

# THE END OF THE CONSENSUS? THE ECONOMIC CRISIS AND THE CRISIS OF MACROECONOMICS<sup>1</sup>

**Francesco Saraceno**

*Sciences Po, OFCE*

---

The New Consensus that has dominated macroeconomics since the 1980s was based on a fundamentally neoclassical structure: efficient markets that on their own converged on a natural equilibrium with a very limited role for macroeconomic (mostly monetary) policy to smooth fluctuations. The crisis shattered this consensus and saw the return of monetary and fiscal activism, at least in academic debate. The profession is reconsidering the pillars of the Consensus, from the size of the multipliers to the implementation of reform, including the links between business cycles and trends. It is still too soon to know what macroeconomics will look like tomorrow, but hopefully it will be more eclectic and open.

*Keywords:* economic crisis, budget policy, reform, New Consensus.

---

## 1. The “New Consensus” and the Great Moderation

From the middle of the 1980s to the beginning of the crisis in 2007, the global economy experienced a period of strong growth, low and stable inflation, and limited macroeconomic uncertainty. The reasons for this period of “Great Moderation” remain unclear. Some explain it by competent management of the cycle by monetary institutions, coupled with reforms and deregulation that made markets more efficient (Bernanke, 2004).<sup>2</sup> This positive appreciation of central bank action explains why when the crisis started, in 2007, monetary policy

---

1. This article reviews and summarizes the arguments developed by Saraceno (2018a, 2018b).

2. Others point to wage moderation, which is a factor in increasing inequality (Piketty, 2013), and which led to asset price inflation and a credit boom, both of which eventually were at the roots of the 2007 crash.

was the privileged tool in the attempt to counter the recession. It was only in 2009, when the economy became enmeshed in the liquidity trap and monetary policy lost traction, that fiscal stimulus packages were implemented by both advanced and emerging economies. The coordinated fiscal expansion has borne fruit and has been recognized as a determining factor for the recovery (Eichengreen and O'Rourke, 2009). But as soon as the worst of the crisis was over, fear of deficits and debt accumulation caused a sudden reversal of fiscal policy stances. The shift to austerity has been particularly brutal in Europe, where the crisis in the peripheral countries has been associated with a long history of fiscal laxity and inefficiency (Sinn, 2014), and was thus "cured" by means of austerity coupled with structural reforms. This was not due to hazard but rather was the result of the economic doctrine that dominated the profession and the major institutions in charge of coordinating economic policy. The "New Consensus" that developed in macroeconomics from the 1980s is based on a set of results that are independent of the individual characteristics of the different models:

1. The reference framework is the Real Business Cycles (RBC) model in which fluctuations are "natural", as they determined by the optimal reaction of agents to technological shocks. Market imperfections can make this natural equilibrium deviate from the Pareto equilibrium.
2. Market imperfections, especially nominal rigidities, also cause the economy to deviate from its natural growth rate in the short-term, i.e. to experience demand-led fluctuations.
3. The privileged instrument of economic policy is *structural reform*, which, by removing rigidities, increases the natural growth rate of the economy, bring it to converge with the Pareto optimum.
4. In the medium term, output gaps, deviations from the natural equilibrium, tend to be absorbed by markets.
5. Discretionary macroeconomic policies are ineffective in stabilizing economic activity. Following rules is preferable, because economic policy action becomes easier to integrate into agents' expectations (which are therefore "anchored").
6. Short-term fluctuations in production have no influence on the natural growth rate (there is a dichotomy between the short and long run, which is also reflected in standard macroeconomics textbooks).

Fiscal policy in particular was removed from policy makers' toolbox. On the one hand, in normal times, it would crowd out private expenditure. On the other hand, during Keynesian aggregate demand crises, it would be less effective than monetary policy in fighting the downturn, because of the inherent lags in decision-making and implementation, together with political biases and the risk of capture of fiscal policy by private interests. Although preferable to fiscal policy because of its technocratic character, monetary policy was also supposed to have a limited impact in the management of income fluctuations, which would mostly be taken care of by market flexibility.

## 2. The Return of Fiscal Policy and the Debate on Multipliers

The crisis that started in 2007 represented a major disavowal of the Consensus, not only because it was not equipped to analyze the imbalances that had their origin in the financial sector, but also because the policies put in place to counter the crisis have prolonged the recession and imposed a disproportionate cost on the population.

Economists have begun to question the ability of markets to absorb shocks within a reasonable time frame, which was the pillar around which the theoretical corpus of the Consensus had been built. Interestingly, much of the research reassessing the role of macroeconomic policy and regulation is being done by the international institutions in charge of economic policy guidance and crisis management. This reassessment of the Consensus is ongoing and wide-ranging: the reciprocal influence between income distribution and growth (Ball *et al.*, 2013; IMF, 2017; Kumhof *et al.*, 2015); the role of labour market institutions in supporting stable and inclusive growth (Jaumotte and Buitron, 2015; Loungani, 2017); and the role of capital controls and financial regulation (Blanchard, 2016a). In this article I have chosen to focus on the reassessment of fiscal policy.

The austerity plans implemented in Europe's peripheral countries were implemented based on the belief that the size of the fiscal multipliers was rather low, certainly less than one, and most probably around 0.5. This led to the belief that austerity would be mildly contractionary in the short-term,<sup>3</sup> but expansionary in the long run, when the State's withdrawal from the economy would unleash the potential of the markets.

Events did not unfold as planned: The fiscal stance reversal slowed the recovery globally, and in the euro zone austerity plunged the economy into a double-dip recession. The profession began to reassess the rejection of fiscal policy advocated by the Consensus. Blanchard and Leigh (2013) developed a box contained in a previous edition of the IMF's *World Economic Outlook*, arguing that during a deep recession, with monetary policy at the Zero Lower Bound (ZLB), the multipliers were closer to 2 than to 0.5. In their view this explained why the contractionary impact of austerity had been far greater than expected, and hence why fiscal contraction had eventually been self-defeating.

The debate around fiscal policy's effectiveness therefore has taken the form of empirical research on the size of the multipliers, which is far from being consensual. Nevertheless, the meta-analyses of Gechert and Will (2012) and Gechert (2015) managed to extract from the abundant literature a number of broad conclusions: *first*, taking the average of the many studies they analyze, public expenditure multipliers are close to 1; this value is significantly larger than the 0.5 value that was taken as the basis of the fiscal consolidation programmes in crisis-ridden euro zone countries. *Second*, consistently with the standard Keynesian argument, the spending multipliers are larger than the tax and transfer multipliers. *Finally*, the public investment multipliers are even larger than the overall expenditure multipliers (Bom and Ligthart, 2014). For investment, the short-term Keynesian effect is actually supposed to be accompanied by a positive impact on potential growth in the long term. This, via expectations, may crowd-in private expenditure (including investment). It is interesting to note that, as long as the economy is at the ZLB, the response of monetary policy to fiscal expansion is mitigated, and the only way to lower real interest rates is inflation. On the contrary, once time-to-build has elapsed and capital is in place, investment has a deflationary effect *via* its impact on productivity, and pushes up the real interest rate. Thus, in times of crisis, investment projects requiring longer time-to-build are to be preferred, because the negative effect of deflation on the real interest rate is postponed (Le Moigne *et al.*, 2016).

---

3. Some even claimed that austerity would also be expansionary in the short-term, based on a seminal paper by Giavazzi and Pagano (1990) on "expansionary fiscal contractions". It has been proven that this claim is strongly linked to specific conditions and, therefore, substantially inaccurate (see e.g. Barry and Devereux, 1995; Perotti, 2011).

Nevertheless, these average values hide a very strong variability; this is not really surprising, as theoretically the value of the multiplier crucially depends on a number of factors: first, the degree of openness of the economy, which determines how much of the additional expenditure will be oriented towards domestic production, thus boosting GDP, and how much will benefit trading partners through increased imports. Then, the distance of the economy from the natural equilibrium, i.e. the “output gap”. Regarding the latter, the debate on the effectiveness of macroeconomic policy often neglects that Keynesian theory applies only when there is slack in the economy, i.e. when market equilibrium leaves idle resources that public expenditure can mobilize. On the other hand, if the economy is at full employment, in Keynesian as much as in neoclassical theory, the value of the multiplier will be zero, and crowding out will be complete.

There have not been many attempts to estimate a time-varying value for the multiplier, which depends on the cyclical position of the economy. Creel *et al.* (2011) used a structural Keynesian model, and found that, consistently with intuition, when the output gap is significantly negative, the value of the multiplier is much larger than when the economy is working at near its full employment equilibrium. More recently, using a different model (an “a-theoretical” VAR model), Glocker *et al.* (2017) confirmed that even for the United Kingdom the multiplier is higher in periods of crisis; but they also found that the Zero Lower Bound does not have a significant impact on the effectiveness of fiscal policy (which according to Keynesian theory should instead be greater when monetary policy does not work as it should). Estimating a similar model for Germany, Berg (2015) found that the cyclical position of the economy has a marginal impact on the size of the multiplier, which nevertheless changes over time and tends to be larger when agents are pessimistic, or when governments can easily finance their expenditures (so that debt sustainability is not in doubt). Contradicting most of the previous literature, a very recent work Ramey and Zubairy (2018) based on US data found that the multiplier is generally less than unity even in periods of recession; only when the economy is at the Zero Lower Bound can it, in some cases, be much higher.

### 3. Reduce Public Debt no Matter what Happens?

The rejection by the Consensus of fiscal policy had naturally led economists and policy makers to argue in favour of reducing the public debt. Excessive indebtedness would result in crowding out private expenditure, rising interest rates and inefficiency in the economy. It is therefore not surprising that the increase in public debt following the 2008 crisis was and still is seen as the major problem faced by the global economy once the recovery was underway. The race to austerity and fiscal consolidation was based on the belief that over-indebtedness hurts growth. Reinhart and Rogoff (2010) quantified a “danger threshold”, a red line not to be exceeded, at 90% of GDP, in a frequently quoted article that subsequently was proved to be flawed by calculation errors. But its main message, the existence of a universal threshold beyond which debt weighs on growth, has not disappeared from the public debate. Only recently, in its *Fiscal Monitor* (2016a), the IMF has provided a more nuanced view. The report shifts the attention from public to private debt, arguing that the deleveraging of households and businesses, which will continue in the coming years, will require accompanying measures by the public sector. On the one hand, renewed attention to the financial sector is needed to ensure that the liquidity problems of firms (and of financial institutions) do not degenerate into solvency problems. On the other hand, increased activism is needed to address the macroeconomic consequences of private sector deleveraging, including the likely savings glut, through Keynesian aggregate demand support, implying that public debt could momentarily grow to support economic activity.

The need to accept temporary increases in public debt in order to ensure the long-term viability of the economy goes beyond the management of deleveraging and the crisis. In a chapter of its 2014 *World Economic Outlook*, the IMF (2014) focused on public investment, noting that there is room for increasing the stock of public capital both in advanced and developing countries. The IMF argues that with high public capital productivity (due to its historically low levels), and borrowing rates that will remain close to zero, public investment has never been so profitable, even if one were to neglect its social purpose. An increase in public investment, even if deficit financed, would support short-term economic activity, increase productivity and long-term potential growth and ultimately reduce government debt-to-GDP ratios. Public investment, argued the IMF, should be the main

tool to try to ensure that the world economy does not get stuck in secular stagnation.

#### 4. Structural Reforms: When and How?

The defining feature of the New Consensus is the argument that the only way to permanently increase the potential growth rate of the economy is to reduce rigidities, especially on the labour market. This is why structural reforms are a pillar of the Consensus policy prescriptions. From the IMF's rescue programmes in Latin America and Africa, or the European Commission recommendation for European Monetary Union (EMU) countries in crisis, to privatizations, increased flexibility in the goods and labour market, and reducing the social protection that hampers market efficiency, these *one-size-fits-all* recommendations were considered essential to make markets more efficient and to avoid sluggish growth. The first doubts about the almost exclusive focus on reforms date back to the late 1990s, when the recommendations of the Washington Consensus failed to deliver the expected results. Criticism, however, remained circumscribed at first, as it especially highlighted the pernicious redistributive effects of structural reforms; furthermore, with some notable exceptions, the critiques came from unorthodox economists.

Things changed with the crisis. While most economists still believe that the long-run effect of reforms on potential growth is positive, their impact in the short-term and their effectiveness depends on the conditions in which they are implemented. For example, Rodrik (2013) argued that by definition reforms are successful if they trigger a process of "creative destruction": efficient and innovative sectors are supposed to absorb the resources released by inefficient sectors. But this only happens if they can anticipate a demand for their additional production. In times of recession, or slow and stagnant growth, capital withdrawn from inefficient sectors and the unemployment this process generates will not be absorbed by more dynamic activities. If implemented in the wrong conditions, reforms can be counterproductive and eventually lead to stagnation in productivity and growth.

Eggertsson *et al.* (2014) emphasized the importance of timing to ensure the success of reforms. In the long term, the expected effect of the reforms is to diminish market power, to obtain lower prices and improve consumer welfare. In times of recession, this expected deflation increases the real interest rate and further depresses private

spending. The central bank could accompany the reforms with an expansionary monetary policy to compensate for falling prices. But if the economy is stuck at the ZLB, monetary policy has no effect and reforms end up hurting the economy.

Recent empirical research shows that these mechanisms have been at work. The IMF (2016b), while arguing that reforms have long-term positive effects, warned of a number of undesirable consequences in the short term. Labor market reforms in particular could have a negative impact on growth and productivity, if implemented during periods of slow growth. Departing from the New Consensus, the report concludes that reforms are not “miracle solutions”, and that they should be carefully designed and accompanied by other measures to support growth. Macroeconomic policies can maximize the chances of reforms’ success both directly, through their effect on aggregate demand, and indirectly, by changing incentives. The report goes further, stating that “traditional” reforms advocated by the Consensus (primarily increased labour market flexibility) should be accompanied by more inclusive measures, for example in the areas of education and innovation, which could help to cushion the short-term negative impact of increased flexibility. The OECD (2016) reaches similar conclusions. In periods of low aggregate demand, prioritizing reforms is the key to their success. The OECD joins the IMF’s analysis of labour market reforms, which are more likely to yield short-term costs that, if not carefully dealt with, lead to their ultimate failure. In times of crisis the reform package must also include measures to facilitate access to credit and investment, to reduce barriers to entry into the services sector, as well as pension and health care reforms. The OECD goes so far as to suggest the implementation of active employment policies and increased investment in public infrastructure as “reforms” broadly defined, which would of course require increased public spending. Finally, the OECD report argues that countries with limited fiscal space should prefer high-yield, or low-cost measures, and thus accept the idea that sequencing is a critical element for successful reforms.

On a similar note, commenting on the tax incentive package announced by the Japanese government in the summer of 2016, Adam Posen (2016) argued that fiscal policy can be a powerful tool for structural reform. He noted that tax policy was twisted to boost labour market participation (especially for women, through investment in childcare systems and tax cuts); these measures aim to boost potential



growth, thus establishing a new link between short-term stabilization policies and long-term growth.

In summary, reforms cannot be implemented with no regard for cyclical conditions and the interaction with other policies; it is essential to establish priorities (for example, focusing on product market reforms rather than labour market reforms), sequencing them and putting in place supportive macroeconomic policies. Finally, the short- and long-term effects of the reforms cannot be dissociated from each other, which is particularly important because another pillar of the New Consensus has been shaken by the crisis: the idea that governments could implement policies aimed at long-term growth without worrying about the short-term consequences. In Europe in particular, the recession was considered as a short-term side effect that would in no way affect the long-term gains associated with reforms and austerity. This interpretation was based on the presumed separation between cycle and trend, with demand factors affecting only the former and supply-side policies the latter. This is another certainty that was shattered by the Consensus.

## 5. Rethinking Macroeconomic Policy in Secular Stagnation

The severity of the recession cast doubt on the fact that it was just a cyclical slowdown, however severe. Economists then wondered whether the economy would one day be able to return to its old levels of activity. On the one hand, the debate over secular stagnation highlighted the reasons why the growth experienced between the 1950s and 1970s would no longer be achieved; on the other, some authors emphasized how prolonged crises could depress physical and human capital, causing irreversible damage to the economy.

In a widely cited paper, Delong and Summers (2012) took up an old intuition of Blanchard and Summers (1986), which highlighted the role of *hysteresis* linked to long-term unemployment: workers who remain unemployed for prolonged periods of time lose their human capital, and when (and if) they finally start working again, they will be less productive. Severe fiscal austerity can therefore be pernicious in the long term as well as the shortterm. Fàtas and Summers (2015) provided empirical evidence for this argument, showing that short-term shocks to the economy tend to impact potential GDP as much as they impact current GDP. Among these shocks, they focus specifically

on fiscal consolidations which, in times of crisis, when multipliers are particularly high, have a very negative effect on income, in both the short and long term. Fatas and Summers thus join the literature that argues against fiscal consolidation and even add their two cents: austerity at the wrong time not only causes unjustified suffering in the short term, it can also be doomed to failure in the long run. Greece is not an exceptional case.

The depth, intensity and duration of the crisis led to new thinking about the possibility of recovering the growth rates of the second half of the twentieth century. In 2014, Larry Summers resurrected a term dating back to the 1930s, *secular stagnation*, to describe the dilemma faced by advanced economies. Hansen (1939) observed that population and capital tend to have similar growth rates over long periods of time. Having observed a decline in the population growth rate, he concluded that capital accumulation would slow too, inducing depressed growth after the economic turbulence of the 1930s. History has proven that Hansen was wrong, mainly because throughout the second half of the twentieth century, technological innovation generated high investment and increasing capital-labour ratios.

The current discussion around secular stagnation comes in a context that is similar to the one in which Hansen had written: an economy struggling to regain its dynamism after a devastating crisis triggered by a fall in demand.<sup>4</sup> Gordon (2012, 2016) looked for an explanation in supply-side factors, though differing from those mentioned by Hansen. Gordon argued (not without being criticized, see e.g. Phelps, 2013) that the technological revolution has had an increasingly weak potential impact, and that right now a flickering innovation faces six headwinds that keep potential growth subdued: (1) the reversal of the demographic dividend, which weighs on the public finances, because of aging; (2) the increase in inequality, which reduces the accumulation of human capital; (3) the combined effect of globalization and new technologies that has led to increased competition in the labour markets and thus to lower wages and productivity; (4) the rising cost of global warming; (5) the burden of debt (public and private) left by the crisis; and finally, (6) more specific to the United States, the deterioration of the educational level. These headwinds

---

4. See Le Garrec and Touzé (in this issue) for a discussion of the secular stagnation issue.

tend to reduce (mainly human) capital accumulation, and hence future potential growth.

Larry Summers (2014, 2016) focused on the demand side of the economy to explain the tendency towards secular stagnation: lower technical progress, slow demographic growth and high debt together tend to reduce the levels of investment. At the same time, the burden of debt, the accumulation of international reserves (public and private) induced by financial instability, and rising inequality (see also Fitoussi and Saraceno, 2011) would increase the level of savings. The natural interest rate decreased to close to zero, if not becoming downright negative, which tends to generate a structural excess of savings over investment. Summers argues that most factors exerting downward pressure on the natural interest rate are not cyclical, but structural, so that the current excess savings is bound to persist in the medium and long term. The natural interest rate could remain negative even beyond the current economic slowdown. This conclusion is not particularly reassuring, as politicians will have to navigate, in the next few years, between Scylla – accepting a constant excess of savings and slow growth (unable to dent unemployment) – and Charybdis – trying to fight the secular stagnation fueling bubbles that remove excess savings at the cost of increased instability and the risk of violent financial crises like the one we experienced in 2007. The recent crisis is an excellent textbook case in this respect, if we consider that the two most important central banks in the world were criticized for diametrically opposite reasons: the Fed accused of keeping interest rates low, thus contributing to a housing bubble (Rajan, 2010), and the ECB guilty according to some of having done too little and too late during the euro zone crisis (Saraceno, 2016).

Olivier Blanchard (2016b) pushed the lines further. Moving away from the Consensus that he helped to shape (Blanchard, 2009), he argues that the exclusive focus on monetary policy as a stabilization tool needs to be reassessed. With (a) low interest rates that make the issue of public debt sustainability irrelevant, (b) the deregulation of financial markets, which is likely to lead to greater variability in GDP and economic activity, and (c) monetary policy that in the future might often be constrained by the ZLB, fiscal policy should find a prominent role among the instruments of macroeconomic regulation.

Nevertheless, Blanchard stops one step before the conclusion that should be obvious: if the economy is doomed to remain tangled in a

semi-permanent situation of excess savings, and if monetary policy is unable to reabsorb the imbalance, there are only two ways to avoid that the *ex ante* excess savings depress the economy: either by a semi-permanent negative external surplus (that is to say, a surplus of the current account balance), or by semi-permanent public negative savings. The first option, the export-led growth model that Germany is today successfully generalizing at the EMU level, is not sustainable for the global economy. Not everyone can be a net exporter: export-led growth and non-cooperative strategies can be a solution for one country (or region), and in the short term only. The second option, a semi-permanent public deficit, needs to be further explored, particularly with regard to its implications for EMU macroeconomic governance. If it is true that deficit financing is not a problem as long as the excess of private savings persists, the actual way of channeling savings into public debt without creating instability needs to be explored. A first option could consist of issuing “debt for investment” reserved to residents to avoid or limit speculative capital flows (Koo, 2011; Fazi and Iodice, 2016). A more radical option would be debt financing through “perpetual bonds” (Flaherty *et al.*, 2016; Sachs, 2014), particularly suitable for financing long-term projects such as those linked to the energy transition; this would *de facto* constitute a debt monetization. Flaherty *et al.* (2016) noted that the acceptance of these securities as collateral by the central banks would make them desirable even if the market return on investment was lower than the social return.

What “new” macroeconomics will emerge from the turmoil that we are witnessing today? Nobody knows. During the twentieth century, neoclassical and Keynesian schools took turns in being the dominant paradigm, each emerging from a crisis of the other. Each time the dominant school of thought tended to become more and more closed to external influences. The refusal to accept complexity has been the hallmark of every dominant paradigm, ultimately driving it, a victim of hubris, to its downfall.

Ideology certainly played a role in the transformation of the academic debate into a parochial quarrel. The identification of neoclassical economies with conservative political positions, and of Keynesianism with progressives, has further removed economists from accounting for the complexity of our economies. Over the last three decades in particular, when macroeconomics came to be seen as the result of the gradual accumulation of knowledge within the framework

given by neoclassical individual rationality, neither attempts to assess the validity of the theory depending on the historical context and institutions, nor the introduction of alternative approaches based on different assumptions, has found any space in the academic and political debate.

In the past, each crisis opened a possible path of contamination, because the dominant paradigm was weakened, while the alternatives had not yet confirmed their hold. The New Consensus is an example of contamination that, nonetheless, turned already starting from the 1980s into a fundamentally neoclassical mechanism. From the current crisis, we should emerge with the methodological principle that no theory is suitable for all seasons. *Pragmatism* should be the guiding principle of macroeconomics in the coming years. We should abandon attempts to reach a unified theory. There is no one-size-fits-all approach or “superior” policies; economists should stop selling this dangerous illusion to politicians.

## References

- Ball, L. M., D. Furceri, D. Leigh, and P. Loungani, 2013, “The Distributional Effects of Fiscal Consolidation”, *IMF Working Paper* 13/151.
- Barry, F. and M. B. Devereux, 1995, “The ‘Expansionary Fiscal Contraction’ Hypothesis: A Neo-Keynesian Analysis”, *Oxford Economic Papers* 47(2): 249-64.
- Berg, T. O., 2015, “Time Varying Fiscal Multipliers in Germany”, *Review of Economics* 66(1): 13-46.
- Bernanke, B.S., 2004, “The Great Moderation”, *Remarks at the Meetings of the Eastern Economic Association, Washington, DC* February 2.
- Blanchard, O. J., 2009, “The State of Macro”, *Annual Review of Economics* 1 (1): 209-28.
- Blanchard, O. J., 2016a, “Currency Wars, Coordination, and Capital Controls”, *NBER Working Paper* 2238 (July).
- Blanchard, O. J., 2016b, “Rethinking Macro Policy: Progress or Confusion?”, in Blanchard O.J. et al. (eds), *Progress and Confusion: The State of Macroeconomic Policy*. MIT Press. URL <http://www.jstor.org/stable/j.ctt1c2crr6.30>
- Blanchard, O. J. and D. Leigh, 2013, “Growth Forecast Errors and Fiscal Multipliers”, *American Economic Review* (Vol. 103).

- Blanchard, O. J. and L. H. Summers, 1986, "Hysteresis and the European Unemployment Problem", *NBER Macroeconomics Annual* (Vol. 1). URL <http://www.nber.org/papers/w1950.pdf%5Cnpapers2://publication/uuid/69497735-5C40-4BC3-B68B-4FC0243437C0>
- Bom, P. R. D. and J. E. Ligthart, 2014, "What Have We Learned From Three Decades of Research on the Productivity of Public Capital?", *Journal of Economic Surveys* 28(5): 889-916.
- Creel, J., É. Heyer, and M. Plane, 2011, "Petit précis de politique budgétaire par tous les temps: les multiplicateurs budgétaires au cours du Cycle", *Revue de l'OFCE* 116: 61-88.
- Delong, J. B. and L.H. Summers, 2012, "Fiscal Policy in a Depressed Economy", *Brookings Papers on Economic Activity* (Spring): 1-52.
- Eggertsson, G. B., A. Ferrero, and A. Raffo, 2014, "Can Structural Reforms Help Europe?", *Journal of Monetary Economics* 61: 2-22.
- Eichengreen, B. and K. O'Rourke, 2009, "A Tale of Two Depressions", *VoxEU* (Last Update: 2010).
- Fàtas, A. and L.H. Summers, 2015, "The Permanent Effects of Fiscal Consolidations", *CEPR Discussion Paper* 10902 (November).
- Fazi, T. and G. Iodice, 2016, "Why Further Integration Is the Wrong Answer to the EMU' S Problems?: The Case for a Decentralised Fiscal Stimulus", *Journal for a Progressive Economy* 8 (October).
- Fitoussi, J.-P. and F. Saraceno, 2011, "Inequality, the Crisis and After", *Rivista Di Politica Economica* (1): 9-28.
- Flaherty, M., A. Gevorkyan, S. Radpour, and W. Semmler, 2016, "Financing Climate Policies through Climate Bonds – A Three Stage Model and Empirics", *Research in International Business and Finance*: 1-12.
- Gechert, S., 2015, "What Fiscal Policy Is Most Effective? A Meta-Regression Analysis", *Oxford Economic Papers* 67(3): 553-80.
- Gechert, S. and H. Will, 2012, *Fiscal Multipliers: A Meta Regression Analysis IMK Working Paper* (Vol. 97).
- Giavazzi, F. and M. Pagano, 1990, "Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries", *NBER Macroeconomics Annual* (Vol. 1990/5). URL <http://ideas.repec.org/h/nbr/nberch/10973.html>
- Glocker, C., G. Sestieri, and P. Towbin, 2017, "Time-Varying Fiscal Spending Multipliers in the UK", *Banque de France Working Paper* 643 (September).
- Gordon, R. J., 2012, "Is US Growth over? Faltering Innovation Faces Six Headwinds", *CEPR Policy Insight* 63 (September).
- Gordon, R. J., 2016, *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War* The Princeton Economic History of the Western World. Princeton University Press. URL <https://books.google.it/books?id=0DJJCgAAQBAJ>

- Hansen, A. H., 1939, "Economic Progress and Declining Population Growth", *The American Economic Review* 24 (1): 1-15.
- IMF, 2014, "Legacies, Clouds, Uncertainties", *World Economic Outlook* Autumn (October).
- IMF, 2016a, "Debt: Use It Wisely", *IMF Fiscal Monitor* (October).
- IMF, 2016b, "Time for a Supply-Side Boost? Macroeconomic Effects of Labor and Product Market Reforms in Advanced Economies", *World Economic Outlook* (Chapter 3).
- IMF, 2017, "Tackling Inequality", *IMF Fiscal Monitor*: October.
- Jaumotte, F. and C. O. Buitron, 2015, "Inequality and Labor Market Institutions", *IMF Staff Discussion Note* 15/14.
- Koo, R., 2011, "The World in Balance Sheet Recession: Causes, Cure, and Politics", *Real World Economics Review* (58): 19-37.
- Kumhof, M., R. Rancière, and P. Winant, 2015, "Inequality, Leverage and Crises", *American Economic Review* 105 (3): 1217-45.
- Loungani, P., 2017, "Inclusive Growth and the IMF", *iMFDirect – The IMF Global Economy Forum* (January 24).
- Le Moigne, M., F. Saraceno, and S. Villemot, 2016, "Probably Too Little, Certainly Too Late. An Assessment of the Juncker Investment Plan", *Document de Travail de l'OFCE* (10).
- OECD, 2016, "Economic Policy Reforms", *Going for Growth Interim Report* June.
- Perotti, R., 2011, "The 'Austerity Myth': Gain Without Pain?", *NBER Working Paper* 17571 (November).
- Phelps, E. S., 2013, *Mass Flourishing: How Grassroots Innovation Created Jobs, Challenge, and Change*. Princeton University Press. URL <https://books.google.it/books?id=wjvFLLgndBkC>
- Piketty, T., 2013, *Le Capital Au XXIe Siècle*. Seuil.
- Posen, A., 2016, "Shinzo Abe's Stimulus Is a Lesson for the World", *The Financial Times* (August 2).
- Rajan, R.G., 2010, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*. Princeton University Press.
- Ramey, V. A. and S. Zubairy, 2018, "Government Spending Multipliers in Good Times and in Bad: Evidence from US Historical Data", *Journal of Political Economy* 126 (2): 850-901.
- Reinhart, C. M. and K. S. Rogoff, 2010, "Growth in a Time of Debt", *American Economic Review: Papers and Proceedings* 100 (May 2010): 573-8.
- Rodrik, D., 2013, "Europe's Way Out", *Project Syndicate* June 12.
- Sachs, J., 2014, "Climate Change and Intergenerational Well-Being", in Bernard L. and Semmler W. (eds), *The Oxford Handbook of the Macroeconomics of Global Warming*. Oxford: Oxford University Press.

- Saraceno, F., 2016, "The ECB: A Reluctant Leading Character of the EMU Play", *Economia Politica* 33(2): 129-51.
- Saraceno, F., 2018a, *La Scienza Inutile. Tutto Quello Che Non Abbiamo Voluto Imparare Dall'economia*. Roma: Luiss University Press.
- Saraceno, F., 2018b, "When Keynes Goes to Brussels: A New Fiscal Rule for the EMU?", *Annals of the Fondazione Luigi Einaudi* 51(2): 131-57.
- Sinn, H.-W., 2014, "Austerity, Growth and Inflation: Remarks on the Eurozone's Unresolved Competitiveness Problem", *The World Economy* 37 (1): 1-13.
- Summers, L. H., 2014, "U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound", *Business Economics* 49(2): 65-73.
- Summers, L. H., 2016, "The Age of Secular Stagnation. What It Is and What to Do About It", *Foreign Policy* (March/April).