducing these levels worldwide.

The Professor of Public Finance at Harvard in 1913 had considered "clearly excessive" the maximum rate of 7 percent that was being considered for taxable income in excess of US $500,000 (at 1913 prices) by the income tax law that was being proposed at that time.[2] And the then Chairman of the Ways and Means Committee of the US Congress, in a speech delivered on the floor of the US House of Representatives in 1913, stated that the income tax rates in the new tax law, which ranged from 1 percent to a maximum of 6 percent, "would produce more money than the mind of man would even conceive to spend."[3] Of course, only few would be subjected to that rate because of the high personal exemption.

The period that followed World War I was one in which governments progressively took upon themselves the responsibility of *redistributing* some income and *sustaining* the income of citizens during periods of economic slowdown. This change of attitude was associated with the "Keynesian revolution", although the challenge of socialism and the propaganda coming out of Russia probably played some role. These new responsibilities made heavy demands on the public purse, which were translated into pressures on the tax system to generate more resources than previously and, perhaps as importantly, to become an instrument of some income redistribution (through its progressivity), as well as one of income maintenance (through the built-in flexibility of the income taxes) and of allocation of resources (through the many incentives that could be provided through various forms of tax expenditures and tax preferences). These new functions would in time make taxation a far more complex area than it had been, and the life of tax administrators far more difficult, as we shall see later in Chapter 3 (see also Tanzi, 2017).

As time passed, the average level of taxation for the majority of countries kept rising, even though the period of optimism about what tax systems and government policies in general could do was replaced in the 1980s and later years by a period of growing skepticism or, in some cases, even antagonism toward the government. These attitudes affected both the level *and*, especially, the structure of taxation. Some taxes, and particularly the taxes on personal income, which lend themselves better to what could be called social engineering than, say, general sales taxes and other taxes, became important after World War II.

The importance of income taxes in the tax systems of the more advanced countries rose considerably. Income taxes came to be seen, by many governments and many citizens, as ideal instruments for achieving specific social and economic goals, and the tax systems were adjusted to reflect this bias. Many of the attempts on the part of governments to promote certain activities over others were promoted through "tax expenditures" associated with income taxes. The rates of these taxes became very high, while a phenomenon referred to at that time as "tax erosion" became progressively more important (see Tanzi, 1969). Tax erosion refers to the gap between the potential and the actual income tax base. This gap increased with the years in many but not all tax systems, not just for personal but also for corporate income taxes.

The reaction to these trends was growing tax evasion and tax avoidance. Underground economic activities promoted by high tax rates began to attract attention and to be a phenomenon deserving more study and pointing to the need for reforms in the tax systems (see Tanzi, 1980). The high tax rates and the proliferation of tax incentives greatly complicated tax administration and, in the views of a growing number of economists, discouraged personal incentives.

These trends affected developed and developing countries alike, although, because of the constraints outlined in the next section and in the next chapter, the level of taxation in developing countries remained much lower than in industrial countries. The reasons are discussed in Chapter 8. These constraints also affected the tax structure, limiting the role of income taxes in developing countries.

III. TAX SYSTEMS AND OBJECTIVE CONSTRAINTS

It was mentioned earlier that, to be stable, the tax systems must be in harmony with the natural environment in which they exist. That environment either facilitates or makes harder the establishment and the maintenance of a given tax system. In other words, it determines to some extent the degrees of freedom that the government of a given country has in establishing that country's tax system. The environment is influenced by different factors such as (a) the structure of the economy and how industrialized it is; (b) the distribution of income; (c) the openness of the economy and how globalized the world has become; (d) the political system; (e) the use of formal accounting; and (f) technological developments.

Structural factors. One factor that has been significant in shaping tax systems over long periods of time, but has not attracted the attention of economists, is the structure of a country's economy (see Tanzi, 1994). This structure imposes limits on the use of some taxes, or facilitates the use of particular taxes. As a consequence, it affects both the level and the structure of taxation. It has been known for some time that the "openness" of the economy, as for example measured by the share of imports and exports in GDP, is, or can be, an important determinant of the level of taxation in developing countries (see Tanzi, 1973). Many studies have confirmed this relationship for past years. The more trade a country has with other countries, the easier it normally is, or used to be in the past, to raise tax revenue. The reason for this relationship is that, as the late Professor Musgrave once put it, foreign trade provides a country's government with an important "tax handle". It is less known that the growing importance of income taxes in industrial countries was also the result of not only the changes in social and political trends mentioned above but also the structural changes in the economy.

Two especially important changes were, first, the increased proportion of total personal income that individuals derive from the sale of their labor services to large enterprises, or from the use by others of their wealth (tangible or financial); and, second, the gradual concentration of income generation in fewer, larger, economic units (governments, large corporations, large banks, etc.). Withholding at the source requires that *income is paid to others and by large establishments*. Where self-employment or small entities prevails, income taxation cannot flourish.

Tax administrations around the world have discovered the close relationship that exists between tax compliance and withholding at the source. This implies that when a country experiences a process of de-industrialization, and large enterprises begin to disappear, its capacity to raise taxes will also be reduced. Poor tax administration has generally been blamed for the poor performance of income taxation in developing countries, but that performance depends significantly on the structure of the economy. The fact that the share of wages and salaries in national income in Latin America and other developing areas is low, and that self-employment and subsistence activities are important, makes it difficult for developing countries to raise large revenue from individual income taxes.

Other structural factors (such as the share of agricultural income in national income, the share of mineral exports in total exports, the development of large retailing outlets) also play major roles in facilitating the collection of income and sales taxes. The main point to be understood is that these structural factors impose constraints on the kind of tax system that is possible for a given country. To ignore these constraints is to invite disappointment. Often they are ignored when countries try to copy the tax systems of other, often more advanced, countries. Or when they are told that there is an optimal tax system that is good for all. This explains why foreign advice is at times of limited value. That advice may be conditioned by the structure of the economy from which the foreign expert comes.

Macroeconomic factors. Tax systems are also influenced by various macroeconomic factors. For example, a high and accelerating rate of inflation will sharply reduce a country's ability to raise, or to continue raising, income taxes (see Tanzi, 1977). Income taxes seem to be highly allergic to a high inflationary environment. Import duties, and to a lesser extent general sales taxes, do not coexist well with a highly overvalued exchange rate. Also booms and bubbles may artificially inflate some incomes leading to temporarily higher tax revenue as shown in Chapter 6. And, of course, recessions affect tax revenue, and the revenue from some taxes more than that from others. These and other macroeconomic factors must be taken into account when planning for changes in tax systems, and they must be analyzed in explaining changes in tax revenue that may occur.

Often changes in the ratio of tax revenue to GDP are attributed to changes in the quality of the tax administration when in fact they may be the direct consequence of macroeconomic developments. The relationship between changes in macroeconomic variables (such as inflation, the rate of exchange, the rate of interest, the wage rate) and changes in the level and the structure of the tax system remains a relatively unexplored area of research in taxation. Tax reforms that ignore these relationships are likely to lead to disappointment.

Technological factors. As in many other walks of life, technology plays a major and growing role in bringing about changes in tax systems. Such a role may be associated with the "invention" or the "discovery" of new taxes, with the introduction of new collection techniques, or with other broader developments. It may seem strange to realize that a century ago the income tax was a relatively new tax, based on a concept that was not easily definable. Seligman, perhaps the most influential scholar in the field of taxation in the early part of last century, was highly skeptical about this new tax (see Seligman, 1914). It is unlikely that this tax would have become so important if the "technological development" of withholding at the source had not been introduced and if the political trends described earlier had not taken place. In the United States, withholding at the source for wages and salaries was introduced in 1943, 30 years after the introduction of the income tax, and Ronald Reagan, when he was the Governor of California, at one time considered abolishing withholding at the source for state income taxes because, in his view, withholding at the source made the collection of taxes easier for the state. He did not like this result because he wanted to increase taxpayer resistance to taxes and reduce public spending and the government's economic role.

Value added tax represents another important technological development in taxation. Its "invention" is only a few decades old. It is unlikely that it would have become so popular had it not been for the creation of the European Economic Community that had required a well-defined rebate on the taxes contained in the value of exports and a well-defined tax on the value of imports if taxes were not to be used to gain unfair trade advantages over trading partners. From the Economic Community, this tax spread to other areas, such as Africa and Latin America, helped to some extent by cultural or political factors. Today it is practically a universal tax.

Other "new taxes" (on cash flow, on expenditures, on gross assets, on financial transactions, etc.) have been proposed or occasionally used by some countries over the years. It remains to be seen which if any will come to play a role in future years. Chance, politics, and technology will all interact to determine the outcome. The only certainty is that the tax structures that will prevail in the future will contain elements that are missing from the present systems and that cannot be easily identified at this time.

These developments will be influenced by the use of computers and by other technologies, such as the Internet, and increasingly by globalization. Internet shopping is creating growing difficulties in tax systems. Computers have also brought major changes to tax systems by making tax administrations focus on and prefer taxes that lend themselves to the use of computer technology (say value added taxes) while perhaps paying lesser attention to those that do not lend themselves to the use of this technology. The cost of collecting different taxes will inevitably influence the choice of taxes in the future, and the cost of collection will be affected by computer and by other technology. An increasing number of countries are requiring now that tax declarations be submitted electronically.

Technology will determine to some extent the facility with which factors of production can move from country to country. By increasing the mobility of these factors, it will also increase the impact that taxes can have on international competitiveness and on decisions as to where to produce. Capital is often more mobile than labor. And higher educated and younger individuals are more likely to have greater legal mobility than lower educated and older individuals. Thus, capital and younger and more educated individuals are more likely to migrate when they are subjected to higher taxes. This is already putting strong pressures on governments to reduce the tax rates on these factors. As we shall see in later chapters, some economists have gone as far as to argue that taxes on mobile capital must eventually fall to zero. Similar arguments might be made for taxes on highly talented and mobile individuals. For sure, the tax rates on these factors of production have already fallen considerably.

These changes will influence the structure and the level of taxation in future years. These considerations are likely to become progressively more important with the passing of time. They have, however, already affected tax policy through changes in tax systems. As the world becomes more open and more integrated economically, both structural changes and technological changes will force major tax reforms. The countries that refuse to go along will undoubtedly suffer. Of course, should globalization come to an end, tax systems would greatly reflect this change.

Tax experts would do well to pay more attention to these developments.

NOTES

1. In 1900–1901, the level of taxation expressed as a share of national income was 15 percent for France, 10 percent for the United Kingdom, 8 percent for Germany, and 8 percent for the United States.
2. Cited in Richard Goode (1964, p. 3).
3. This speech by Wilber D. Mills, the then Chairman of the Ways and Means Committee, was cited in a *Washington Post* article (for more detail see Tanzi 1988 and 1992).

REFERENCES

Goode, Richard, 1964, *The Individual Income Tax* (Washington, DC: The Brookings Institution).

Leroy-Beaulieu, Paul, 1888, *Traité de la science des finances*, Tome Premier, *Des Revenue Publics* (Paris: Guillaumin).

Seligman, Edwin R.A., 1914, *The Income Tax: History, Theory, and Practice of Income Taxation*, Second Edition (New York: Macmillan).

Tanzi, Vito, 1969, *The Individual Income Tax and Economic Growth* (Baltimore: The Johns Hopkins University Press).
Tanzi, Vito, 1973, "The Theory of Tax Structure Change during Economic Development: A Critical Survey", *Rivista di Diritto Finanziario e Scienza delle Finanze*, vol. 32, pp. 199–208.
Tanzi, Vito, 1977, "Inflation, Lags in Collection, and the Real Value of Tax Revenue", *IMF Staff Papers*, vol. 24, no. 1 (March), pp. 154–167.
Tanzi, Vito, 1980, "The Underground Economy in the United States: Estimates and Implications", *Quarterly Review*, Banca Nazionale del Lavoro (Rome), no. 135 (December), pp. 427–453.
Tanzi, Vito, 1988, "Forces that Shape Tax Policy", in Herbert Stein, editor, *Tax Policy in the Twenty First Century* (New York: Wiley, pp. 266–277).
Tanzi, Vito, 1992, "Structural Factors and Tax Revenue in Developing Countries: A Decade of Evidence", in Ian Goldin and Alan Winters, A., editors, *Open Economies: Structural Development and Agriculture* (Cambridge: Cambridge University Press).
Tanzi, Vito, 1994, "Taxation and Economic Structure", *Public Choice Studies* (Japan), no. 24, pp. 35–45.
Tanzi, Vito, 2017, "Corruption, Complexity and Tax Evasion" paper presented at the "Tax and Corruption Symposium" organized by the UNSW Business School, Sydney, 19–20 April.
Tanzi, Vito, 2018, *Termites of the State: How Complexity Leads to Inequality* (New York: Cambridge University Press).