Austerity, economic growth, and multipliers

by

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1. Introduction and summary

Austerity policies which prioritise rapid reductions in government deficits are being applied by many governments in Europe. They involve large cuts in public expenditure and some tax increases. The EU is a key driver of this process because of its targets for government deficits and debt, and because, along with the ECB and the IMF, it is part of the 'troika' which has insisted on particularly sharp austerity policies in Greece, Portugal, and Ireland, and placed great pressure on other countries such as Italy and Spain to do likewise.

This paper examines:

- the evidence of the impact of these policies on economic growth, which shows that, greater austerity leads to greater falls in GDP
- the failure of the forecasts used in austerity programmes, as a result of using economic multipliers – which estimate the economic impact of changes in government deficit – which have proved to be far smaller than the actual relationship visible
- the 'Report on Public Finances in EMU 2012' includes a theoretical simulation attempting to show that austerity should not damage the debt-to-GDP ratio, but does not address the actual empirical data nor the direct relationship between austerity and GDP
- the impact of austerity on GDP was consistently underestimated by forecasts on earlier austerity programmes, which was already well known in 2009 and should have been taken into account by the promoters of austerity packages
- an recent IMF study has shown that the negative multiplier effects of austerity are even greater in recessions, and that "withdrawing fiscal stimuli too quickly in economies where output is already contracting can prolong their recessions without generating the expected fiscal saving. This is particularly true if the consolidation is centred around cuts to public expenditure…and if the size of the consolidation is large."
- There is also now clear empirical evidence, from another IMF study, that the 'good governance' of reduced regulation – a key part of the Troika's austerity programmes - is not simply of no benefit but a serious liability: countries which follow this recipe for economic liberalisation consistently performed *worse* in the economic crisis than other countries.

2. Austerity worsens recession

Before discussing multipliers, it is important to address the more fundamental question: what are the actual observable effects of austerity on economic performance as measured by GDP. The advocates of austerity programmes argue that they are a way of improving economic performance. Critics argue that they have the opposite effect of reinforcing recession and creating higher unemployment: in addition, this damage to the real economy makes government deficits worse because it reduces government revenues and increases the need to pay benefits.

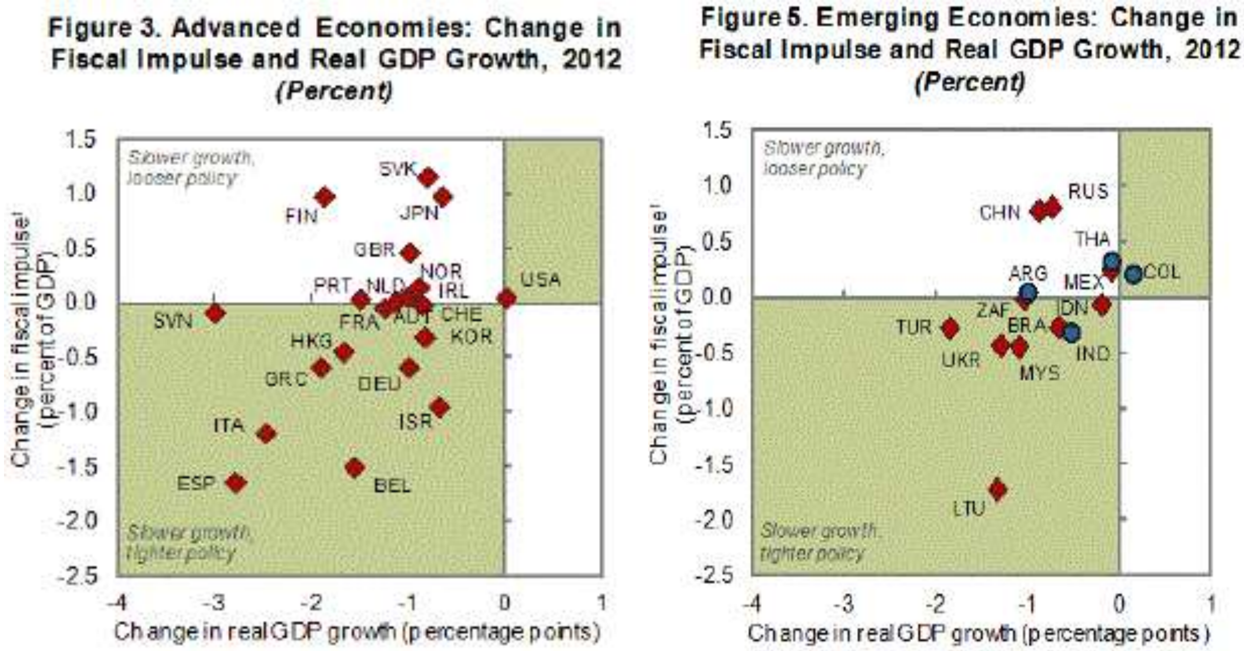
The empirical evidence shows a clear picture. Since the financial crisis of 2008, there is a correlation between the size of a reduction in government deficits and a change in GDP. The greater the reduction in fiscal deficit, the worse the contraction in the economy.

This evidence has been presented in simple graphs by economist Paul Krugman in the New York Times. The IMF itself has presented similar evidence in relation to both OECD and developing countries.

Chart A. More austerity means economic contraction (Krugman)

[Austerity - Blunder of Blunders 23/03/2012](#) by Paul Krugman

Chart B. More austerity means economic contraction (IMF)



[IMF Fiscal Monitor Update January 2012]

3. Systematically overstated forecasts

The austerity measures encouraged by the IMF and the European Commission since 2009, and imposed under Troika conditions and government policies in the EU, have been justified in terms of the short and long-term impact on economic growth. The policies are accompanied by forecasts of what will happen to economic growth as a result of the policies, and these forecasts are based on multipliers.

As the previous section made clear, the actual results of austerity have been to worsen the contraction of economies. This is contrary to the claims by the IMF, European Commission, OECD and governments that these austerity policies would improve the economy. It is therefore not surprising that the IMF, in the October 2012 World Economic Outlook, has found that the forecasts of economic growth following austerity have been systematically overstated by a large margin.

The WEO confirms that this applies to the forecasts of all the international institutions - the IMF, European Commission, and OECD – and one leading private forecaster, the Economist Intelligence Unit. It also confirms that the overstatements are not explicable by exceptional cases of high debt levels, or trade imbalances, or even the activities of financial markets. The WEO says bluntly that the relationship between forecasts and actual outcomes is "large, negative, and significant". (IMF WEO Oct 2012 Box 1.1 p.41).

The multipliers used in forecasts by the IMF and others were around 0.5, according to the WEO (although the assumptions were so vague that this itself is only a rough estimate: "not all forecasters make these assumptions explicit. Nevertheless, a number of policy documents, including IMF staff reports, suggest that fiscal multipliers used in the forecasting process are about 0.5").

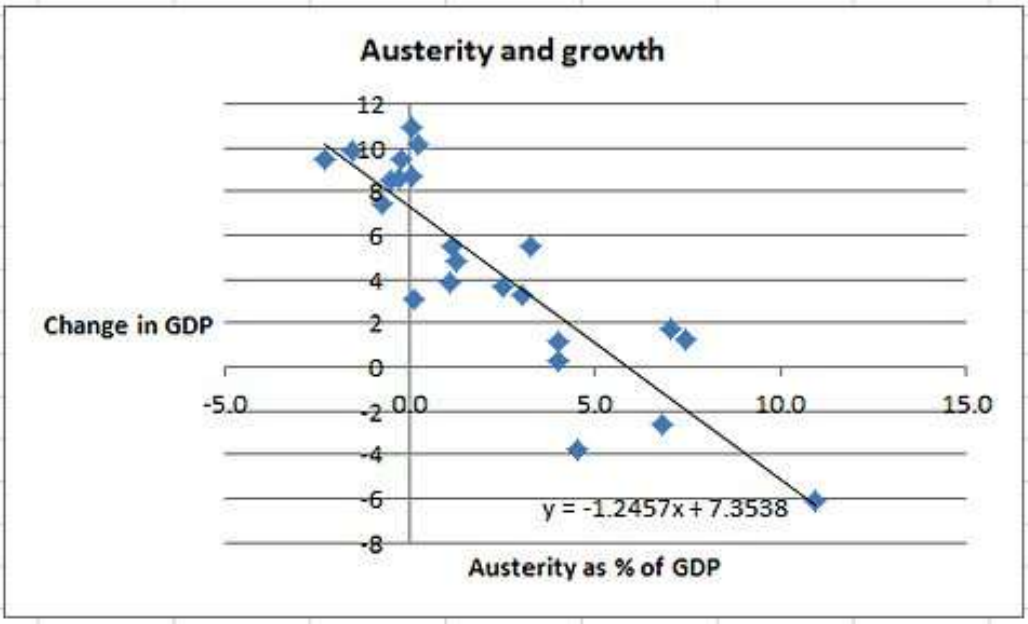
The WEO now estimates that the actual multipliers have been between 0.9 and 1.7. (IMF WEO Oct 2012 Box 1.1 p.43) The gap between reality and forecast is thus extremely large. The negative effects on economic growth have been three times as great as forecast by the IMF, EU or OECD.

4. Actual multipliers

The WEO estimate of actual multipliers between 0.9 and 1.7 is consistent with other estimates. For example, in April 2012 Krugman estimated the actual multiplier effect of austerity in Europe as 1.25. He further notes that: "this also implies that 1 euro of austerity yields only about 0.4 euros of reduced deficit, even in the short run." Martin Wolf, at the same time, estimated that the actual multiplier has been 1.5: "Every percentage point of structural fiscal tightening is estimated to lower GDP by 1.5 per cent of its 2008 level. So the 8 percentage points of structural fiscal tightening in Greece lowered its GDP by 12 per cent."

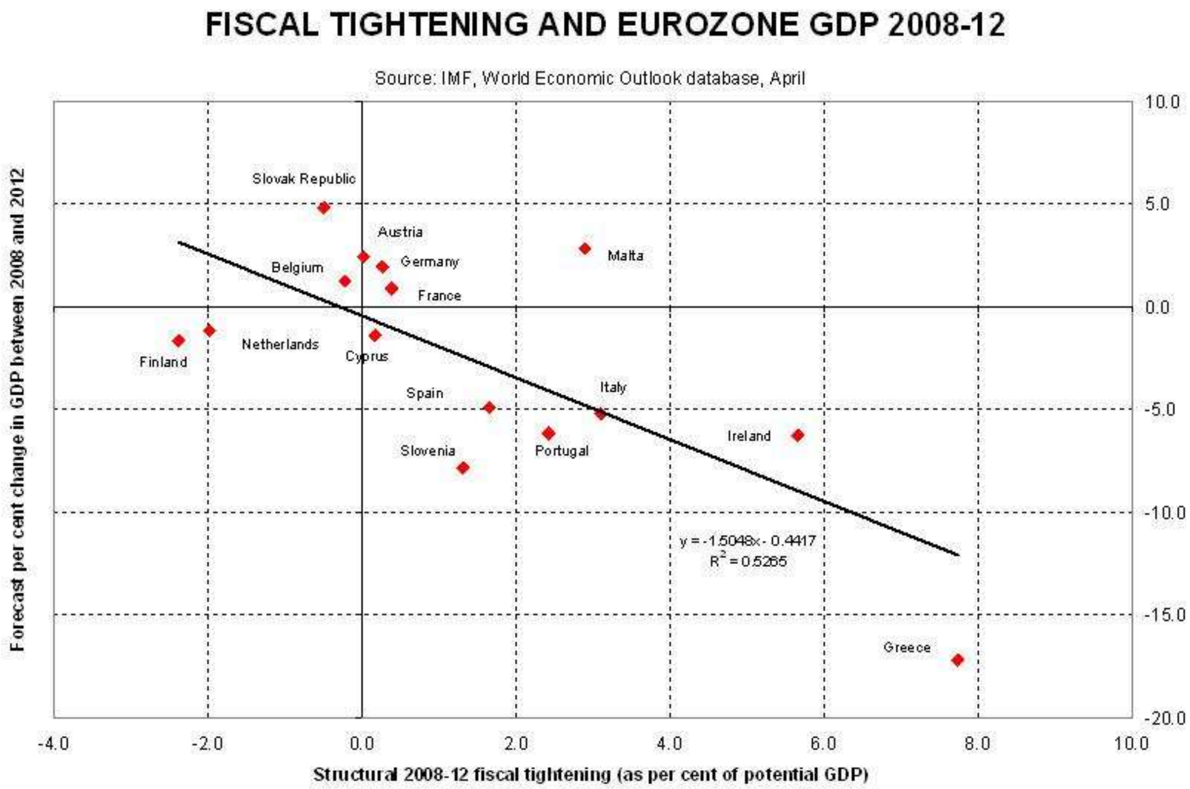
However, this general multiplier conceals a significant difference between cuts in spending and increases in taxation: the multiplier effect of cuts in spending is much greater. An IMF research paper (below) estimates a range of 1.6 to 2.6 for spending cuts, compared with a multiplier of only 0.16 to 0.35 for tax increases (IMF WP12190 p.7)

Chart C. Austerity multiplier 2009-2011 (Krugman)



http://krugman.blogs.nytimes.com/2012/04/24/austerity-and-growth-again-wonkish/

Chart D. Austerity multiplier 2008-2012 (Wolf)



http://blogs.ft.com/martin-wolf-exchange/2012/04/27/the-impact-of-fiscal-austerity-in-the-eurozone/#axzz1sy4qGXP8

5. The European Commission prefers theory

The recent European Commission report on public finances attempts a tortuous defence of the possibility of austerity policies being compatible with growth in GDP. (Report on Public Finances in EMU 2012, European economy series 4/2012 p.113 http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-4.pdf)

Unlike the WEO, it does not ask the empirical question of what the multipliers have been, nor does it ask whether the European Commission's forecasts and assumptions have been wrong. It is therefore fortunate that the WEO analysis covers the EU (and OECD) forecasts, as well as the IMF's, in its demonstration of how incorrect the assumptions have been. We can therefore be confident that the European Commission's forecasts have been as badly exaggerated as the others.

Instead of addressing the empirical data, the European Commission paper prefers to try and reject the critique that "austerity can be self-defeating… [because] a reduction in government expenditure leads to such a strong fall in activity that fiscal performance indicators actually get worse". The evidence shows this is actually happening, on a very damaging scale, as set out above, but the paper prefers to describe this as "counter-intuitive dynamics": in other words, it runs counter to their beliefs. It can then treat it as an unwelcome theoretical possibility, rather than a brutal reality. The paper then states that it will "define precisely the conditions under which counter-intuitive dynamics can happen" - by contrast, again, with the empirical approach of the WEO paper, which demonstrates quite simply that they have indeed happened, on a large scale, in the conditions of the last two years.

It presents a lengthy and thorough review of the literature, covering much of the same ground as was covered in the IMF paper in 2009, which shows that economists have a a wide range of different theories, methodologies and estimates of multipliers. It homes in on a range of 0.7-1.2 in the current climate, which is significantly less than the WEO and other estimates based on actual empirical data (see above).

It then conducts an elaborate simulated model of what multipliers might be, and what the effects of austerity on the debt-to-GDP ratio might be.

Two points are worth emphasising about this exercise.

Firstly, unlike the WEO, it does not address the empirical question of what the multiplier effects have actually been over the last three years. This is entirely a theoretical exercise.

Secondly, at no point does the paper discuss directly the effects of austerity on economic growth or unemployment. The entire exercise is focussed only on whether the GDP-debt ratio might be worsened as a result of the multiplier effects. Thus the editorial for the entire issue says “concerns have been raised that further fiscal consolidation amid weak growth prospects may have self-defeating effects on debt ratios.” The impact on growth or unemployment in themselves, which is the principal concern of most critics, is treated as of no interest except as a mechanism influencing the debt ratio.

The conclusions show an agonised awareness of reality lurking in the background, but a clear position that if so, the fault lies firmly with reality. It concedes that actual multipliers may differ from the estimates:

> “the risks of such [counter-intuitive] effect to arise from consolidation in the present context are overstated under plausible assumptions, although over the short-term increases in the debt-to-GDP ratio may be observed, driven by the denominator effect. Such debt increases are in most cases short-lived and followed by a fall in the debt ratio below the baseline of unchanged policy. In other words, over the medium-term, consolidations are generally successful in reducing the debt-to-GDP-ratio.” (p.159)

It attempts to protect its simulation by acknowledging that:

> “the presence or absence of counter-intuitive effects from consolidations on debt dynamics is primarily driven by the size of the GDP multiplier. …. The range was based on the existing economic literature; however it is likely that one-year multipliers are larger in the current crisis period than in normal times.”

In a final remarkable paragraph it presents a tortuous claim that its model also allows for an extremely unlikely, but theoretically possible, set of circumstances in which things might just go wrong.

> “It is however shown that for high but plausible values of the multipliers, such counter-intuitive effects are short-lived unless the multipliers have a high persistence – which can happen only in cases where the fiscal adjustments are repeatedly noncredible– or if effects on interest rates are high and contrary to what is normally expected in consolidations. A fully self-defeating dynamic would only be generated under very unlikely configurations, i.e. situations in which multipliers are very large and interest rates rise significantly (and counter-intuitively) due to the consolidation and debt developments. A high degree of financial market myopia is also required for these effects to exist.” (p.160)

This is quite close to reality, which may explain why the authors repeatedly attempt to describe it as implausible, counter-intuitive, short-lived, non-credible, abnormal, self-defeating, unlikely and myopic. Anything rather than evidence-based policy-making.

6. A long record of over-optimistic exaggeration of growth prospects

Much of the discussion of the IMF new position has referred to the multipliers used in the forecasts as ‘errors’. However, if was simply an error, one would expect there to be an equal chance of overstatement and understatement, but the unreliability is all in one direction. Was it reasonable for the IMF (and the EU, and the OECD) to make such a big error in this direction?

The IMF published a discussion paper on multipliers in 2009 (IMF 2009 Fiscal multipliers http://www.imf.org/external/pubs/ft/spn/2009/spn0911.pdf). It presented a number of examples of multipliers and offered some generalisations:

> “The size of the fiscal multiplier is country-, time-, and circumstance-specific…..The profession disagrees on the reliability of the multipliers, partly because of methodological differences, and partly because the range of estimates, even for similar methodologies, is often quite large.” (p.3)

This assessment of the uncertainty of multipliers should have led the IMF (and the EU and OECD) to be extremely cautious about insisting on an austerity policy where the impact on growth depended on such an uncertain variable.

The IMF had also known for some years that its growth forecasts for austerity packages were systematically over-optimistic. A detailed examination of fiscal adjustment in 133 IMF-supported programmes in 70 countries carried out by the IMF’s own Independent Evaluation Office (IEO) in 2003 noted:

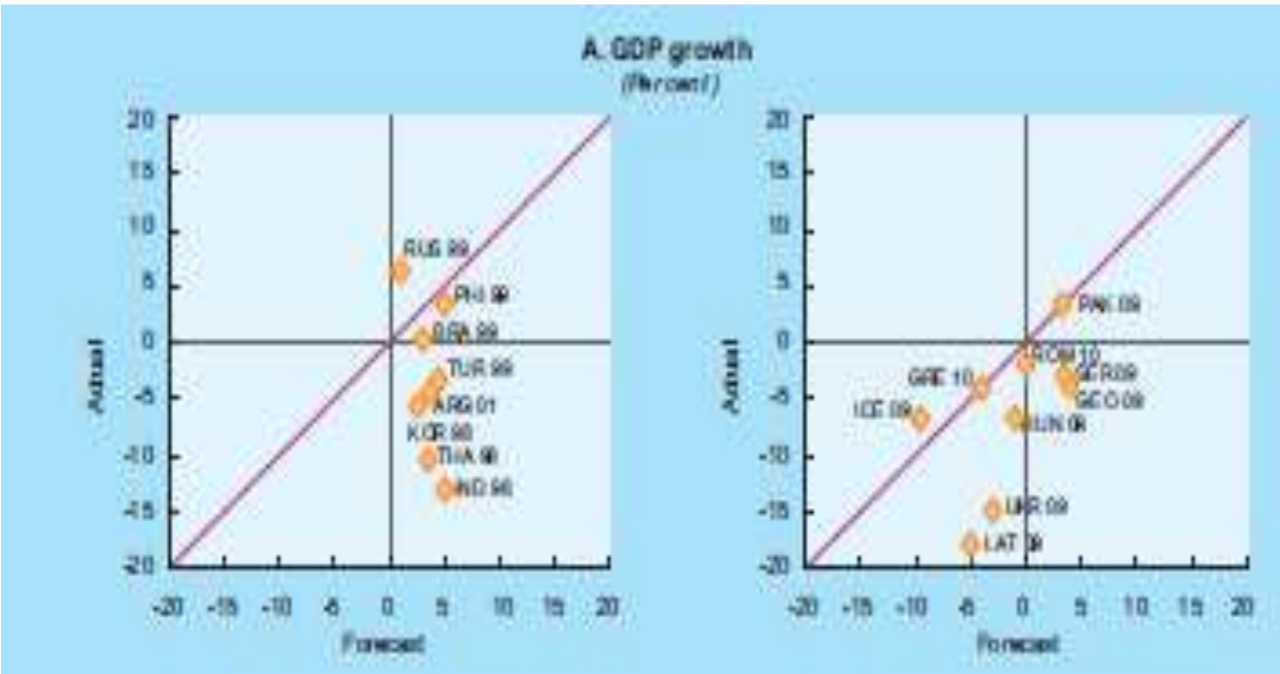
> “There is a tendency to adopt fiscal targets based on overoptimistic assumptions about the pace of economic recovery leading inevitably to fiscal underperformance and frequent revisions of targets. The optimism about growth recovery in the short term is itself often the consequence of overoptimistic assumptions about the pace of revival of private investment when a more realistic assessment in certain circumstances could have justified the adoption of a more relaxed fiscal stance on contracyclical grounds…. Optimism regarding growth recovery was particularly significant in programs that started from an adverse situation. When growth was negative during the first year of the program, growth projections for the second year were on average twice as high as in reality. Moreover, programs were generally reluctant to project a slowdown in growth and very rarely projected negative growth. For example, growth slowdowns between the first and second year of the program occurred twice as often as they were projected. Negative growth for the second year of the program was projected in only 1.3 percent of cases, but in reality it happened 10 times as frequently.” (IMF 2003 Fiscal Adjustment in IMF-Supported Programs www.ieo-imf.org/ieo/files/completedevaluations/09092003main.pdf)

A 2011 report by UNCTAD (UNCTAD Trade and development report, 2011 “Post-crisis policy challenges in the world economy” http://unctad.org/en/Docs/tdr2011_en.pdf) presented a similar damning analysis of IMF austerity programmes. It found that in nearly all cases, the outturns in terms of GDP growth were worse than the IMF forecasts:

> “outcomes systematically failed to live up to expectations. In some cases, the gaps are sizeable: in 1998, a GDP growth of 5 per cent was forecast for Indonesia, but in fact it

experienced minus 13 per cent growth; Thailand was expected to achieve 3.5 per cent growth, but growth actually contracted by 10.5 per cent; and the Republic of Korea was expected to achieve 2.5 per cent growth but it actually recorded minus 5.7 per cent. In recent years, growth outcomes have been overestimated by more than 5 percentage points in Georgia, Hungary, Latvia, Serbia and Ukraine."

Chart E. Actual growth below IMF forecasts (UNCTAD 2011)



http://unctad.org/en/Docs/tdr2011_en.pdf

The UNCTAD report also pointed to the remarkable absence of an explanation as to how fiscal tightening was supposed to translate into economic growth:

> "Misjudging the effects of fiscal tightening seems to be the rule rather than the exception in IMF-backed programmes…. In country after country where fiscal tightening was expected to both reduce the budget deficit and boost investment and economic growth, the opposite happened. Private sector demand and investment, in particular, responded much more sluggishly than the IMF had expected. In addition, fiscal balances, on average, failed to improve during the first two years of the fiscal adjustment programmes, even though this was an explicit goal of those programmes. The main reason for the shortfalls in countries that made large fiscal adjustments was that government revenues fell far below expectations. On the other hand, the spending cuts were on target. This record of failed IMF-sponsored adjustment programmes suggests that they are based on a fundamental macroeconomic misconception. The conceptual basis is not quite clear. The majority of programmes reviewed by the IMF-IEO did not explain the links between the targeted fiscal adjustment and the envisaged improvement in the external situation, or the assumptions driving the projected recovery of private spending and how it was linked to the fiscal policies recommended." (p.65)

7. Further evidence on the effects of austerity

The damaging effects of austerity on growth are even more explicitly spelt out in an IMF research paper published in August this year (IMF WP12190 p.7 , with the extremely misleading title of "Successful Austerity in the United States, Europe and Japan"). The paper's main conclusions did not identify any successes, but rather confirmed that damage to growth is extremely likely, especially in recession:

- The multiplier effects "are significantly larger in downturns than in upturns", so recession is the worst time to implement any form of fiscal consolidation
- Fiscal consolidation is twice as likely to deepen a downturn if it is made in a recession, more likely to have a recessionary effect if it is concentrated upfront,
- The benefits of 'confidence effects' "do not seem to have ever been strong enough to make the consolidations expansionary", so the supposed trade-off of restoring market confidence never compensates for the damage
- The multiplier effect of spending cuts is much greater than that of tax increases, so consolidation through spending cuts is the most harmful
- "frontloading fiscal consolidations tends to have harsher and more protracted adverse effects on output"
- And most generally, as stated in the concluding remarks: "withdrawing fiscal stimuli too quickly in economies where output is already contracting can prolong their recessions without generating the expected fiscal saving. This is particularly true if the consolidation is centred around cuts to public expenditure…and if the size of the consolidation is large."

As an analysis by Ronald Janssen concluded, this paper: "is simply devastating for traditional and mainstream recommendations on fiscal policy and austerity." (http://www.social-europe.eu/2012/10/blame-it-on-the-multiplier/)

8. The negative effects of 'good' governance

The systematically unreliable growth forecasts are not the only problem of austerity programmes. These programmes also include 'improvements' in economic governance, including less regulation of private business activity.

But research by both the IMF and the ECB has demonstrated that these very policies have in fact been highly damaging.

An IMF paper (The Economic Crisis: Did Financial Supervision Matter? WP 11/261 http://www.imf.org/external/pubs/ft/wp/2011/wp11261.pdf) found that countries which scored best on market-friendly regulation, as defined by the World Bank indicators of 'good governance', did worst in the recession:

> "the countries with the best ratings in terms of public sector regulatory framework, as well as those countries with the most far reaching financial deregulation, were hit the hardest economically".

'Good' regulation was not just useless, it was damaging: "This variable is negative and highly significant…". So the World Bank governance index is still useful- the worse you score, the better your economic prospects.

The same was true of countries which had liberalised the banking sector: "the significantly negative coefficients indicate that the countries that liberalized their financial systems the most, were most affected by the banking and economic crisis."

Similar results had already been published by the OECD in a paper co-authored by an ECB economist and others , which also found that countries did better on economic growth, and less badly in the crisis, if they scored badly on 'market friendliness' – especially in the financial sector. (Market freedom and the global recession 2010 http://www.oecd.org/economy/productivityandlongtermgrowth/46418753.pdf)

It also confirmed research carried out in Latin America in the 1980s, which showed that financial liberalisation damages growth.

9. Some conclusions

The economic forecasts of these bodies, including the forecasts underlying the Troika packages, cannot be trusted. Such drastic economic and social policy measures cannot be justified by reference to forecasts which are so uncertain, unrelated to reality, and have historically been systematically exaggerated.

The austerity packages introduced under the Troika have resulted in lower growth in GDP, and in some cases extremely large.

The actual multipliers overall have been between 1.2 and 1.5, for cuts in spending over 2.0, and for tax increases only about 0.2.

The use of a multiplier of 0.5 in forecasts by the IMF/EU/OECD was not a simple 'error' but a continued use of exaggerated forecasts of economic growth following fiscal austerity, which were known to be proved incorrect.

The European Commission should join the IMF in acknowledging that the austerity policies have had disastrous effects on the real economy and people's lives, and abandon the current policies.