

Department of Economics

Vito Tanzi

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Pleasant Dreams or Nightmares, in the Public Debts Scenarios?*

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Vito Tanzi**

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^{* *} The author is a former Director of the Fiscal Affairs Department of the IMF and a former Undersecretary for Economy and Finance in the Italian Government.

I. Past and Current Views on Public Debt.

Over many centuries, until the middle of the 20th Century, public debt had not enjoyed a good reputation. Several famous historical figures, including Cicero, George Washington, Napoleon and others, warned about the danger, to countries and to governments, of borrowing to finance public spending. Economists shared those concerns. The concerns were based on concrete experiences of countries that had got into difficulties, and not on abstract, armchair theorizing.

In the year 43 BC Cicero wrote:

"The national budget must be balanced. The public debt must be reduced and controlled. Payments to foreign governments must be reduced. The arrogance of the authorities must be moderated and controlled. Payments to foreign governments must be reduced if the nation does not want to go bankrupt.

Seventeen centuries later, the views of David Hume, philosopher and economist, are highly pertinent. At about the time when Adam Smith was working on The Wealth of Nations, Hume wrote that:

"It is very tempting to a minister to employ such an expedient [i.e. public borrowing], as it enables him to make a great figure during his administration without overburdening the people with taxes, or exercising immediate clamors against himself. The practice, therefore, of contracting debt will almost infallibly be abused in every government". Hume, p. 92.

There were always and there continue to be situations that may justify the expedient of public borrowing. It should be realized that in the past governments did not have the elaborate, modern tax administrations capable of collecting new taxes within relatively short periods of time, when a need arised. In the past, loans could be obtained more quickly, and often more easily, than taxes. There were also

the reasons mentioned by Hume for preferring to rely on the "expedient' of borrowing. Therefore, in spite of the opposition to public debt, many governments of the past did borrow, as we can read in Smith, 1776, and in Leroy-Beaulieu, 1888.

The historical figures mentioned above and most economists of the past would have supported, and today's economists would support public borrowing in particular situations which would include: (a) fighting a war that threatened the existence of a country or the freedom of its citizens, as was the case during England's war against Napoleon, when the public debt of that country increased sharply; or (b) dealing with the consequences of a great natural disaster.

In more recent times, many economists would not oppose public borrowing to deal with a Great Depression, such as the one that in the 1930s pushed the US unemployment rate to 25 percent of its labor force. That experience led John Maynard Keynes to write The General Theory of Employment, Interest, and Money, the book that contributed to changing the attitude of many modern economists, though not all of them, and many policymakers toward fiscal deficits, and, thus, toward increasing public debts, when countries experience recessions and not only depressions.

Some economists might also argue that the financing of *major* public investment programs, "big push" in infrastructure building, concentrated into a short time span, could be added to the above list. However, there would be disagreement among economists on whether *routine* public investment spending, spending that does not change much year after year, should be financed by credit, rather than by current revenue, as defenders of the so called *golden rule*, to estimate the size of

the fiscal deficit, have argued that it should.

Not all what is called public investment is productive, and not all contributes to economic growth and to future public revenue. The public spending classified as investment is often inflated by "white elephants", investments on "roads to nowhere", and expenses that may reflect corruption, rent seeking or other forms of opportunistic behavior. See Tanzi and Davoodi, 1998. Corruption can significantly inflate investment spending (by up to 40 percent, as it was reported (by the Italian Corte dei Conti in a 2014) to have happened in Italy, and as it has happened in other countries, including Brazil and Greece, in recent years.

This kind of "public investment" contributes neither to economic growth, nor to future public revenue. However, it does inflate the public debt and the future costs of servicing the debt. It also reduces future economic growth.

Furthermore, there continues to be a debate among accountants as to what kind of spending should be defined as public investment, thus allowing less scrupulous governments to classify some current expenses as investment. The use of the golden rule encourages these actions.

Many modern economists would also agree that the fiscal deficits that arise from the automatic action of "built -in stabilizers", during genuine economic recessions, could also be financed by debt. But many would strongly disagree with the view (pushed by some vocal economists in recent years) that, when, for a variety of reasons (including among them the very existence of a public debt high enough to cause concern), the growth rate has fallen below what they believe is the long run trend, this fall would justify a *sustained* fiscal injection. It ought to be also

recognized that the growth rates that had prevailed in several countries in the years before the financial crisis were probably inflated by the bubble that led to the crises. See Tanzi, 2015a. Therefore, the growth rate of those years should not be identified with the long run trend.

In all the above situations, a county, that in past years, had kept its public accounts in order, would find it easier and would be more justified, to rely on public borrowing, when that need occurred, than a country that had let its public account deteriorate, and that was already exposed to the potentially damaging effects of a high public debt. This means that the *initial conditions* on the status of the fiscal accounts, at a given moment in time, are important in determining what fiscal policy is feasible and desirable. See Tanzi, 2015b.

The realization that there can be *Great Depressions*, or even *Great Recessions*, which can lead to sudden and sharp falls in output and large increases in unemployment justify, for many modern economists, fiscal policies that could create employment opportunities and might prevent worse outcomes. This realization led Keynes in the 1930s to propose the use of *time -limited*, expansionary fiscal policies, policies mainly associated with public spending on productive public works, financed by public borrowing. Keynes also theorized that, through the work of a fiscal *multiplier*, a given initial and time-limited fiscal expansion would have a larger impact on aggregate spending, and would help create more employment and more output, than would have had the initial fiscal stimulus, without the assistance of the multiplier.

That realization and the concern for high unemployment also led Keynes to

state, famously and perhaps a bit imprudently, that, in the pursuit of their policies, governments should give priority to short run objectives, because, as he put it, "in the long run we are all dead". This statement implied that, if short run objectives (such as reducing a high unemployment rate) called for sharply increasing a country's public debt, so be it; worry about the short run and ignore the long run!

The Keynesian statement about the long run has been often cited by economists to recommend at times highly questionable policies. It has been interpreted to suggest that the short run should *always* be the focus of countercyclical fiscal policies. As a consequence, counter-cyclical fiscal policy has tended to pay relatively little attention to its long run implications, and especially to the implications of high and growing public debts, that often accompany it, and that may become large or even unsustainable, if the debt continues to accumulate, in the pursuit of presumably short -run objectives. Some argue that this may be the case, today, in several countries, including the United States.

Except for Great Depressions, which fortunately have remained rare events, it can be argued, and perhaps Keynes would have agreed, that the use of counter-cyclical fiscal policy should be *symmetric*, over longer periods of time. In other words, it should generate budget deficits during recessions, and budget surpluses during good times. Therefore, it should not lead to the accumulation of large public debts over the longer run, that might become costly to service and that might make it more difficult for a country to use fiscal policy in future years, when the need for it may present itself.

Since the end of World War Two, the industrial countries have *not* fought

great wars. They have *not* experienced major natural disasters. And they have *not* experienced Great Depressions. Furthermore, they have *not* engaged in major public investment programs concentrated in short time periods, as for example has done China. If anything, spending for public infrastructure has been reduced in many countries, especially in recent decades. This has led economic operators, citizens and some economists to complain about the poor conditions of their deficient, antiquated, and unsafe infrastructures. Furthermore, the countries have had far more efficient tax administration capable of collecting taxes than in the past.

In spite of the above experiences, public debt has grown in most industrial Countries; in some it has reached historical records. In spite of these levels, some economists have been urging several industrial countries, to keep borrowing, to increase spending and to subject their large existing public debt to benign neglect. This course of action would, in their views, stimulate the economies, while they would take advantage of the low interest rates that the central banks have made possible in recent years.

II. "New Keynesian" Views on Fiscal Policy

Some economists have recommended, and some governments have adopted policies broadly described as "Keynesian", or "New- Keynesian", although it is not certain that they would have received Keynes' own stamp of approval, if he had been alive today. These policies reflect the belief, firmly held by some highly vocal economists, that with enough public spending any country can prosper, can grow and live happily ever after, regardless of structural or other obstacles

that might be restraining its growth.

A change in a paradigm often starts with a change in the meaning of some terms. This has happened in recent years in the discussion of fiscal policy, especially in the years after the beginning of the Great Recession. Terms such as "austerity", "recession", "growth" and others have been subjected to a non transparent but significant massaging of their meanings. For example "austerity" now no longer means the "pursuit of an austere practice", as the dictionary would put it, but, it means for governments, not continuing to spend lots of money that they do not have. Or, take the term 'recession". A country as the USA, that is growing at more than two percent annual rate and that has a five percent unemployment rate, is described as being "deeply depressed". "Growth policies" are no longer policies that increase the potential of an economy to grow in the long run. Rather they refer to policies in which governments sharply increase public spending of *any kind*, productive or unproductive. These new definitions have accompanied the promotions of new theories associated with fiscal and monetary policies...

Realistic obstacles to the growth of countries may include some of a *structural nature* and others of a more *psychological nature*. *The latter* that may be created by various kinds of uncertainty that changes in some policies, or some future events (in interest rate, taxes, regulations, or developments in other countries), including large and growing public debt overhangs, can create, in countries where citizens are already highly taxed, the interest rates have been pushed to unusual, historical low, enterprises are highly regulated and the governments are deeply indebted.

The implicit belief of the "New- Keynesian" paradigm seems to be that, very large, fiscal multipliers exist at this time and that the very low borrowing costs, made possible by central banks policies, can make public spending perform economic miracles. A high aggregate demand, sustained by large fiscal deficits, can significantly raise a country's growth rate, especially the growth rates of "deeply depressed" economies, including that of the United States. It is also believed that the *high levels* of public debt, that now exist in many countries, and the additions to those levels caused by borrowing to support high spending would not create future obstacles because the anticipated high growth rates would, organically and painlessly, melt the debt over the longer run.

Given these assumption, it is believed to be counter-productive, or even "stupid", as Joe Stiglitz put it in a 2015 column, to worry about fiscal deficits and public debts, through policies of "austerity", at a time when the growth rates are still modest, there are workers still looking for jobs, and the borrowing costs to governments are very low. Policies of "austerity", presumably those adopted in the more recent years by the USA, the UK, Germany, Italy Spain and other countries, or forced on countries such as Greece, Portugal, and others,, are considered counterproductive and not smart.

The large space that the media gives to a few, highly vocal economists, who have assumed the role of public intellectuals and who hold the views described above, gives the impression that those views now reflect those of the majority of economists. However, many leading economists, including several past or recent Nobel Prize winners, do not share, or would not have shared, those

views if they had been still alive today. Hayek, Friedman, Buchanan, and living Nobels, such as Lucas, Sargent, Phelps, Fama, Kydland, Prescott, Sims and others hold, or held, widely different views.

As a footnote, similar advice had been given to, and had been followed by,

Japan, in the 1990s --see, Tanzi, 2008, pp. 122- 125-- with results that have become
all too evident. An evaluation of the recent Japanese experience and of future
prospects for that highly indebted country is available in Horioka, Nomoto and
Terada-Hagiwara, 2015.

As a result of the new theories, research in the fiscal area has become more and more *creative*, and less and less *intuitive* or convincing, in recent years, to those who do not share the same paradigm. Paul Krugman, and to a more guarded extent Larry Summers, and some others have argued that traditional or orthodox rules of economics may no longer apply, when economies are "deeply depressed", as they believe the American, the European and the Japanese economies are at this time, and when "liquidity traps" are present, as they also seem to believe that there are. In these circumstances, fiscal policies that stimulate demand for a *sustained* period of time are assumed to be extraordinarily growth generating.

Empirical studies, broadly, if not always precisely, in line with the above thinking, have generated research results that to more orthodox economists seem highly questionable and less and less understandable. More orthodox economists have had increasing difficulties in understanding the channels and the mechanisms that are expected to create the huge multipliers believed to exist, and the large growth rates. Those results just seem too good to be true..

III. Public Debt and Its Impact on Economic Activity

Various papers, some by academic economists and some, more surprisingly, by economists at some international institutions, especially at the IMF, have advocated expansionary fiscal policies and slower paces of fiscal consolidation, by countries with high fiscal deficits and large public debts, including the United States the UK and other countries and have complained about policies of "austerity" as they define the term.

At the end of 2008, and at the beginning of the financial crisis, some high level economists at the IMF, including the heads of two important departments (Fiscal and Research), set the tone for the policies that the economists at IMF would recommend to advanced countries to fight the crisis. In an important paper, they called for the adoption of large, expansionary, and sustained fiscal policies. The fiscal packages, to be adopted, by countries that had already large fiscal deficits and high public debts, had to be not only "large" but also "sustained" in time.

Other economists echoed that call and later complained that the fiscal stimuli packages, that various countries introduced and that in 2009 sharply increased their fiscal deficits, at times to extraordinarily and clearly unsustainable levels, had not been large enough and/or had not been sustained long enough. In the G7 countries the fiscal deficits in 2009 averaged 10 percent of GDP. In 2010 they were still 8.8 percent of GDPs. In several countries, they were even larger than 10 percent of GDPs. See IMF Fiscal Monitor, Oct. 2015.

The fiscal stimulus packages introduced in 2009 had been withdrawn when the money budgeted for the fiscal expansion had been spent. The deficits, that existed after that money had been spent, were still very large. In the G7 countries they were still over 6 percent of GDP in 2012, but these deficits reflected "austerity" in the view of some economists. See Tanzi, 2015a.

The papers that have been part of the pro-spending literature cannot be discussed in any details here. We shall report some statistics on public debts and some estimates of "fiscal space" that some economists believed that still exist and that should be used byadvanced countries. These economists believe that the (in their opinion) ample fiscal space would allow many of these countries to keep financing large fiscal deficits, while easily servicing their public debts. In their view this policy would promote "growth".

We shall organize our discussion around an IMF staff paper, co-authored by three economists from the Research Department of that institution. It should be mentioned that these *staff papers* do not necessarily reflect the official positions of the IMF, but the personal views of the authors. However, especially when they are issued by major departments, they influence the way that the media and the governments assess the IMF current thinking.

In the recent writings that have criticized policies of "austerity", "austerity" seems to describe the policies of countries that did not maintain the fiscal deficits at the extraordinarily high levels of 2009-2010, the years immediately after the financial crisis, when the stimulus packages had made the deficits very large. The criticisms seem to imply that the more prudent or more orthodox,

policies that followed the introduction of the large "fiscal packages", even though they were still associated with significant deficits and rising public debts, were too restrictive. In the view of the critics the countries should have maintained the large fiscal stimuli, and several countries should now adopt more expansionary policies:

(a) regardless of the current levels of public spending (that for most countries have remained very high, and well above that in 2007 in real terms; (b) despite the record levels of public debt; and (c) despite the expectation in many countries that the public debt will continue to rise and that in some might become unsustainable

As interpreted in the 2015 Fund study mentioned earlier, the current fiscal and economic situations of many countries would justify and would allow them to introduce much additional *and sustained*, expansionary fiscal action. These policies would be different from the time- limited packages, theorized by Keynes, expected to operate through the action of reasonably –estimated, fiscal multipliers.

Very large fiscal multipliers are now assumed — see, DeLong and Summers, 2012--- and they operate over much longer time periods –see, Blanchard and Leigh, 2013. Thus, in the views of the economists that are behind these new theories, the fiscal expansion policies need to be sustained for much longer periods. It is obvious that these economists believe that we are now in a very different fiscal world, one where past rules no longer apply.

Perhaps, because of the popularity that some of these views have acquired in some quarters, and because of the political attraction of public borrowing, that David Hume had recognized three centuries ago, the world risks drowning in an enormous pool of public *and private* debt, especially if the proposed policies should

not generate the fast rate of growth that those who propose them hope they will generate.

In a 2015 Report, Mckinsey & Company, have provided useful statistics on public debt in the world. Some of these statistics are reported in Table 1, below. The combined level of public and private debt in the world has never been so high. As the Mckinsey Report states: "Government debt has risen by \$ 25 trillion [sic] since 2007 and will continue to rise in many countries, given current economic fundamentals". Italics added. \$19 trillion of that total was in advanced countries.

The Mckinsey Report warns that "high debt levels... have historically placed a drag on growth and [have] raised the risk of financial crises that [can} spark deep, economic recessions". In a recent book, the author of this paper argued that large and growing disequilibria in the public finances of many European countries, some hidden by questionable and non transparent fiscal accounts, or by faulty data, made the financial crisis (imported into Europe from the United States), after the American, sub–prime, fcrisis exploded, much more severe than it would have been if the fiscal accounts had been in order. . For a discussion of the "massaged" fiscal data in the European countries, see Tanzi, 2013, chapter 6, and also Irwin, 2015.

It should be recalled that neither the Federal Reserve System nor other official, economic institutionshad predicted the financial crisis of 2007-2008; or, for that matter, the 1997-1999 crisis in Southeast Asia. This failure should be a warning for what could happen in future years, if another crisis should appear suddenly and if it needed to be met by governments' fiscal actions, and by central banks' expansionary monetary action, when the public debts are at historic high

and the levels and interest rates have remained at extremely low levels. Significant increases in interest rates are expected in the future. They will make the existing public debts more expensive to service and will increase the still high fiscal deficits.

High public debt may depress growth through various channels. The most direct channel is that servicing the public debt costs money that may need to be diverted from public spending that could have been used to finance public infrastructure. This relationship was first theorized and empirically tested in a paper by Tanzi and Chalk, published in 2000 by the European Commission. That relationship has been confirmed by later studies. For Example, the mentioned IMF paper by Ostry at al, on p.15, reported the existence of a "strong negative relationship between public debt ... and public investment". Another IMF paper by Chudik, et al., 2015, has also found "significant negative long-run effects of public debt buld-up on output growth", p.1.

A few years ago some papers by Reinhart et al. argued that there was a *threshold* of around 90 percent in the debt /GDP relationship, at which the public debt started to have a negative impact on growth. That argument elicited much controversy. The importance of such a threshold has not been confirmed by other studies, and it is not likely that such a threshold exists. The main reason is that not all public debts are born equal and the *cost* of servicing similar public debt levels can be very different in different countries. There are several reasons for this affirmation:

First, there is the question of the use to which the borrowed money was put when the debt was contracted . If it was used to finance productive public

investments, its impact on growth would be expected to be different from what it would be if it financed, say, higher salaries for public employees.

Second, the average interest rate on the total debt of countries can differ significantly, making the burden of the debt widely different, even when the debt/GDP ratios are similar.

Third, the maturity of the debt is also important and different countries tend to have different maturities. A debt with a long maturity and a low average interest rate is much less burdensome and less risky than an equivalent debt with short maturity and high interest cost. A debt with long maturity will also be sensitive to the rate of unexpected inflation, if the debt is in domestic currency. The high debt accumulated by the USA before and during World War two, that carried low interest rates, because of the low inflation when it was contracted, was significantly eroded by the higher inflation that prevailed in the years after the war.

Forth, the debt can be contracted in the currency of the country, or in the currencies of other countries. While a country can inflate itself out of a domestic debt, as did Argentina and other Latin American countries in the 1980s, it cannot inflate itself out of a debt contracted in a foreign currency. Different countries have relied differently on foreign debt.

Finally, the tax treatment of interest incomes received by the holders of the debt can also play a role. That treatment varies significantly among countries.

Because of the above reasons, it seem highly unlikely that a specific threshold could be established at which the debt/GDP ratio begins to affect negatively a country's growth rate. Such a threshold, if it existed, would be different for

different countries; it would also be different over time for the same country.

It seems less controversial that the higher is the debt to the GDP ratio in a country, the greater would be the negative impact of public debt on economic growth.

Some economists have challenged or qualified the latter conclusion.

For example the cited paper by Ostry al., states that despite the negative impact, that it reports, of high debt on public investment and on growth "...the analytical framework implies that, in general it is better (for growth and welfare) to live with high debt than to try to reduce it through distortionary taxation". Ibid. While this may be true, "distortionary taxation" may not be the only or the desirable way to reduce a high debt in most countries. A better way would be to reduce unproductive spending, of which there is often a lot in many countries.

Some countries that in the recent past cut public spending sometimes by very large shares of GDP, to deal with high and growing public debts, did very well in the future years. Tanzi, 2011, p.235, reported that public spending was reduced by very large percentages of GDP, in Sweden, Canada, Ireland, Norway and some other countries in the past two decades. They all performed remarkably well in the years after the spending was cuts.

High public debt may reduce growth through channels other than the impact on public investment and on tax levels. See the papers by Reinhart et al, 2012, and by Cecchetti at al. 2011. In particular high public debt may depress growth by creating concerns, in the minds of investors and consumers, about the long run sustainability of fiscal policy and the increasing likelihood of financial crises. Some recent studies have shown that economic uncertainty has

grown a lot in recent years, especially in the years when fiscal policy became more active and public debt grew. See Baker, Bloom and Davis, 2013.

Even a casual look at the countries with high public debt will indicates that they have not been blessed by high growth rates. For example both Italy and Japan stopped growing when their ratios of debt to GDP reached high levels. Of course it is always difficult to determine cause and effect in these relationships. Some economists have argued that it was the slow economic growth that led to the increase in the Debt/GDP ratios.

IV. Debt Statistics and Future Prospects

The Mckinsey Report listed 23 countries, which included all the large

Industrial countries, that in 2014, had ratios of total (public and private) debt to

GDP of over 200 percent. See column 2 in Table 1 below. It ought to be recalled that,

		Table 1				
Actual and Simulated Debt Data, 2014						
(1)	(2)	(3)	(4)	(5)		
	Total Debt/GDP	Government		Change in Gov. Debt/GDP		
Country	Ratio	Gross Debt/GDP	Fiscal Space	(2007-2014)		
Japan	400	246	0	63		
Ireland	390	108	106	93		
Singapore	382	99	193	22		
Portugal	358	130	59	83		
Belgium	327	107	124	34		
Netherlands	325	68	158	38		
Greece	317	177	0	70		
Spain	313	98	118	92		
Denmark	302	45	197	22		
Sweden	290	44	188	1		
France	280	96	117	38		
Italy	259	132	0	47		
United Kingdom	252	89	133	50		
Norway	244	28	246	-16		
Finland	238	59	172	29		
U.S.A.	233	105	165	36		
South Korea	231	36	241	15		
Austria	225	84	157	23		
Canada	221	88	150	16		
Australia	213	34	215	23		
Germany	188	75	168	17		

Sources: Columns 2 and 4, from Mckinsey Global Institute, Debt and (Not Much) Deleveraging, February 2015, Table on page 4.

Column 3, from IMF, Fiscal Monitor, Oct. 15, 2015.

Column 5, from Jonathan D. Ostry, Atish R. Ghosh, and Raphael Espinoza, "When Should Public Debt Be Reduced?" IMF Staff Discussion Note 15/10 (June 2015).

as it was learned in recent years in countries such as Ireland, Spain, Iceland, Cyprus, United States and one some others, over the years ,private debt has shown an increasing tendency to become public debt, in times of crisis. At the same time, more and more public debt has been parked in the balance sheets of the central banks. This represents a radical change, the long run consequences of

which are difficult to predict at this time.

While the data cited above are just statistical facts, as already mentioned, the attitude of some economists has become less antagonistic to public debt, than it had been in the past. Some have even converted public debt from a sin into a virtue, under certain circumstances. Governments that do not increase their public borrowing and their public spending, presumably to promote what these economists call growth, are criticized. Central banks have been facilitating this behavior by reducing and keeping low the cost of short term borrowing. Some economists would even push the rates into sharply negative territory.

Years ago, attitudes that, at least among economists, were less extreme than the ones reported above had led the great Austrian economist. Ludwig von Mises—to remark, in response to Keynes' comment about the importance of the short run, that the trouble with the excessive focus on the short run, and with the short run promotion of public spending and borrowing, was that "…nearly—all of us outlive—the short run and… spend decades paying for the easy money—orgy of a few years". For sure the Greeks, the Japanese, the Portuguese, the Spaniards, the Italians, and the citizens of several other highly-indebted countries have discovered, or some will discover, the relevance of von Mises' comment. See Mises, 205, p. 130.

Concerns and antipathy vis -a -vis the accumulation of public debt had persisted until the time when the Keynesian views of the positive role that fiscal deficits could play to fight recessions became popular in the 1940s. There are *many* countries, today, with high *public* debts, and several advanced countries have public debts that exceed 100 percent of their GDPs. The latest IMF statistics of

public debts, reported as Column 3 of Table 1, indicate that in 2014 the public debts of general governments, as percentages of GDPs, were: 246 for Japan; 177 for Greece; 132 for Italy; 130 for Portugal; 107 for Belgium; 108 for Cyprus; 105 for the United States; and 108, for Ireland. Several other countries (Canada, France, Singapore, Spain and the UK), had Debt/GDP shares close to 100 percent. See IMF Fiscal Monitor, October, 2015. These debts continued to grow in 2015.

Clearly attitudes vis -a -vis public debt have changed over the years, while the supply of credit, to governments that want to borrow, has become progressively more elastic, because of globalization of financial markets, the growth of shadow banking, the high saving rate of China, and the novel, and more accommodating policies of central banks.

In recent years the policies of central banks have made it increasingly more difficult to distinguish fiscal policies from monetary policies, because of the experimentation by central banks with "Quantitative Easing" and with other highly unorthodox and novel policies. Monetary policy has become increasingly more dependent on fiscal developments, after the campaign by economists for central bank political independence. An increasing share of government debt has ended in the balance sheets of the central banks.

Some recent economic literature has attempted to define an *optimal* public debt level, or a *safe* level of debt, naturally assumed to be far above zero, and recognizing that such a level is "very difficult to pin down precisely in practice". See Ostry et al.p.1. That literature has suggested that debt levels fall into three zones: a *green zone*, a *yellow zone* and a *red zone*. For green zone countries "reducing

debt ... is likely to be normatively undesirable as the costs involved [in reduced output] will be larger than the resulting benefits". See Ostry ar al. , p.1.

According to this methodology only four countries (Japan, Italy, Greece and Cyprus) are in the red zone and face inflexible debt limits. These countries should refrain from adding to their public debt levels. The countries in the yellow zone have fiscal space that they can still use, but must exercise some caution. Those in the green zone, that includes most counties, have large fiscal space, as large as 100 or even 200 percent of GDP. One can only wonder at these estimates. For example is it reasonable to assume that the current fiscal space of Belgium is 124 percent of GDP, that of Spain is 118 percent, and that of France is 117 percent? What would happen if all the countries in the table decided to use the estimated fiscal space?

We know that all the countries in Table 1 will face significant age-related public spending in the coming years. Some have large, unfunded, pension liabilities that do not show in the official public debts statistics. These contingent liabilities, if added to the official estimates of the public debt would raise the debts considerably. Also the interest rates that have prevailed in recent years have been very low, in part because of the interest rate policies, and in part because of the large saving rates in particular countries and especially in China. These favorable factors are likely to change in future years, creating a far less -favorable environment for countries with high public debts. For many of these countries the maturity of the debt is relatively short.

Table 2 provides some data, estimated by Standard and Poor a few years ago, on the future impact of aging on public spending in many industrial countries,

under the laws when the estimations were made. The table shows that all the countries in the table will be severely affected by aging, some more than others. Several countries will need as much as ten or more percentage points of GDPs in public spending to cover the increasing costs of aging by 2050. A large proportion of those living today will be still around in 2050; so that, 2050 does not reflect the time "when we are all dead".

Over the past two decades there has been increasing resistance on the part of the citizens of OECD counties to pay higher taxes. Revenue statistics provided by the OECD indicate that the highest shares of taxes into GDPs were achieved in the decade of the 1990s. Almost no country increased its tax level by any significant amount after the end of the 1990s. Therefore, the obvious question must be: how will the countries be able to, both, service the (current or the even higher) future public debts, at likely higher interest rates, while, at the same time, significantly increasing public spending, in some cases by very large amounts, to cover costs of aging populations, costs related to needed infrastructure, costs due to global warming, and other costs. This is the question that those who are currently advocating higher public spending that would be financed by higher public debt should address.

	Increase in Age-	Table 2 related Spending	, percent of GDP	
Country	2010	2030	2050	Change 2010-2050
Japan	18.8	22.1	26.7	7.9
Ireland	12.1	16.2	22.0	9.9
Singapore	n.a.	n.a.	n.a.	n.a.
Portugal	20.8	24.4	29.9	9.1
Belgium	21.8	28.8	32.8	11.0
Netherlands	16.1	23.3	28.2	12.1
Greece	18.6	26.6	36.6	18.0
Spain	16.9	21.0	28.6	11.7
Denmark	18.3	23.2	24.5	6.2
Sweden	21.6	25.2	27.4	5.8
France	24.9	29.1	31.9	7.0
Italy	22.4	26.0	28.8	6.9
United	15.7	20.1	23.7	8.0
Kingdom				
Norway	18.2	25.0	29.1	10.9
Finland	19.5	26.6	28.8	9.3
U.S.A.	10.8	15.1	18.5	7.7
South Korea	5.8	10.8	17.2	11.4
Austria	21.5	26.2	29.6	8.1
Canada	14.1	19.1	22.0	7.9
Australia	9.6	11.1	14.4	4.8
Germany	20.0	25.0	29.5	9.5

Source: Standard and Poor's Global Credit Portal, "Global Aging 2010:An Irreversible Truth", October 7, 2010.

Concluding Remarks

This paper has dealt with the rise of public debt in recent years in industrial countries and with the push on the part of some vocal economists, both in academia and in some international institutions, to increase public spending and to abandon what they call "austerity", in the belief that this policy will promote growth, and not just at best a potential, short run increase in output at the cost of financial difficulties in

the future.

The paper has discussed how, over the long run, attitudes vis -a -vis public borrowing changed and became more relaxed; and how some economists came to see higher public debt as almost a kind of miracle cure that would increase economic growth, not just in the short run but also in the long run, through highly questionable channels. The paper has provided some data that indicate how much the public debts have become a current and future problem and has warned against letting public debt rise even more.

It may be instructive to conclude this paper by citing from Adam Smith's The Wealth of Nations.

"All states...have on some occasion played this very juggling trick [of replacing tax revenue with borrowing]" p.883. "When national debts have once been accumulated to a certain degree, there is scarce... a single instance of their having been fairly and completely paid. The liberation of public revenue, if it has ever been brought about at all, has always been brought by bankruptcy: sometimes an avowed one, but always by a real one, though frequently by a pretended payment." P. 882.

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