

Manic-depressive austerity: let's talk about it!

By [Christophe Blot](#), [Jérôme Creel](#), and [Xavier Timbeau](#)

Following discussions with our colleagues from the European Commission [1], we return to the causes of the prolonged period of recession experienced by the euro zone since 2009. We continue to believe that premature fiscal austerity has been a major political error and that an alternative policy would have been possible. The economists of the European Commission for their part continue to argue that there was no alternative to the strategy they advocated. It is worth examining these conflicting opinions.

In the [iAGS 2014](#) report (as well as in the [iAGS 2013](#) report and in [various OFCE publications](#)), we have developed the analysis that the stiff fiscal austerity measures taken since 2010 have prolonged the recession and contributed to the rise in unemployment in the euro zone countries, and are now exposing us to the risk of deflation and increased poverty.

Fiscal austerity, which started in 2010 (mainly in Spain, Greece, Ireland and Portugal, with a fiscal impulse [2] for the euro zone of -0.3 GDP point that year), and then was intensified and generalized in 2011 (a fiscal stimulus of -1.2 GDP point across the euro zone, see table), and then reinforced in 2012 (-1.8 GDP point) and continued in 2013 (-0.9 GDP point), is likely to persist in 2014 (-0.4 GDP point). At the level of the euro zone, since the start of the global financial crisis of 2008, and while taking into account the economic recovery plans of 2008 and 2009, the cumulative fiscal impulse boils down to a restrictive policy of 2.6 GDP points. Because the fiscal multipliers are high, this policy explains in (large) part the prolonged recession in the euro zone.

The fiscal multipliers summarize the impact of fiscal policy on activity [3]. They depend on the nature of fiscal policy (whether it involves tax increases or spending cuts, distinguishing between transfer, operating and investment expenditure), on the accompanying policies (mainly the ability of monetary policy to lower key rates during the austerity treatment), and on the macroeconomic and financial environment (including unemployment, the fiscal policies enacted by trading partners, changes in exchange rates and the state of the financial system). In times of crisis, the fiscal multipliers are much higher, *i.e.* at least 1.5 for the multiplier of transfer spending, compared with near 0 in the long-term during normal times. The reason is relatively simple: in times of crisis, the paralysis of the banking sector and its inability to provide the credit economic agents need to cope with the decline in their revenues or the deterioration in their balance sheets requires the latter to respect their budget constraints, which are no longer intertemporal but instantaneous. The impossibility of generalizing negative nominal interest rates (the well-known “zero lower bound”) prevents central banks from stimulating the economy by further cuts in interest rates, which increases the multiplier effect during a period of austerity.

Table. Fiscal impulses in the euro area

In GDP points

	2010	2011	2012	2013	2014
DEU	1,3	-1,1	-1,2	0,2	0,1
FRA	-0,5	-1,8	-1,2	-1,4	-0,7
ITA	-0,7	-0,4	-3,0	-1,5	-0,6
ESP	-1,4	-1,3	-3,4	-1,6	-1,0
NLD	-1,1	-0,5	-1,4	-1,5	-1,0
BEL	-0,1	0,1	-0,6	-1,0	-0,5
IRL	-4,2	-1,5	-2,0	-1,7	-1,7
PRT	-0,3	-3,7	-3,9	-1,5	-1,5
GRC	-7,6	-5,5	-3,9	-3,3	-1,7
AUT	0,5	-1,4	-0,3	-0,9	-0,4
FIN	1,3	-0,7	-0,3	-1,4	-0,3
EA (11)	-0,3	-1,2	-1,8	-0,9	-0,4

Sources: Eurostat, National accounts.

If the fiscal multipliers are higher in times of crisis, then a rational reduction in the public debt implies the postponement of restrictive fiscal policies. We must first get out of the situation that is causing the increase in the multiplier, and once we are back into a “normal” situation then reduce the public debt through tighter fiscal policy. This is especially important as the reduction in activity induced by tightening fiscal policy may outweigh the fiscal effort. For a multiplier higher than 2, the budget deficit and public debt, instead of falling, could continue to grow, despite austerity. The case of Greece is instructive in this respect: despite *real* tax hikes and *real* spending cuts, and despite a partial restructuring of its public debt, the Greek government is facing a public debt that is not decreasing at the pace of the budgetary efforts – far from it. The “fault” lies in the steep fall in GDP. The debate on the value of the multiplier is old but took on new life at the beginning of the crisis.[\[4\]](#) It received a lot of publicity at the end of 2012 and in early 2013, when the IMF (through the voice of [O. Blanchard and D. Leigh](#)) challenged the European Commission and demonstrated that these two institutions had, since 2008, systematically underestimated the impact of austerity on the euro zone countries. The European Commission recommended remedies that failed to work and then with each setback called for strengthening them. This is why the fiscal policies pursued in the euro zone reflected a considerable error of judgment and are the main cause of the prolonged recession we are experiencing. The magnitude of this error can be estimated at almost 3 percentage points of GDP for 2013 (or almost 3 points of unemployment): If austerity had been postponed until more favourable times, we would have reached the same ratio of debt-to-GDP by the deadline imposed by treaty (in 2032), but with the benefit of additional economic activity. The cost of austerity since 2011 is thus almost 500 billion euros (the total of what was lost in 2011, 2012 and 2013). The nearly 3 additional points of unemployment in the euro zone are now exposing us to the risk of deflation, which will be very

difficult to avoid.

Although the European Commission follows these debates on the value of the multiplier, it (and to some extent the IMF) developed another analysis to justify its choice of economic policy in the euro zone. This analysis holds that the fiscal multipliers are *negative* in times of crisis *for the euro zone*, and for the euro zone alone. Based on this analysis, austerity should *reduce* unemployment. To arrive at what seems to be a paradox, we must accept a particular counterfactual (what would have happened if we had not implemented austerity policies). For example, in the case of Spain, without an immediate fiscal effort, the financial markets would have threatened to stop lending to finance the Spanish public debt. The rise in interest rates charged by the financial markets to Spain would have pushed its government into brutal fiscal restraint, the banking sector would not have survived the collapse of the value of Spain's sovereign notes, and the increased cost of credit due to the fragmentation of the financial markets in Europe would have led to a crisis that spiralled way beyond what the country actually experienced. In this analytical model, the austerity recommended is not the result of dogmatic blindness but an acknowledgement of a lack of choice. There was no other solution, and in any case, delaying austerity was not a credible option.

Accepting the European Commission's counterfactual amounts to accepting the idea that the fiscal multipliers are negative. It also means accepting the notion that finance dominates the economy, or at least that judgments on the sustainability of the public debt must be entrusted to the financial markets. According to this counterfactual, quick straightforward austerity would regain the confidence of the markets and would therefore avoid a deep depression. Compared to a situation of postponed austerity, the recession induced by the early straightforward budget cuts should lead to less unemployment and more activity. This counterfactual thesis was

raised against us in a seminar held to discuss the iAGS 2014 report organized by the European Commission (DGECFIN) on 23 January 2014. Simulations presented on this occasion illustrated these remarks and concluded that the austerity policy pursued had been beneficial for the euro zone, thereby justifying the policy *a posteriori*. The efforts undertaken put an end to the sovereign debt crisis in the euro zone, a prerequisite for hoping one day to get out of the depression that began in 2008.

In the [iAGS 2014](#) report, publically released in November 2013, we responded (in advance) to this objection based on a very different analysis: massive austerity did not lead to an end to the recession, contrary to what had been anticipated by the European Commission following its various forecasting exercises. The announcement of austerity measures in 2009, their implementation in 2010 and their reinforcement in 2011 never convinced the financial markets and failed to prevent Spain and Italy from having to face higher and higher sovereign rates. Greece, which went through an unprecedented fiscal tightening, plunged its economy into a deeper depression than the Great Depression, without reassuring anyone. Like the rest of the informed observers, the financial market understood clearly that this drastic remedy would wind up killing the patient *before* any cure. The continuation of high government deficits is due largely to a collapse in activity. Faced with debt that was out of control, the financial markets panicked and raised interest charges, further contributing to the collapse.

The solution is not to advocate more austerity, but to break the link between the deterioration in the fiscal situation and the rise in sovereign interest rates. Savers need to be reassured that there will be no default and that the state is credible for the repayment of its debt. If that means deferring repayment of the debt until later, and if it is credible for the State to postpone, then postponement is the

best option.

Crucial to ensuring this credibility were the intervention of the European Central Bank during the summer of 2012, the initiation of the project for a banking union, and the announcement of unlimited intervention by the ECB through Outright Monetary Transactions ([Creel and Timbeau \(2012\)](#)), which are conditional upon a programme of fiscal stabilization. These elements convinced the markets almost immediately, despite some institutional uncertainty (particularly concerning the banking union and the state of Spain's banks, and the judgment of Germany's Constitutional Court on the European arrangements), and even though OMT is an option that has never been implemented (in particular, what is meant by a programme to stabilize the public finances conditioning ECB intervention). Furthermore, in 2013 the European Commission negotiated a postponement of fiscal adjustment with certain Member States ([Cochard and Schweisguth \(2013\)](#)). This first tentative step towards the solutions proposed in the two IAGS reports gained the approval of the financial markets in the form of a relaxation of sovereign spreads in the euro zone.

Contrary to our analysis, the counterfactual envisaged by the European Commission, which denies the possibility of an alternative, assumes an unchanged institutional framework [\[5\]](#). Why pretend that the macroeconomic strategy should be strictly conditioned on institutional constraints? If institutional compromises are needed in order to improve the orientation of economic policies and ultimately to achieve a better result in terms of employment and growth, then this strategy must be followed. Since the Commission does not question the rules of the game in political terms, it can only submit to the imperatives of austerity. This form of apolitical stubbornness was an error, and in the absence of the ECB's "political" step, the Commission was leading us into an impasse. The implicit pooling of the public debt embodied in the ECB's

commitment to take all the measures necessary to support the euro (the “Draghi put”) changed the relationship between the public debt and sovereign interest rates for every country in the euro zone. It is always possible to say that the ECB would never have made □□this commitment if the countries had not undertaken their forced march towards consolidation. But such an argument does not preclude discussing the price to be paid in order to achieve the institutional compromise. The fiscal multipliers are clearly (and strongly) positive, and it would have been good policy to defer austerity. There was an alternative, and the policy pursued was a mistake. It is perhaps the magnitude of this error that makes it difficult to recognize.

[\[1\]](#) We would like to thank Marco Buti for his invitation to present the iAGS 2014 report and for his suggestions, and also Emmanuelle Maincent, Alessandro Turrini and Jan in’t Veld for their comments.

[\[2\]](#) The fiscal impulse measures the restrictive or expansionary orientation of fiscal policy. It is calculated as the change in the primary structural balance.

[\[3\]](#) For example, for a multiplier of 1.5, tightening the budget by 1 billion euros would reduce activity by 1.5 billion euros.

[\[4\]](#) See [Heyer \(2012\)](#) for a recent review of the literature.

[\[5\]](#) The institutional framework is here understood broadly. It refers not only to the institutions in charge of economic policy decisions but also to the rules adopted by these institutions. The OMT is an example of a rule change adopted by an institution. Strengthening the fiscal rules is another element of a changing institutional framework.

Spain: a lose-lose strategy

by Danielle Schweisguth

At a time when the [IMF](#) has publicly recognized that it underestimated the negative impact of fiscal adjustment on Europe's economic growth, Spain is preparing to publish its public deficit figure for 2012. The initial estimate should be around 8% of GDP, but this could be revised upwards, as was the case in 2011 – while the target negotiated with the European Commission is 6.3%. With social distress at a peak, only a sustainable return to growth would allow Spain to solve its budget problems through higher tax revenue. But the austerity being imposed by Europe is delaying the return of economic growth. And the level of Spain's fiscal multiplier, which by our estimates is between 1.3 and 1.8, is rendering the policy of fiscal restraint ineffective, since it is not significantly reducing the deficit and is keeping the country in recession.

At a time when the [IMF](#) has publicly recognized that it underestimated the negative impact of fiscal adjustment on Europe's economic growth – the famous fiscal multiplier – Spain is preparing to publish its public deficit for 2012. The initial estimate should be around 8% of GDP, but this could be revised upwards as was the case in 2011. If we exclude the financial support for the banking sector, which is not taken into account in the excessive deficit procedure, the deficit then falls to 7% of GDP. This figure is still higher than the official target of 6.3% that was the subject of bitter negotiations with the European Commission. Recall that until September 2011, the initial target deficit for 2012 was 4.4% of GDP. It was only after the unpleasant surprise of the publication of the 8.5% deficit for 2011 (which was later

revised to 9.4%) – which was well above the official 2011 target of 6% of GDP – that the newly elected government of Mariano Rajoy asked the European Commission for an initial relaxation of conditions. The target deficit was then set by Brussels at 5.3% of GDP for 2012. In July 2012, pressure on Spain’s sovereign rate – which approached 7% – then led the government to negotiate with the Commission to put off the 3% target to 2014 and to set a deficit target of 6.3% of GDP in 2012.

Tableau. Growth, fiscal impulse and the public deficit in Spain

	2007	2008	2009	2010	2011	2012
GDP growth (%)	3,5	0,9	-3,7	-0,3	0,4	-1,4
Fiscal impulse (% of GDP)	0,6	1,0	1,3	-2,2	-0,9	-3,3
Public deficit* (% of GDP)	1,9	-4,5	-11,2	-9,7	-9,4	-8,0

* The public deficit includes the financial support given to the banking sector.
Sources : Ministerio de Hacienda y Administraciones Publicas, OFCE forecast for 2012.

But the strategy of trying to reduce the deficit by 2.6 GDP points while in a cyclical downturn proved to be ineffective and even counter-productive. Furthermore, the result has not been worth the effort involved, even though the European authorities have praised it repeatedly. A succession of three consecutive years of austerity plans of historic proportions (2010, 2011 and 2012) has led to only a very small improvement in the budget balance (Table). The deficit was reduced by 3.2 percentage points in three years, while two years of crisis were enough to expand it by 13.3 points (from 2007 to 2009). The fiscal impulse was -2.2 percentage points of GDP in 2010, -0.9 point in 2011 and -3.3 points in 2012, or a total of 6.4 GDP points of fiscal effort (68 billion euros). Yet the crisis has precipitated the collapse of the real estate market and greatly weakened the banking system. Since then, the country has plunged into a deep recession: GDP has fallen by 5.7% since the first quarter of 2008, which puts it 12% below its potential level (assuming potential growth of 1.5% per year),

with 26% of the workforce currently unemployed, in particular 56% of the young people.

The deterioration of Spain's economic situation has hit tax revenue very hard. Between 2007 and 2011, the country's tax revenues have fallen further than in any other country in the euro zone. Revenue declined from 38% of GDP in 2007 to 32.4% in 2011, despite a hike in VAT (2 points in 2010 and 3 points in 2012) and an increase in income tax rates and property taxes in 2011. The successive tax increases only slightly alleviated the depressive effect of the collapse of the tax base. VAT revenues recorded a sharp drop of 41% in nominal terms between 2007 and 2012, as did the tax on income and wealth (45%). In comparison, the decrease in tax revenue in the euro zone was much more modest: from 41.2% of GDP in 2007 to 40.8% in 2011. Finally, rising unemployment has undermined the accounts of the social security system, which will experience a deficit of 1 percentage point of GDP in 2012 for the first time in its history.

To compensate for the fall in tax revenue, the Spanish government had to take drastic measures to restrict spending to try to meet its commitments, including a 5% reduction in the salaries of civil servants and the elimination of their Christmas bonus; a hiring freeze in the public sector and increasing the work week from 35 to 37.5 hours (without extra pay); raising the retirement age from 65 to 67, along with a pension freeze (2010); a reduction of unemployment benefits for those who are unemployed more than seven months; and lowering severance pay from 45 days per year worked to 33 days (20 if the company is in the red). Even though household income has stagnated or declined, Spanish families have experienced a significant increase in the cost of living: a 5-point increase in VAT, higher electricity rates (28% in two years), higher taxes on tobacco and lower reimbursement rates for medicines (retirees pay 10% of the price and the employed 40% to 60%, depending on their income).

The social situation in Spain is very worrying. Poverty has increased (from 23% of the population in 2007 to 27% in 2011, according to Eurostat); households failing to pay their bills are being evicted from their homes; long-term unemployment has exploded (9% of the labour force); unemployed youth are a lost generation, and the best educated are emigrating. The VAT increase in September has forced households to tighten their budgets: spending on food declined in September and October 2012, respectively, by 2.3% and 1.8% yoy. Moreover, the Spanish health system is suffering from budget cuts (10% in 2012), which led to the closure of night-time emergency services in dozens of municipalities and to longer waiting lists for surgery (from 50,000 people in 2009 to 80,000 in 2012), with an average waiting time of nearly five months.

Social distress is thus at a peak. The movement of the *indignados* led millions of Spaniards to take to the streets in 2012, in protests that were often violently suppressed by riot police. The region of Catalonia, the richest in Spain but also the most indebted, is threatening to secede, to the consternation of the Spanish government. On 24 January, the Catalan government passed a motion on the region's sovereignty, the first step in a process of self-determination that could lead to a referendum in 2014.

Only a lasting return to growth would enable Spain to solve its budget problems through higher tax revenue. But the tightening of financing conditions on Spain's sovereign debt since the summer of 2012 has forced the government to strengthen its austerity policy, which is delaying the return to economic growth. Furthermore, the European Commission has agreed to provide financial assistance to Spain only if it renounces its sovereignty in budget matters, at least partially, which the government of Mariano Rajoy is still reluctant to accept. The initiative of the European Commission on the exclusion of capital expenditures from calculations of the public deficit for countries close to a balanced budget,

the details of which will be published in the spring, is a step in the right direction ([El Pais](#)). But this rule would apply only to the seven countries where the fiscal deficit is below 3% of GDP (Germany, Luxembourg, Sweden, Finland, Estonia, Bulgaria and Malta), which leaves out the countries facing the most difficult economic situations. Greater awareness of the social dramas that underlie these poor economic performances should lead to greater respect for the fundamental rights of Europe's citizens. Moreover, in [the 2013 iAGS report](#) the OFCE showed that a restrained austerity policy (budget restrictions limited to 0.5 percent of GDP each year) is more effective from the viewpoint of both growth and deficit reduction in countries like Spain where the fiscal multipliers are very high (between 1.3 and 1.8, according to our estimates).

A review of the recent literature on fiscal multipliers: size matters!

By [Eric Heyer](#)

Are the short-term fiscal multipliers being underestimated? Is there any justification for the belief that fiscal restraint can be used to drastically reduce deficits without undermining business prospects or even while improving the medium-term situation? This is the question that the IMF tries to answer in its latest [report on the world economic outlook](#). The Fund devotes a box to the underestimation of fiscal multipliers during the 2008 crisis. While until 2009 the IMF had estimated that in the developed countries they

averaged about 0.5, it now calculates that they have ranged from 0.9 to 1.7 since the Great Recession.

This reassessment of the value of the multiplier, which [X. Timbeau discusses in an interesting reading](#) on the basis of a “corrected apparent” multiplier, builds on the numerous studies carried out by IMF researchers on the issue and especially that of [Batini, Callegari and Melina \(2012\)](#). In this article, the authors draw three lessons about the size of the fiscal multipliers in the euro zone, the U.S. and Japan:

1. The first is that gradual and smooth fiscal consolidation is preferable to a strategy of reducing public imbalances too rapidly and abruptly.
2. The second lesson is that the economic impact of fiscal consolidation will be more violent when the economy is in recession: depending on the countries surveyed, the difference is at least 0.5 and may be more than 2. This observation was also made in another study by the IMF ([Corsetti, Meier and Müller \(2012\)](#)) and is explained by the fact that in “times of crisis” more and more economic agents (households, firms) are subject to very short-term liquidity constraints, thus maintaining the recessionary spiral and preventing monetary policy from functioning.
3. Finally, the multipliers associated with public expenditure are much higher than those observed for taxes: in a recessionary situation, at 1 year they range from 1.6 to 2.6 in the case of a shock to public spending but between 0.2 and 0.4 in the case of a shock on taxes. For the euro zone, for example, the multiplier at 1 year was 2.6 if government spending was used as an instrument of fiscal consolidation and 0.4 if the instrument was taxation.

As the economic crisis continues, the IMF researchers are not the only ones raising questions about the merits of the fiscal consolidation strategy. In an NBER working paper in 2012, two

researchers from Berkeley, [Alan J. Auerbach and Yuriy Gorodnichenko](#), corroborate the idea that the multipliers are higher in recessions than in periods of expansion. [In a second study](#), published in the *American Economic Journal*, these same authors argue that the impact of a shock on public expenditure would be 4 times greater when implemented during an economic downturn (2.5) than in an upturn (0.6). This result has been confirmed for the US data by three researchers from the University of Washington in St. Louis ([Fazzari et al. \(2011\)](#)) and by two economists at the University of Munich ([Mittnik and Semmler \(2012\)](#)). This asymmetry was also found for the data on Germany in a study by a Cambridge University academic and a Deutsche Bundesbank researcher, [Baum and Koester \(2011\)](#).

In other work, a researcher at Stanford, [Hall \(2009\)](#), affirms that the size of the multiplier doubles and is around 1.7 when the real interest rate is close to zero, which is characteristic of an economy in a downturn, as is the case today in many developed countries. This view is shared by a number of other researchers, including two at Berkeley and Harvard, [DeLong and Summers \(2012\)](#), two from the Fed, [Erceg and Lindé \(2012\)](#), those of the [OECD \(2009\)](#), those of the [European Commission \(2012\)](#) and in some recent theoretical work ([Christiano, Eichenbaum and Rebelo \(2011\)](#), [Woodford \(2010\)](#)). When nominal interest rates are blocked by the zero lower bound, anticipated real interest rates rise. Monetary policy can no longer offset budgetary restrictions and can even become restrictive, especially when price expectations are anchored on deflation.

As already noted by J. Creel on this blog ([insert link to the post of 22.02.12](#)) with respect to the instrument to be used, *i.e.* public spending or taxation, other IMF economists together with colleagues from the European Central Bank (ECB) the US Federal Reserve (FED), the Bank of Canada, the European Commission (EC) and the Organization for Economic Cooperation and Development (OECD) compared their assessments in an

article published in January 2012 in the *American Economic Journal: Macroeconomics* ([Coenen G. et al. \(2012\)](#)). According to these 17 economists, on the basis of eight different macroeconometric models (mainly DSGE models) for the United States, and four models for the euro zone, the size of many multipliers is large, particularly for public expenditure and targeted transfers. The multiplier effects exceed unity if the strategy focuses on public consumption or transfers targeted to specific agents and are larger than 1.5 for public investment. For the other instruments, the effects are still positive but range from 0.2 for corporation tax to 0.7 for consumer taxes. This finding is also shared by the [European Commission \(2012\)](#), which indicates that the fiscal multiplier is larger if the fiscal consolidation is based on public expenditure, and in particular on public investment. These results confirm those published three years ago by the [OECD \(2009\)](#) as well as those of economists from the Bank of Spain for the euro zone ([Burriel et al \(2010\)](#)) and from the Deutsche Bundesbank using data for Germany ([Baum and Koester \(2011\)](#)). Without invalidating this result, a study by [Fazzari et al \(2011\)](#) nevertheless introduced a nuance: according to their work, the multiplier associated with public spending is much higher than that observed for taxes but only when the economy is at the bottom of the cycle. This result would be reversed in a more favourable situation of growth.

Furthermore, in their assessment of the US economy, researchers at the London School of Economics (LSE) and the University of Maryland, [Ilzetzki, Mendoza and Vegh \(2009\)](#), highlight a high value for the fiscal multiplier for public investment (1.7), *i.e.* higher than that found for public consumption. This is similar to the results of other IMF researchers ([Freedman, Kumhof, Laxton and Lee \(2009\)](#)).

In the recent literature, only the work of Alesina, a Harvard economist, seems to contradict this last point: after examining 107 fiscal consolidation plans, conducted in 21 OECD

countries over the period 1970-2007, Alesina and his co-authors ([Ardagna in 2009](#) and [Favero et Giavazzi in 2012](#)) conclude first that the multipliers can be negative and second that fiscal consolidations based on expenditure are associated with minor, short-lived recessions, while consolidations based on taxation are associated with deeper, more protracted recessions. In addition to the emphasis on the particular experiences of fiscal restraint (Scandinavian countries, Canada), which are not found when including all experiences with fiscal restriction (or expansion), the empirical work of Alesina *et al.* suffers from an endogeneity problem in the measurement of fiscal restraint.

The notion of a narrative record of fiscal impulse helps to avoid this endogeneity. For example, in the case of a real estate bubble (and more generally in cases of large capital gains), the additional tax revenues from the real estate transactions results in a reduction in the structural deficit, as these revenues are not cyclically based (the elasticity of revenues to GDP becomes much higher than 1). So these are associated with an expansionary phase (in conjunction with the housing bubble) and a reduction in the structural deficit, which artificially strengthens the argument that reducing the public deficit may lead to an increase in activity, whereas the causality is actually the reverse.

With the exception of the work of Alesina, a broad consensus emerges from the recent theoretical and empirical work in the existing economic literature: a policy of fiscal consolidation is preferable in periods of an upturn in activity, but is ineffective and even pernicious when the economy is at a standstill; if such a policy is to be enacted in a downturn, then tax increases would be less harmful to the activity than cuts in public spending ... all recommendations contained in [Creel, Heyer and Plane \(2011\)](#).

