Vito Tanzi*

The Economic Role of the State in the 21st Century

The last half century has witnessed major developments in the economies of the industrial countries and in the role that the governments of these countries have played especially through the instrument of public spending. This article describes some of these developments and focuses on the role that the governments of these countries should play in the future.1

The Growth of Public Spending

The tax levels of many industrial countries are today at an all time high. Only a century ago, the situation was far different. Discussing the optimal level of taxation in 1888, the French economist, Paul Leroy-Beaulieu, concluded that tax revenue of 5-6 percent of GDP could be considered "moderate," revenue of 8-10 percent of GDP would be "normal," while revenue beyond 12 percent of GDP would be "exorbitant" and would damage the growth prospect of countries. Leroy-Beaulieu (1988:127-28). In the context of today's tax burdens on industrial countries, and even of many developing countries, such as Brazil or Argentina, that position seems extreme. However, it was far from extreme at the time Leroy-Beaulieu wrote his book. At that time, most of today's industrial countries had levels of taxation and of public spending of around 12 percent of GDP². For example, in 1870, France and Italy had public spending and tax levels of about 13 percent of GDP and the United States had even lower levels. The economic role of the state at that time was limited and was focused on "core" functions such as defense, protection of individuals and property, administration, justice, and large public works. These core functions were largely those described by Adam Smith in the Wealth of Nations. In the period between 1870 and 1913, a period of

intense globalization, there was little growth in the relative levels of taxation and public spending.3 See Table 1.

In later years public attitudes vis-à-vis the economic role of the state started changing. In 1926, John Maynard Keynes called for the 'end of laissez-faire' in a book of the same title and proposed a widening of the role of the state. Keynes (1926). In 1932, in an article in L'Encyclopedie Italienne, Mussolini predicted that the 20th century would become the "century of the state." Mussolini had initially been an economic liberal but he changed his views during the Great Depression. Perhaps he saw political advantage in a larger role of the state in the economy. From an economic perspective, his prediction proved to be right.

At the time when Keynes and Mussolini were expressing these views, other pressures were coming from both the political right and the political left for enlarging the role of the state. Countries that adopted fascism and communism or socialism endorsed the view that the state should play a larger role in the economy. Even Roosevelt's New Deal reflected this view.

These pressures, together with developments such as the Russian Revolution, World War One, World War Two, the advent of totalitarian regimes (both fascist and communist) in several important countries, and the Great Depression created a social environment and some of the economic conditions that ultimately were to encourage the phenomenal expansion of the economic role of the state that would take place in the rest of the 20th century. See Table 1. Public spending started to grow in the 1920s but grew slowly until about 1960. The great acceleration came in the period

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¹ For related discussions see Edwards (2004) and Balcerowicz (2004)

² Still today there are some developing countries, including Mexico, Guatemala, Haiti and others with these levels of taxation.

³ See Vito Tanzi and Ludger Schuknecht, Public Spending in the XX Century: A Global Perspective (Cambridge University Press, 2000)

Table 1: Growth of General Government Expenditure, 1870-2002 (Percent of GDP)

	Late 19 th Century	PrePost World War I		Pre World	Post World War II				
	About 1870°	1913	1920	War II 1937	1960	1980	1990	1996	2002
General Governm	nent for all ye	ars							
Australia	18.3	16.5	19.3	14.8	21.2	34.1	34.9	35.9	35.6
Austria	10.5	17.0	14.7⁵	20.6	35.7	48.1	38.6	51.6	51.3
Canada			16.7	25.0	28.6	38.8	46.0	44.7	41.4
France ^c	12.6	17.0	27.6	29.0	34.6	46.1	49.8	55.0	53.6
Germany	10.0	14.8	25.0	34.1	32.4	47.9	45.1	49.1	48.5
Italy	13.7	17.1	30.1	31.1	30.1	42.1	53.4	52.7	48.0
Ireland ^d			18.8	25.5	28.0	48.9	41.2	42.0	33.5
Japan	8.8	8.3	14.8	25.4	17.5	32.0	31.3	35.9	39.8
New Zealand⁴			24.6	25.3	26.9	38.1	41.3	34.7	41.6
Norway	5.9	9.3	16.0	11.8	29.9	43.8	54.9	49.2	47.5
Sweden ^c	5.7 ^b	10.4	10.9	16.5	31.0	60.1	59.1	64.2	58.3
Switzerland	16.5	14.0	17.0	24.1	17.2	32.8	33.5	39.4	34.3
United Kingdom	9.4	12.7	26.2	30.0	32.2	43.0	39.9	43.0	41.1
United States	7.3	7.5	12.1	19.7	27.0	31.4	32.8	32.4	34.1
Average	10.8	13.1	19.6	23.8	28.0	41.9	43.0	45.0	43.5
Central governme	ents for 1870-	-1937, gene	eral govern	ment therea	after				
Belgium		13.8	22.1	21.8	30.3	57.8	54.3	52.9	50.5
Netherlands	9.1	9.0	13.5	19.0	33.7	55.8	54.1	49.3	47.5
Spain		11.0	8.3	13.2	18.8	32.2	42.0	43.7	39.9
Average	9.1	11.3	14.6	18.0	27.6	48.6	50.1	48.6	46.0
Total Average	10.7	12.7	18.7	22.8	27.9	43.1	44.8	45.6	41.5

Sources: Compiled by Tanzi and Schuknecht based on Fernandez Acha (1976); Andic and Veverka (1964); Australia, Bureau of Census and Statistics (1938); Institut National de la Statistique (Belgium) (1952); Brosio and Marchese (1986); United States Bureau of Census (1975); Butlin (1984); Norway, Statistisk Sentralbyra (1969, 1978); Delorme and André (1983); Flora, Kraus, and Pfenning (1983); IMF, Statistical Appendix, New Zealand; IMF, Switzerland: Recent Economic Developments (1996); Historical Statistics of Japan (1987); Mitchel, International Historical Statistics (various years); Neck and Schneider (1988); The Netherlands, Centraal Bureau voor de Statistiek (1956); New Zealand Official (1938); OECD Economic Outlook (1966, 1997); Italy, Istituto Nazionale de Statistica (1951); Österreichisches Statistiches Zentralamt (1935). Please see original for more details.

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between 1960 and the mid-1980 when many countries, and especially the European countries, created mature welfare states that aimed at the economic protection of individuals from the "cradle to the grave". In that period, in several European countries (Austria, Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, and Sweden), public spending approached or exceeded 50 percent of GDP. This level of public spending, and the taxes needed to finance it, would have been considered unthinkable in the earlier part of the 20th Century.

Economists contributed indirectly and perhaps unintentionally to the growth of public spending by developing or popularizing economic concepts that provided convenient theoretical justifications for greater governmental interventions in the economy. Budget experts developed public management tools which, they claimed, would facilitate the scientific or objective analysis and evaluation of government programs. This was supposed to help avoid policy mistakes and to limit government-imposed inefficiencies. Concepts such as public goods, externalities, merit goods, natural

^a Or closest year available for all columns. Pre World War II data are sometimes on the basis of GNP or NNP instead of GDP.

^b Central government data for this year, New Zealand: 1960 = 1970, and 1994-95 = 1996.

c 1996 and 2002 data: calculations are based on the Maastricht definition, and are smaller than those published by the INSEE, the national statistical agency. d 1995 instead of 1996, because of break in data calculation.

monopolies, built-in stabilizers, multipliers and so on were developed and were often used to justify greater public-sector interventions. Also a perception developed that larger public sectors would make economies more immune to business cycles.

Tools such as social cost-benefit analysis, Public Programming and Budgeting Systems (PPBS), zero-based budgeting, capital budgeting, and so forth provided at times a kind of scientific cover for evaluations of governmental programs that, in many cases, in reality continued to be guided largely by political pressures and by political considerations. At times these tools were bent to justify more public spending as, for example, when some economists in the mid-1960s argued that costbenefit evaluations of public investments and other spending should give more weight to one dollar of benefit that goes to a poorer person than a dollar that goes to a richer person or it should take into account the unemployment rate of a region. The calibrating of benefits and costs often led to the justification of public expenditure with low economic justification. This meant that in practice the economists -and their advice - contributed to driving up public spending.

Spending Levels and Economic Welfare

There is much debate on whether the large increase in public spending, especially in the last 50 years, contributed to a genuine improvement in the welfare of the majority of citizens, or whether the citizens would have been better off with a lower growth in that spending that would have left them with more after tax income but less governmental services. Greater public spending often went towards paying for social services - health, education, and other benefits including pensions. Government often provided such services directly through the public sector. Because public sector intervention often displaces existing institutions or private intervention, it does not necessarily add, on a net basis, to the informal arrangements for social protection that the residents of a country were receiving or could have received through private programmes. For example, in some countries there were extensive networks that informally provided some social protection to those in needs. Ludger Schuknecht and I have challenged the view that the growth in public spending necessarily increased welfare. See Tanzi and Schuknech (1997 and 2000).

If it is assumed that the welfare of citizens is linked to the numerical results of certain socio-economic indicators, such as life expectancy, infant mortality,

educational achievements, literacy rates, growth in per capita incomes, inflation, and others, that governments attempt to influence through their public spending the evidence shows that there has been little relationships, if any, in recent decades between the changes in the countries' shares of public spending in GDP and the changes, in the desired direction, of these socio-economic indicators. Countries that allowed their public spending to grow significantly more than other countries do not show, on the average, better quantitative results for these indicators than countries that kept their governments smaller and leaner. On the other hand, by reducing the after tax income of the citizens, the countries that allowed their public spending to grow more undoubtedly reduced the economic freedom of their population.

When used as a general reference index for social welfare, the United Nations' Human Development Index (HDI) shows that among the 20 countries

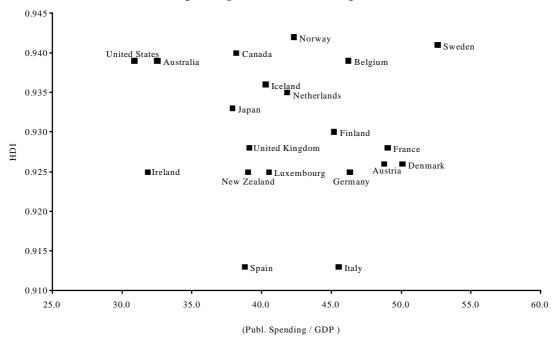
Table 2: Public Spending and Human **Development Index (HDI)**

Countries	Public	шы.			
Countries	Yea Highes	r of t Level	2002	HDI	
Norway	52.0	(1992)	42.3	0.942	
Sweden	67.5	(1993)	52.6	0.941	
Canada	49.9	(1992)	38.2	0.940	
Belgium	57.1	(1985)	46.2	0.939	
Australia	37.7	(1985)	32.5	0.939	
United States	34.8	(1992)	30.9	0.939	
Iceland	40.5	(1992)	40.3	0.936	
Netherlands	53.3	(1987)	41.8	0.935	
Japan		-	37.9	0.933	
Finland	59.1	(1993)	45.2	0.930	
France	51.8	(1993)	49.0	0.928	
United Kingdom	43.2	(1993)	39.1	0.928	
Denmark	58.0	(1996)	50.1	0.926	
Austria	53.3	(1993)	48.8	0.926	
Luxembourg	44.0	(1992)	40.5	0.925	
Germany	47.3	(1996)	46.3	0.925	
Ireland	50.7	(1985)	31.8	0.925	
New Zealand	51.8	(1986)	39.0	0.917	
Italy	55.4	(1993)	45.5	0.913	
Spain	47.2	(1993)	38.8	0.913	

Sources: OECD, Economic Outlook (Paris: 2002) and UNDP, Human Development Report, 2002.

Figure 1: Scatter Diagram





with the best scores on this index, some have high shares of public spending to GDP - such as Austria, Belgium, Denmark, France, Germany, and Sweden - and some have low shares of public spending - such as the United States, Australia, Ireland, Canada and Japan. See Table 1. The HDI combines indicators of longevity, educational attainment and enrollment ratios, and living standards. Furthermore, some countries not shown in the table, including Singapore, Taiwan, and Hong Kong - with small, but highly efficient governments -have levels for the HDI index and for various socio-economic indicators almost as good as those for the countries with much higher public spending.

Some of the countries with the highest scores in the Human Development Index, and with high levels of public spending, such as Norway, Canada, Sweden, Belgium, the Netherlands, and Finland have in recent years significantly reduced their public spending while retaining their high HDI index. See Table 2 and Schuknecht and Tanzi (2005). Thus, there is life after public spending reduction! These countries have shown that public spending can be significantly reduced without causing the large fall in public welfare that many expect. A scatter diagram shows that there is no identifiable relationship between levels of public spending and HDI. See Fig. 1. This is confirmed by the absence of any correlation between the two variables.

Because the high taxes needed to finance high public spending reduce the post-tax (or disposable) income of taxpayers, thus restricting their economic freedom and, most likely, over the long run, have a negative impact on the efficiency of the economy and on economic growth, the question arises whether the level of public spending and, consequently, of taxation should be reduced if this could be done without reducing public welfare. That is to say, if public welfare is not reduced on any objective criteria by reduced public spending, then public spending and consequently tax revenue, should be cut. This would allow most individuals to have discretion over a larger share of their pretax incomes. In other words the citizens would decide how to spend this money, not the government.4

All the theoretical reasons advanced by economists to justify the role of the state in the economy, including the need to assist the poor, could be satisfied with a much smaller share of spending in GDP than is now found in most industrial countries

⁴ A basic difference between a centrally planned economy and a market economy is the discretion that citizens have on how to dispose of the (pre tax) income that they produce. In market economies citizens have discretion over a larger share but this share is still small in highly taxed countries.

if the governments could be efficient and more focused in the use of their resources.5 There is a great deal of empirical evidence to indicate that much public spending "benefits" the middle classes broadly defined. At the same time much of the "burden" imposed by the government in the form of taxes falls also on the middle classes. Putting it differently, the government taxes the middle classes with one hand and subsidizes them with the other. The government becomes a classic intermediary. As a consequence of this "fiscal churning" the government creates disincentives and inefficiencies on the side of taxation and on the side of spending. It also reduces the economic freedom of the individual citizens and, probably, the rate of growth of the country over the long run. Countries that have kept their taxes low, or have reduced them over recent years, such as Australia, Ireland and the United States have grown at a faster rate than other countries.

It is not likely that governments need to spend more than, say, around 30 per cent of their GDPs to be able to promote their finance their fundamental social and economic objectives. Some well-functioning countries do not allocate more than 20 per cent of their GDP, for public programs. Even among the highly developed countries shown in Table 1 we find that some (United States, Switzerland, Australia, and Ireland) have public spending levels not too far from 30 per cent. And in some of them, there may be scope for spending reduction. See Edwards (2004) for the United States. Two of these, the United States and Australia, have some of the highest scores on the Human Development Index. Switzerland is also likely to have a high score.

Market Development and the Role of the State

The real difficulties that would be faced by a government in reducing the role of the state in the economy is not that a less dominant state would imply a reduction in economic welfare but, rather, that a reduction in public spending would face strong political opposition on the part of those whose current or expected standards of living have come to depend on the existing public programmes. Such opposition has been evident in countries such as France, Germany, and Italy. This opposition has tied the hands of policymakers. Public programmes create strong constituencies: pensioners, those close to the retirement age, school teachers, public

Those who have acquired "entitlements" or various claims vis-à-vis the public sector oppose reductions in public spending. Some of these entitlements may be simply in the form of higher salaries or higher pensions or better job guarantees than they could get in the private sector. For this reason, polls show that citizens often support current spending by governments while they oppose the taxes necessary to support that spending. Alternatively they favor cutting general public spending but oppose cutting expenditures in programs that help them. These people consider a reduction in public spending as a negative-sum game. Therefore the evidence that some countries with relatively low levels of public spending operate well should not be interpreted as an indication that high-spending countries could easily reduce their public spending. However, as the data in Table 1 show, in recent years several countries have succeeded in doing so without generating major economic or even political difficulties. See also Schuknecht and Tanzi (2005).

Levels of public spending at any one time tend to be set by past political trends and promises, rather than by informed decisions based on the evidence of the day. At any given moment the level of public spending depends substantially on the entitlements and claims on the government created in **past** periods. It does not depend on well thought-out analyses and considerations of what the state could or should do in a modern and sophisticated market economy. It rarely depends on the spending level that the government in power might wish to have.

For the reasons mentioned above, there is often no realistic possibility of a zero-based assessment and implementation of the role of the state. In other words, given the political forces at work, the level of spending that prevails in a country represents the outcome of current and past political processes with the past having a major weight. However, it is evident that if past mistakes, or misguided actions, have determined the current level of public spending, that level cannot be assumed to be optimal in an economic or even political sense even though it may, in some sense, represent a kind of political equilibrium. It is, thus, important to separate, at least analytically, what could be the optimal role of the state in the long run from the current role. Also the current role must not be interpreted as putting a floor on public spending as it seems to be implied by Wagner's

⁵ For an attempt at estimating empirically the efficiency of public sectors, see Antonio Afonso, Ludger Schuknecht and Vito Tanzi, (July 2003), forthcoming in **Public Choice**.

Law of the growth of the public sector. As often interpreted, Wagner's Law states that as per capita income grows so must the level of public spending as a share of the country's gross domestic product.6

A question to ask, then, is whether the governments of today should simply accept the status quo and, thus, continue with the existing public programs while trying to accommodate as best they can the future pressures on spending coming, for example, from demographic changes, or on public revenue coming from globalization? Alternatively, should they put in motion radical reforms that in the long run - say over a generation - would bring the role of the state more closely in line with an ideal or economically optimal role? Recent experience in several European countries indicates that the second alternative is a politically difficult one because of powerful political opposition to real reform. At the same time some countries, such as Canada, Ireland, Finland and others, have initiated such a process.

Another way of putting the question is: what economic role should the state play, especially in relation to public spending, in advanced industrial countries in the 21st century? This is a difficult question to answer because, inevitably, the answer to it must reflect political biases as well as the importance that one attaches to the transitional costs of getting from where we are today to where we ought to be, say, 20 or 30 years from now. The greater the importance that one attaches to the transitional costs, and especially to the political costs, the greater will be the inclination to support the status quo and the current spending programs. This seems to be what is happening in several European countries at this time. Let me focus on some essential elements to consider when dealing with the above question.

The first of these elements is the recognition that in a market economy there should be a relationship between what the market is capable of doing and what the government should do. After all, in a market economy, the state is supposed to correct the mistakes made by the market, or to compensate for its shortcomings, and not to replace the market. A more efficient market should require less government. In a society where the market is underdeveloped, so that it is not capable of performing well some important tasks - be these to produce necessary goods and services; to create jobs for most of those who wish to work; to create efficient insurance markets that allow individuals to protect themselves directly against various future

economic risks; to provide efficient and relatively safe channels for investing individual savings, and so on - there will be a presumption for the state to step in, thus correcting or complementing the market in some of these functions. This was the main argument that, over the years, led to the expansion in the economic role of the state especially in the period since 1945. It was used not only in countries where the market was not well developed but also in countries where the market might have been able to perform, but was not performing, some of the tasks that were taken over by the government. This, for example, was the argument used by many economists in the 1950s in the United States and in Europe to argue for an expansion of the role of the state.

In this connection it should be mentioned that an important but relatively recent branch of economics, the School of Public Choice, of which the leading exponent, Professor James Buchanan, was awarded the Nobel Prize in economics. questions the need for governmental intervention even under circumstances in which the market is deficient. Those who adhere to this school believe that governmental intervention to correct shortcomings of the market often makes things worse rather than better. This may happen because a country in which the private market is not developed is not likely to have a public sector that is efficient. The same factors that make for an underdeveloped market are likely to make for an inefficient public sector. It may also happen because, as the School of Public Choice emphasizes, those who make the decisions in the government public are subject to particular pressure, and incentives that bias their decisions. For whatever reasons. Public Choice followers argue that, when the government intervenes, market shortcomings are often replaced by governmental shortcomings. Or putting it more bluntly, the cure is often worse than the illness. This aspect, though important, will not be addressed here because we wish to focus on a less known or less explored aspect.

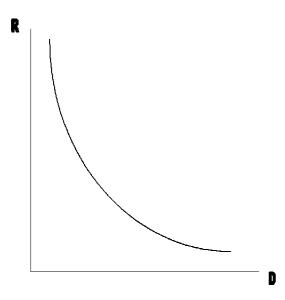
As markets develop and become more efficient in performing various tasks, and in allowing individuals to satisfy directly various needs, (including the need to buy protection against particular events that could have economic consequences) the theoretical justification for governmental intervention through public spending decreases. This should lead to a fall in public spending. A perfect market would, of course, not require any government role. On the other hand, it could be argued that economic growth might

⁶ Adolph Wagner, a German economist, advanced this theory at the beginning of the last century. That theory would imply that, if in the future the per capita income of a country keeps growing, the current level of public spending is always a floor.

bring greater need for public intervention in particular sectors. However this intervention is more likely to require efficient regulations than public spending.7

To put it a bit more formally, if R represents the role of the state (identified here with the level of public spending) and D represents the degree of development and sophistication of the private sector, then we can postulate that R should be a negative function of D. Fig. 2 puts this relation in a simple graphical form. We assume that the degree of sophistication, D, of the market is a function of (depends on) time and the income level. As time passes, and as per capita income rises, the private sector becomes more sophisticated. It develops many markets that allow individuals the possibility to acquire directly protection or insurance against many risks that have economic consequences. As a result of this change, governments should progressively be able to reduce their spending, as shown in Fig. 2, letting the individuals satisfy more of their needs directly through the private market. For example, the development of the financial market allows individuals to save more easily in the form that they desire. This makes it possible to substitute public pensions with private pensions. Similar arguments can be made for other categories of public spending.

Figure 2: Market Sophistication and **Government Expenditure**



A second important element, and one that has not received attention in the literature, is that when in

the past the government entered a sector, it introduced laws and regulations that facilitated and justified its own intervention in that sector. It inevitably made it more difficult or at times even impossible, for the private sector to develop in that sector and, thus, to create private alternatives to the government's activity in that sector. In other words, governmental involvement often created public monopolies that crowded out private involvement in those sector. Public monopolies in electricity, communication, transportation, the provision of pensions, health services, education and in several other activities prevented the private sector of many countries from developing efficient alternatives to the government's in these areas. The intrusion of the government in these areas prevented private markets from developing. This created the presumption and the belief, on the part of the public, that the public sector should remain engaged in these areas if the welfare of citizens was to be protected. Often such presumption was promoted by political campaigns. Many citizens came to believe that this was the case. Thus, they opposed reforms that would reduce the role of the state even when the reforms, once made, would, most likely, have benefited the majority. Such opposition was often encouraged by those who worked for or administered the public monopolies.

Government monopolies in the provision of public pensions have, in many countries, prevented the development of private pension funds or other private alternatives such as individual retirement accounts. In several countries the public has come to believe that only public pensions can protect individuals against the economic risks of old age or disability. This belief is maintained even in the face of growing and convincing evidence from several countries that demographic changes will make it almost impossible for governments to maintain the promises made to future pensioners and that rates of return on private pensions would likely be higher over the long run. Government monopolies in the provision of health services have prevented or discouraged the development of truly private health alternatives. The same argument applies to education and infrastructure developments. In many of these areas the involvement of the government drives out competition and reduces the scope for efficient solutions which can only come from the competition that would accompany the development of private markets. In recent years some moves have been made by the governments of some countries to extend the role of the private sector. However, some of these moves have been half hearted. In infrastructure, for example, public

⁷ An interesting book has in fact argued that a freer market would require more rules. See Vogel, (1996).

private partnerships (PPP) have started to create a larger role for the private sector but that role is still limited and controversial8.

A third element is that not only is the concept of the state itself evolving, but rapid technological innovations, the growing sophistication of the market, the development of financial services, and globalization are changing the basis for providing services and even for government. The current role of the state was developed mostly in the period after World War II, when, for a variety of reasons, the markets of many countries were not well developed. This was the period when the concept of a "mixed economy" that assigned a large economic function to the state, was most popular. At the time it must have seemed natural for governments to take over many responsibilities including, at times, even that of producing private goods. At one time, in Italy, the government was even in the business of producing panettoni!

In spite of the obstacles often imposed by the government, markets have become much more sophisticated over the years. Various developments have made it possible for the private sector to replace several previously public activities. Technological developments have destroyed the presumption that there are "natural monopolies" in the generation of electricity, in various forms of transportation (railroads, airlines), in communications (telephones, telegraphs), and in other areas. In earlier years, this presumption had assigned to the public sector major or exclusive responsibility in these areas. In several countries, the government has started to withdraw from some of these activities and relatively well functioning markets have quickly developed in them. This is certainly the case too for private pensions and for transportation and communication. In most cases the economic welfare of the citizens has not been damaged by these developments. On the contrary, and with exceptions that often are much publicized, services have often improved in quality while prices have fallen.9

Major developments in financial markets, including greater international capital mobility, have also removed the presumption that governments should be involved in the allocation of private savings and credit as they were in many countries until a couple decades ago. In a modern economy there should be no place for what economists call "policy loans" or "financial repression". Financial

repression exists when the government constrains interest rates and decides where private savings must be invested. Policy loans are loans made by banks to particular sectors or enterprises at the request of the government. In financial markets as well as in the areas mentioned above, there is a very important surveillance and regulatory function that governments must perform. This function cannot, or should not, be left to the private sector and it should be taken seriously by the government. It should be seen as part of the core activities of the state.

This regulatory function is necessary to prevent abuses and the creation of private monopolies and to protect individuals against unscrupulous practices. The need for this function has been made obvious in recent years by scandals that have surfaced in large private enterprises such as Enron, Parmalat and others. In 1776 Adam Smith had already warned about these problems. He recognized the private incentive to create monopolies. This surveillance and regulatory function must be directed at (a) promoting and maintaining competition; (b) promoting transparency, and (c) at generating needed information so as to reduce the scope for actions stimulated by the existence of asymmetric information. This surveillance and regulatory function must be market-creating rather than market-controlling. It must be focused and limited because excessive regulation can create problems similar to those created by excessive public spending.

A fourth element is that globalization, in its various aspects, is bringing major changes to the way markets operate or could operate. Foreign competition can make domestic markets more efficient by promoting competition for what could have been domestic monopolies. Globalization is also affecting public sector activities in other ways. By eliminating frontiers, or making them less constraining, globalization is creating the potential for more options for both citizens and governments. For example, education and health services can now be obtained more easily than in the past in other countries. In some sense they have become tradable goods. Public sector procurement can now benefit from foreign participation thus reducing government costs. In some areas, this access to foreign markets has created options beside the ones traditionally available domestically and which were mostly available from the public sector.

⁸ See Stephen Harris, (2004) and Hana Polackova Brixi and Allen Schick (2002).

⁹ There is a large literature produced by the World Bank and by the OECD that has reported on these developments. Some is summarized in the book of Tanzi and Schuknecht (2000).

A government no longer needs to intervene as a provider of a service when accessible and cheaper foreign options are available to its citizens. Insurance against many risks can now be bought, or in time it will be possible to buy it, from providers in other countries, when it is cheaper or more reliable. Savings and the assets accumulated by private pension funds or by individual retirement accounts can be invested abroad. Educational and health services can be obtained abroad. These developments are reducing the justification for the intervention of the government as a provider and for its role as a monopolist in many areas. In some of these areas the government must still play a role in enforcing transparency, accountability, and easy access to reliable information.¹⁰ Global regulations are helping in this context. These are often coordinated by international institutions such as the BIS, WTO, and so on.

Globalization is also creating "fiscal termites," that is developments that over many years are likely to reduce tax revenue and, thus, the government's ability to finance through taxes high levels of public spending. Globalization has made possible for many taxpayers either to "vote with their feet" or "vote with their portfolio" thus making it much easier than in the past to escape high taxes. Various possibilities or "termites"-electronic commerce, electronic money, transfer prices used by multinational enterprises, tax havens, facility of exporting financial capital, shopping abroad, and so on—are leading to the "disappearance of the taxpayer" and to increasing difficulties for tax administrators to continue raising high tax levels. See Tanzi (2001 and 2002).

If the forecast of increasing difficulties in raising high tax levels proved to be correct, the government of tomorrow could have far less discretion in raising public revenue than those of today; thus their ability to engage in activities that required high levels of public spending would be reduced if macroeconomic difficulties are to be avoided. This development might occur at the same time when demographic changes will be pushing for more spending in health and pensions under current programmes As it is widely known, because of the increasing life expectancy and the fall in birth rates, all industrial countries and some other countries such as China are undergoing a fast process of aging of their populations that will increase the cost of pensions and of medical care.

If current policies cannot be changed, and the danger coming from the work of "fiscal termites" meets the time bomb created by the demographic changes, industrial countries will face unsustainable fiscal developments in future years. For this reason, it is important that policymakers address now this fundamental problem and consider how they can reduce, over future years, the high levels of public spending that have prevailed in many industrial countries in recent decades. This reduction in spending should be achieved while preserving, to the extent possible, the basic goals than an efficient and compassionate government would want to promote. Thus, the above discussion has little or no implication for the truly redistributive role of the government in favor of those who, through handicaps, illnesses or other misfortunes that are no fault of their own, find themselves at the bottom of the income distribution. In the view of the author of this paper, the government should continue to have some responsibility towards these people. This responsibility points to more focused government programmes and to government roles that contain less 'fiscal churning' and more attention to the truly basic or legitimate functions of the state.

A fifth and final element that merits to be mentioned is the potential impact that recent technological developments (internet, instantaneous and cheap communication, facility to store large amount of data in computer systems) could have on how governments operates. As of now this impact is still sporadic and limited. In many countries there is more talk than effective action. In some countries public employees may not even be aware that a new era is dawning. In some of them, new and more technologically advanced ways of doing things have not replaced old ways but, rather, have been simply added to them often creating confusion rather than creating more efficiency. Yet, hardware and software for an electronically-based government (an e-government) are available and have become much cheaper and more accessible than in the past. The main issue now is to learn how to use them effectively and to remove the administrative or legal obstacles that prevent their full use. Some of these obstacles may go from the need for an actual signature when a document is sent electronically, to the constraints imposed by union contracts on changing the functions of public employees.

¹⁰ For example it could play a role in regulating the foreign investments allowed to private pension funds, or the foreign schools whose diplomas would benefit from certification in the countries where the students come from. Today the public monopoly over education that exists in many countries at times implies that a degree from a top foreign university say Harvard, or Oxford does not have the same legal value as a degree from domestic and low quality universities.

It is difficult to assess the extent to which, and how soon, these new developments will penetrate deeply traditional governmental operations and change them. In some countries these developments are proceeding much more quickly than in others. But the potential is enormous provided that the governments facilitate the changes with efficient regulatory and legal reforms.

Over the long run countries that are slow to introduce these changes will pay a price vis-à-vis those that act more quickly and aggressively. Some countries such as Finland, Sweden, Australia and others are rushing to exploit the new opportunities. A leader in these areas, as in other areas, has been Singapore which in recent years launched an initiative, backed by a large budgetary appropriation, to make all public employees computer-literate within a short period of time. The aim was to eliminate the use of paper and the restrictions imposed by physical distances and office hours in dealings between the private and the public sectors and within the public sector. To achieve this objective many governmental functions need to be reengineered or redesigned. Employees that are not able to adjust to the changes would have to move to other jobs or retire. Where labor unions or labor laws prevent these changes, the countries will pay a high price.

A reengineered e-government would create a formidable tool for pursuing legitimate governmental objectives in different and more efficient ways. There is little doubt that by the middle of the 21st century the role of the state will look different from the one at the beginning of the 21st century. Given the new tools available to it, it is important that that role have as much legitimacy as possible.

Given the conditions mentioned above, what role should the public sector play if the legacy of past commitments did not exist?

The Limits of Governmental Action in the 21st Century

First, there is now broad agreement among economists that the state should not be engaged in the production of goods and services that can be produced by the private sector or can be imported. Thus, the state should be completely out of such activities. In many industrial countries the state is still involved in producing steel, running airlines, providing electricity and doing other similar actions. This creates pressures for providing direct or indirect subsidies to enterprises which in turn increases public spending.

Second, given the technological developments of recent years, "natural monopolies" that genuinely justify public ownership and operation have become extremely rare. For many activities that in the past were public monopolies the main role of the state should be a regulatory one. It should promote competition, transparency and consumers'

Third, markets have developed a great deal and, given recent and expected future developments, are likely to continue to develop even more if given the opportunities. There are now even world auctions, as with the Ebay market. Furthermore, foreign markets have become accessible and increasingly transparent due to the use of the Internet and the freedom of capital movements. Information on them has become more readily available than in the past. Foreign markets can provide the citizens of a country options that are not available from the domestic private sector or that are more costly domestically. This includes medical treatment and educational services, but it is not limited to them.

What are the consequences of this development of private markets? First, there is no longer a strong reason for the state to monopolize areas such as pensions. While the provision of a guaranteed minimum pensions available to anybody reaching a reasonable retirement age might be considered by some government a legitimate social goal, (and this expenditure could be financed through general revenue, as in the case in Denmark, rather than through payroll taxes), pensions above that minimum level could be left to the private sector to provide. If the state wished to play a larger role, as for example to make sure that individuals are not too myopic in their provisions for their old age, it could require that a given proportion of a person's income must be invested in private funds or private assets under some form of governmental supervision to reduce the amount of risk in the portfolios. The funds could be foreign funds if they provided higher returns for an acceptable degree of risk. This so called "Chilean model" has been introduced in several countries and has been acquiring popularity. In time it could revolutionize the provision of pensions and in the process, destroy the monopoly by governments in this area. 11 There

¹¹The Chilean pension system consists broadly of three tiers. The first is a minimum pension financed and guaranteed by the government. The second tier is a private pension acquired by investing a fixed proportion of income in regulated investment funds. The proportion to be invested is fixed by the government. The third tier is made up of free investments of savings in

are of course significant problems of transition to deal with by countries that have been relying on public pensions. A major problem is that during the transition to the private system, the government will lose the contribution that would otherwise be made to its revenue by workers who move to the new system while it must pay pensions to the pensioners who are in the old system. This can be costly to the public accounts. It implies that it is good to start on this road with fiscal accounts that are sound. Over the long run this problem solves itself.

Second, though healthcare is complex, the same argument could be advanced for some aspects of health care as for pensions. Private sector arrangements could replace public ones for at least some aspects of public health provision. Also public health accounts, as used in Singapore, could provide an adequate and more efficient alternative. See Schreyogg and Kin (2004). In most countries that have public health systems, parallel private systems have developed implying that health care is no longer equal for everyone, as the provision of public health systems assumes. For some countries there could continue to be public payment for services rendered by private providers but arrangements should be made to ensure competition and to control costs by making the patients bear a reasonable share of the costs.

Third, a larger role in education should be given to the private and voluntary sector, especially for secondary schools and universities. Private schools are a booming industry in various parts of the world and in some of them their quality is very high. The free, public provisions of education can be very costly in terms of economic resources if it encourages many individuals to obtain diplomas or degrees for which they are academically unsuited; or where the degrees are not useful for obtaining productive jobs. When education is (almost) free it is more likely that individuals are less careful in pursuing degrees that are directly useful in the job market. Degrees from private schools are less likely to derive their value from legal certifications, rather than from the intrinsic market evaluation of the human capital acquired with the degree. Special provisions must exist for the talented but poor individual who might not have the means to pursue an education. Scholarships or guaranteed loans can go a long way toward dealing with this potential problem. These arguments are of course much more valid for higher than for basic or primary education

which should continue to be provided largely free (or financed through vouchers) by the state.

Conclusion: Less Public Spending and More Market Solutions

Government should now scale down its operation. If it were not for the legacy of past commitments, the private sector that exists now or that could exist in many industrial countries would make it possible for the government to significantly reduce its public spending and its tax burden. In our 2000 book, Schuknecht and I speculated that no country need to spend more than 30 percent of its gross domestic product for public sector activities. This level ought to be enough to finance all the legitimate interventions by the state. Of course this percentage cannot be set in stone and some variation across countries, to reflect different circumstances and preferences, could be justified.

A change from the current situation could not and should not be achieved overnight. Too many individuals depend on government programs for their livelihood. For this reason it would be necessary to establish a clear sense of direction in the progressive reduction of the government role in the economy, assuming that, say, over a generation the role of the state could change significantly. Less public spending and more reliance on market solutions should be the guiding principle. A fundamental role of the state would be to make markets work well by becoming more efficient and more transparent. This, in fact, should be seen as the most fundamental role of the state in a market economy. The government should be ruthless in the pursuit of this objective. The speed of the change while important would probably be less important than the agreement about the direction of the change. In many European countries, the political leaders have not been capable of articulating the need for this change and to establish how the role of the public sector in their countries could be scaled down. Perhaps they are still not convinced for the need to change.

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special individual retirement account One concern that has arisen is that the management fees for the pension funds tend to be high. Perhaps greater use of indexed funds could reduce these fees as long as the high costs are not exclusively a consequence of promotion by the investment funds to attract individual investors.

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