LIVING ON BORROWED TIME
THE TROUBLE WITH PUBLIC DEBT

Public debt has been converted from a fiscal sin to a fiscal virtue, argues **Vito Tanzi**

In recent years the rise of public debt has been accompanied by a push, on the part of some vocal economists, for governments to increase public spending and abandon what they call 'austerity' in the belief that this policy will promote sustained growth. This article discusses how attitudes to public borrowing have changed and how some economists have come to see higher public spending as a kind of miracle cure that would increase economic growth in the long run. It concludes by providing some indications of the extent to which public debt has become both a current and future problem.

Past and present views on public debt

In his 2014 book *Eurotrap* on 'bursting bubbles, budgets and beliefs', the distinguished German economist Hans-Werner Sinn worries that '. . . nearly all [European Union countries have] increased their sovereign debt faster than their GDP'.[1] They were not the only ones to do so, even though over many centuries—up until the middle of the 20th century—public debt has not enjoyed a good reputation. Several famous historical figures from Cicero to Napoleon to George Washington and others warned about the danger of public borrowing.[2] Economists such as Adam Smith and David Hume shared those concerns.[3]

Naturally, there were situations or good excuses that at times seemed to justify public borrowing. In the past governments did not have modern tax administrations capable of collecting taxes when needed. Loans could be obtained more quickly, and often more easily. Therefore, even in the past governments borrowed.[4]

The historical figures and economists of the past might have approved of public debt in situations that included: (a) fighting legitimate wars; (b) dealing with the consequences of great natural disasters; and, in recent times, (c) public borrowing during severe recessions. Some economists today might also approve of public borrowing to finance a 'big push' in infrastructure creation. However, there would be disagreement on whether *routine* public investment spending, that did not change much year after year, should be financed by borrowing rather than taxes, as defenders of the so-called golden rule have argued.[5] Not all public investment is productive, and not all contributes to economic growth and future tax revenue. Public spending classified as investment can be inflated by 'white elephants' and 'roads to nowhere'.[6] Furthermore, corruption often inflates investment spending, as has happened in Italy, Brazil and Greece in recent decades.[7]

Many modern economists would further agree that the fiscal deficits that arise during recessions from the action of 'built-in stabilisers' and short-run discretionary fiscal

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measures can also justify public debt. However, they would not necessarily agree with the view, held today by some vocal economists such as Paul Krugman and Joseph Stiglitz, that when the growth rate falls below what they believe is the long-run trend, this fall would justify *large and sustained* fiscal injections.

In all the above situations, a country that has kept its public accounts in good order would have less difficulties in borrowing than a country that had let its public accounts deteriorate and was already exposed to the potentially damaging effects of high public debt. This means that the initial conditions of the fiscal accounts are important in determining the fiscal policy that is feasible and desirable.[8]

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The realisation that there can be Great Depressions or Great Recessions, which can lead to sharp decreases in output and large increases in unemployment, justifies—for many modern economists—fiscal policies that might help stabilise the economy. This realisation led John Maynard Keynes in the 1930s to propose the use of time-limited expansionary fiscal policies mainly associated with public spending on productive public works, financed by public borrowing. Keynes also theorised that fiscal multipliers would create more employment and more output than would have the initial fiscal stimulus.

Concern over high unemployment during the Depression also led Keynes to state that governments should give priority to short-run objectives, because, as he put it, 'in the long run we are all dead'. That statement has often been cited to suggest that the short run should be the focus of counter-cyclical fiscal policies. As a consequence, relatively little attention has been paid to the long-run implications of high and growing public debts. Counter-cyclical fiscal policy should be *symmetric* over longer periods of time. It should generate budget deficits during recessions and budget surpluses during better times. It should not lead to the accumulation of large public debts that may become costly to service and that may make it more difficult for a country to use fiscal policy in future years if the need arises.

Since the end of World War II, industrial countries have *not* fought great wars, have *not* experienced major natural disasters, have *not* experienced Great Depressions, and have *not* engaged in major public investment programs concentrated in short time periods, as China has done for example. Spending on public infrastructure has been reduced in recent decades. Nevertheless, public debt has grown. In some countries it has reached record levels. In spite of these levels, some economists have urged governments to spend and borrow more. In their view, this course of action would stimulate economies while countries would take advantage of the low interest rates that central banks have made possible.

'New-Keynesian' views on fiscal policy

Some economists have recommended, and some governments have adopted, policies described as 'new-Keynesian', although it is not certain that they would have received Keynes' stamp of approval if he had been alive today. They reflect a belief that with enough public spending any country can prosper and grow. Public spending is seen as the basic growth factor.

Changes in paradigms often start with changes in the meaning of some terms. This has happened in the discussion of fiscal policy. Terms such as 'austerity', 'recession' and others have been subjected to some massaging of their meanings. For instance, 'austerity' no longer means the 'pursuit of an austere practice', as the dictionary would put it, so that governments do not continue spending money they do not have. Or take the term 'recession'. A country like the United States that has been growing at 2% a year and has a 5% unemployment rate is described as 'deeply depressed'.[9]

These new definitions have accompanied new and at times even strange economic theories that seem to ignore obstacles to growth of structural or psychological natures. The implicit belief of the 'new-Keynesian' theories seems to be that very large fiscal multipliers exist and that more public spending can generate miracles. Large fiscal deficits can raise growth rates, especially in 'deeply depressed' economies. High levels of public debt would not create difficulties because the anticipated high growth rates would melt the debt.

Given these assumptions, it would be 'stupid' (Stiglitz's term[10]) to worry about fiscal deficits and public debt. 'Austerity' policies, such as those adopted in Italy and Spain or forced on countries like Greece, are considered counterproductive. The large space that the media gives to highly vocal economists such as Stiglitz who hold these views gives the impression that they now reflect the views of the economic profession. However, many leading economists do not share them.[11]

As a result of the new theories, some research in the fiscal area has become more creative and less intuitive or convincing to those who do not share the same paradigm. Paul Krugman,[12] and to a more guarded extent Larry Summers and some others,[13] have argued that traditional or orthodox economic rules no longer apply when economies are 'deeply depressed' and when 'liquidity traps' are present. Some empirical studies have generated results that orthodox economists find highly questionable and hard to accept. The latter have had increasing difficulties in understanding the channels and mechanisms that can create the huge multipliers and claimed large growth outcomes.

Public debt and its impact on economic activity

Various papers have advocated expansionary fiscal policies and slower paces of fiscal consolidation in countries with high fiscal deficits and large public debts. At the beginning of the Global Financial Crisis (GFC), some economists set the tone for the policies that advanced countries should follow to deal with the GFC. An important International Monetary Fund (IMF) paper in 2008 called for the adoption of *large, expansionary and sustained* fiscal policies.[14] Various countries introduced policies that, in 2009-2010, increased their fiscal deficits to extraordinary and clearly unsustainable levels.[15] The fiscal stimulus packages were withdrawn when the money budgeted for them was spent. However, the deficits remained very large. In 2012, in the Group of Seven (G7) countries, they averaged over 6% of GDP but some economists defined them as 'austerity'.[16] 'Austerity' has come to describe the policies of countries that did not maintain fiscal deficits at the extraordinary levels of 2009-2010.

These criticisms imply that the more prudent or orthodox policies followed after the introduction of the large 'fiscal packages' of 2009 were too restrictive, and that countries should have maintained the large fiscal stimuli. As interpreted in a 2015 IMF study,[17] the current fiscal and economic conditions of many countries would justify and allow them to introduce *additional and sustained* fiscal expansionary policies. These would be different from the time-limited packages theorised by Keynes and expected to operate through the action of reasonably-estimated fiscal multipliers.

Very large fiscal multipliers are now assumed[18] and operate over much longer time periods.[19] Thus, in the views of economists behind these new pro-spending theories, large expansionary fiscal policies should be sustained for much longer periods to fight stagnation. These economists seem to believe that we are now in a different fiscal world where old rules no longer apply.

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The world risks drowning in an enormous pool of public—and private—debt if the recommended policies fail to generate the fast rate of growth that those who propose them hope they will generate. In a 2015 report, McKinsey & Company provided useful statistics on public and private debt in the world. Some of these statistics are reported in Table 1 overleaf. The total debt in the world has never been so high. The report warned 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, I 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 GFC, imported into Europe from the United States after the sub-prime meltdown, more severe than it would have been.[20]

High public debt may depress growth through various channels. The most direct is that servicing the public debt diverts public spending from public investment. This relationship was first theorised and empirically tested in a 2000 paper,[21] and was confirmed by later IMF studies.[22] Some economists have qualified the negative relationship between public debt and growth. For example, the 2015 IMF paper cited earlier found that high debt has a negative impact on public investment and growth, but nevertheless argued that '. . . 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'.[23] While this may be true, 'distortionary taxation' may not be the only or the most desirable way to reduce a high debt in most countries. A better way would be to reduce unproductive spending, as many IMF studies have found. In recent decades some countries, such as Norway, cut public spending (sometimes by very large shares of GDP) to deal with high and growing public debts. They did very well in the years that followed.[24]

High public debt may reduce growth through channels other than the impact on public investment and tax levels;[25] for instance, by creating concerns about the sustainability of fiscal policy and the increasing likelihood of financial crises.[26] A casual look at countries with high public debt, such as Italy and Japan, indicates that they have not been blessed by high growth rates.

Debt statistics and future prospects

The McKinsey Report listed 23 countries, which included all the G7, that had ratios of total (public and private) debt of over 200% of GDP in 2014 (see column 2 in Table 1). In many countries, private debt has shown a tendency to become public debt during crises. Increasing shares of public debt have been parked in the balance sheets of the central banks.[27] The long-run consequences of these developments are difficult to predict.

While the data cited above are statistical facts, some economists have become less antagonistic to public debt and have even converted public debt from being a sin into being a virtue, with central banks encouraging this conversion by keeping the cost of short-term debt very low for governments.

Table 1: Actual and Simulated Debt Data, 2014

(1) Country	(2) Total Debt/ GDP Ratio	(3) Government Gross Debt/GDP	(4) Fiscal Space	(5) Change in Govt. Debt/ GDP (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* (15 October 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).

Many countries today have public debts that exceed 100% of their GDPs.[28] IMF statistics, as reported in column 3 of Table 1, indicate that in 2014 general government debts, 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 government debt to GDP shares close to 100%.[29] These debts grew in 2015.

The supply of credit to governments has become progressively more elastic because of the globalisation of financial markets, the growth of shadow banking, the high saving rate of China, and the novel and more accommodating policies of central banks. Monetary policy has become increasingly dependent on fiscal developments.

Some recent economic literature has attempted to define an *optimal or safe* public debt level, recognising that such a level is 'very difficult to pin down precisely in practice'.[30] That literature has suggested that debt levels fall into three zones: green, yellow and red. 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'.[31] Japan, Italy, Greece and Cyprus are the countries in the red zone that 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, which seems to include most countries, have large fiscal space available—spaces as large as 100% to 200% of their GDPs.

One can only wonder at these estimates, especially given the source. For example, is it reasonable to assume that the current fiscal space of Belgium is 124% of GDP, that of Spain is 118%, and that of France is 117%? What would happen if all the countries in Table 1 decided to use their estimated fiscal space?

We know that all these countries will face future significant age-related public spending. Some have large unfunded pension liabilities that do not show in the official public debt statistics. If added to the official estimates of the public debt, these liabilities would raise the debts considerably. Also, the interest rates that have prevailed in recent years have been very low. These factors are likely to change in future years, creating a far less favourable environment for countries with high public debts. For many of these countries the maturity of the debt is relatively short. And future growth rates are likely to be lower.

In 2010, Standard and Poor's estimated the future impact of aging on public spending in many industrial countries, under the laws that existed when the estimates were made (see Table 2 above). It found that *all* the countries in the table will be severely affected by aging. By 2050, several countries will need as much as ten or more percentage points of GDPs in public spending to cover the increasing costs of aging. Many of those living today will be living and retired in 2050.

Table 2: Increase in Age-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 Kingdom	15.7	20.1	23.7	8.0
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' (7 October 2010).

Over the past two decades there has been increasing resistance, on the part of citizens of OECD counties, to pay higher taxes. OECD statistics indicate that the highest shares of taxes into GDPs were achieved in the 1990s. Almost no country has increased its tax levels significantly since then. The obvious question to ask must be: how will the countries be able to service current or even higher future public debts at likely higher interest rates while at the same time, and in some cases, increasing by very large amounts public spending to cover the costs of aging populations, of needed infrastructure, those due to climate change and other costs? This question must be addressed.

> [Australia's] general government gross debt has risen from 9.7% in 2007 to 40.9% in 2016 in spite of low borrowing rates. This change indicates how quickly comfortable fiscal situations can turn into worrisome ones.

I might conclude this article with a few comments on Australia's recent fiscal developments. According to the latest IMF data,[32] in 2007, the last year before the GFC, the general government expenditure of Australia was 34.4% of GDP while its general government revenue was 35.8%, thus giving the country a general government net surplus of 1.5% of GDP. In that year, general government gross debt was only 9.7% of GDP, one of the lowest among OECD countries. By 2016, Australia's public spending had risen to 37.6% of GDP and its fiscal balance (that in 2008 had become a deficit and in 2010 had reached the high level of 5.1%) was still close to 3%. Not surprisingly, general government gross debt had risen from 9.7% in 2007 to 40.9% in 2016 in spite of low borrowing rates. This change indicates how quickly comfortable fiscal situations can turn into worrisome ones.

I have argued elsewhere that public spending of a range between 30% to 35% of GDP ought to be sufficient for governments to satisfy the social needs that require public spending. The total debt of Australia (public plus private debt) is well over 200% of GDP, and age-related and other pressures for higher public spending that are likely to appear in future years will also be present in Australia, as they will be in other countries. The conclusion must be that letting recent trends continue, or even worse using what some call 'fiscal space' to increase spending, might be a grave mistake.

Endnotes

1 Hans-Verner Sinn, *Eurotrap* (Oxford University Press, 2014), 55.

2 For instance, in 43 BC Cicero wrote: 'The national budget must be balanced. The public debt must be reduced and controlled. 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.'

3 Some 17 centuries after Cicero—and when Adam Smith was working on *The Wealth of Nations*—David Hume wrote that: 'It is very tempting for 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 excercising immediate clamours against himself. The practice, therefore, of contracting debt will almost infallibly be abused in every government'. See David Hume, *Writings on Economics*, edited by Eugene Rotwein (Madison: University of Wisconsin Press, [1752] 1937), 92.

4 See detailed accounts in Adam Smith *The Wealth of Nations* (New York: The Modern Library, [1776] 1937) and Paul Leroy-Beaulieu, *Traité de la Science des Finances* (Paris: Guillaumin et C.le Libraires, 1888).

5 The golden rule states that spending from public investment should be excluded from the estimate of a country's fiscal deficit.

6 Vito Tanzi and Hamid Davoodi, 'Corruption, Public Investment and Growth', in *The Welfare State, Public Investment and Growth*, edited by H. Shibata and T. Ihori (Springer, 1998).

7 By up to 40% in Italy, as was reported in 2014. See Vito Tanzi, 'Roads to Nowhere: How Corruption in Public Investment Hurts Growth', in *New Perspectives on Combating Corruption* (Transparency International and The World Bank, 1998).

8 See Vito Tanzi, 'Fiscal and Monetary Policies During the Great Depression: A Critical Evaluation', *Comparative Economic Studies* 57 (2015), 243-275 and Vito Tanzi, 'Crises, Initial Conditions and Economic Policies', in Symposium on Structural Reforms and Fiscal Consolidation: Trade-Offs or Complements?, Federal Ministry of Finance of Germany (Berlin: 25 March 2015).

9 Bradford J. DeLong and Lawrence H. Summers, 'Fiscal Policy in a Depressed Economy', *Brookings Papers on Economic Activity* (2012), 233- 297.

10 Joseph E. Stiglitz, 'The Politics of Economic Stupidity', *Project Syndicate* (20 January 2015).

11 These include past Nobel Prize winners such as Hayek, Friedman and Buchanan as well as living Nobels such as Lucas, Sargent, Phelps, Fama, Kydland, Prescott and Sims, all of whom hold or held widely different views.

12 For one of many examples, see Paul Krugman, 'Secular Stagnation, Coalmines, Bubbles and Larry Summers', *The New York Times* blog (16 November 2016).

13 See DeLong and Summers, 'Fiscal Policy in a Depressed Economy'. See also Antonio Fatas and Lawrence H. Summers, 'The Permanent Effects of Fiscal Consolidations', *Discussion Paper* No. 10902, Center for Economic Policy Research (14 October 2015).

14 Antonio Spilimbergo, Steve Symansky, Olivier Blanchard and Carlo Cottarelli, 'Fiscal Policy for the Crisis', *IMF Staff Position Note* 08/01 (29 December 2008).

15 See Tanzi, 'Fiscal and Monetary Policies During the Great Depression', 17.

16 See Tanzi, 'Fiscal and Monetary Policies During the Great Depression'.

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

18 See DeLong and Summers, 'Fiscal Policy in a Depressed Economy'.

19 See Blanchard and Leigh, 'Growth Forecast Errors and Fiscal Multipliers', National Bureau of Economic Research (2013).

20 For a discussion of the 'massaged' fiscal data, see Vito Tanzi, *Dollars, Euros and Debt: How We Got into the Fiscal Crisis and How We Get out of It* (London: Palgrave Macmillan, 2013) and Timothy C. Irwin, 'Getting the Dog to Bark: Disclosing Fiscal Risks from Financial Sector, *IMF Working Paper*, WP/15/208 (2015).

21 Vito Tanzi and Nigel Chalk, 'Impact of Large Public Debt on Growth in EU: A Discussion of Potential Channels', in *Public Debt and Fiscal Policy in EMU, European Economy*, European Commission, Reports and Studies, No 2 (2000). Republished in Marco Buti, Jürgen von Hagen and Carlos Martinez-Mongay, *The Behavior of Fiscal Authorities: Stabilization, Growth and Institutions* (Palgrave, 2002).

22 The 2015 IMF *Staff Discussion Note* by Ostry et al (see note 17) reported the existence of a 'strong negative relationship between public debt. . . . and public investment' (page 15). Another 2015 IMF paper found 'significant negative long-run effects of public debt build-up on output growth' (page 1). See Chudik et al, 'Is There a Debt-Threshold Effect on Output Growth?', *IMF Working Paper*, WP 15/197 (September 2015).

23 Ostry et al, 'When Should Public Debt be Reduced?'.

24 Vito Tanzi, *Government Versus Markets: The Changing Economic Role of the State* (Cambridge University Press, 2011), 235.

25 See Carmen Reinhart, Vincent R. Reinhart and Kenneth S. Rogoff, 'Public Debt Overhangs: Advanced Economy Episodes Since 1800', *Journal of Economic Perspectives* 26:3 (Summer 2012) as well as Stephen G Cecchetti, M.S. Mohanty and Fabrizio Zampolli, 'The Real Effect of Debt', Bank for International Settlements *Working Paper* Number 352 (September 2011).

26 Scott R. Baker, Nicholas Bloom, and Steven J. Davis, 'Measuring Economic Policy Uncertainty', mimeo (1 January 2013).

27 As has been stressed by Hans-Werner Sinn in *Casino Capitalism: How the Financial Crisis Came About and What to Do About It* (Oxford University Press, 2010).

28 Reinhart et al have argued that there is a threshold of around 90% in the debt to GDP ratio at which public debt started to have a negative impact on growth. (See Carmen M. Reinhart and Kenneth S. Rogoff, 'Growth in a Time of Debt', *American Economic Review* 100:2, 2010, 573-78.) However, the importance of such a threshold has not been confirmed by other studies, and it is not likely that such a threshold exists. Not all public debts are created equal and the cost of servicing similar public debt levels can be very different in different countries. It seems less controversial to argue that the higher the debt to GDP ratio is, the greater would be the negative impact of public debt on economic growth.

29 See IMF, *Fiscal Monitor* (October 2015).

30 See Ostry et al, 1.

31 As above.

32 IMF, *Fiscal Monitor* (October 2016).