ADJUSTMENT AND GROWTH PROSPECTS IN THE DEVELOPED ECONOMIES

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Introduction

The global financial crisis triggered in 2007-2008 has been the most serious shock to the world economy since the Second World War. As a result of the crisis, the GDP of the main developed economies fell by between 3% and 6% from its previous high, despite the rapid and coordinated response of the economic authorities. The measures aimed at stimulating aggregate demand, supporting the financial sector and restoring agents' confidence succeeded in breaking the negative feedback loop between the weakness of financial systems and the deterioration in the real economy, and contributed to the start of a moderate recovery. Gradually, the role of macroeconomic policy in support of the recovery has become more focused on monetary policy, given the deterioration in the public finances of many advanced economies.

Despite the support of monetary policy, recovery in the major economies is proving slow, fragile and uneven. Some of these economies, such as the United States, have returned to growth rates close to pre-crisis levels; others, including some in the euro area, continue to post growth rates far below those achieved in the previous upswing, and have even suffered fresh setbacks. As a result, GDP levels are well below their pre-crisis trends (see Charts 1 and 2).

In this context, there is heated debate about the causes of the persistent low growth in advanced economies, which has significant implications both for their prospects and for economic policy responses. The numerous factors that have been highlighted in this debate include the imbalances accumulated in the past (both before and during the crisis), certain longer-term trends, that were already apparent before the global financial crisis was triggered and might be behind the persistent weakness of aggregate demand (such as the increasingly unequal income distribution or the higher demand for safe assets), and various phenomena that might point to a reduction in potential growth (such as population ageing or a slowdown in technical progress).

This article offers a broad overview of the studies that have been emerging on the impact of the crisis on advanced economies, with a view to determining and assessing the main factors responsible for the weakness of the recovery in these economies, and reflecting on the appropriate economic policies to overcome this prolonged period of slow growth. The next section outlines the usual patterns of exit from financial crises, and compares them to the current path of recovery. The third section analyses the main imbalances resulting from the crisis, assessing the extent to which they are being corrected. In the fourth, the outlook for potential growth is discussed, while in the fifth the role of economic policies in the current situation is reviewed. The article concludes with some brief final reflections.

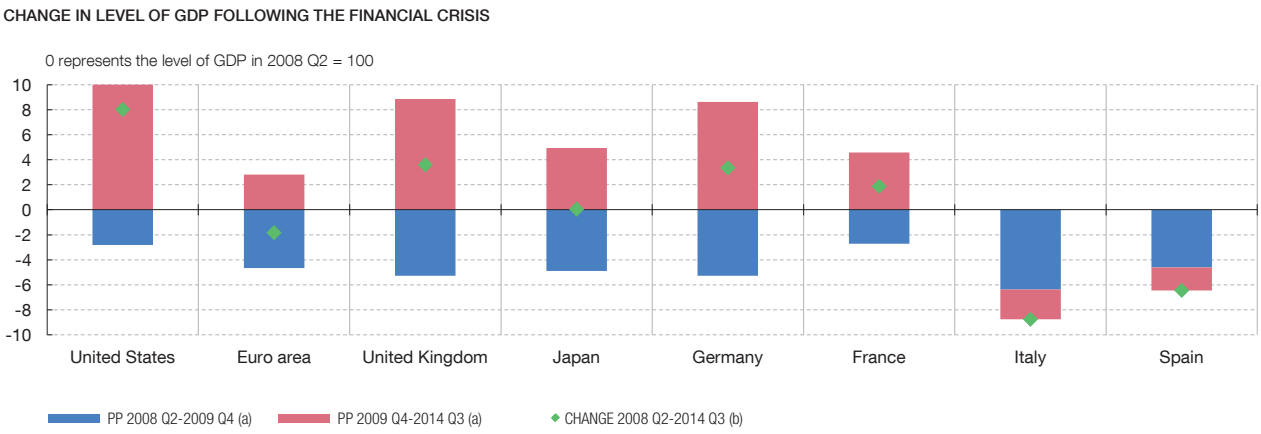
Adjustment after the financial crisis

The global financial crisis has had a very significant adverse impact on the GDP of the advanced economies. This is in line with the historical experience of recessions occurring after financial crises[1], which tend to result in a permanent loss of GDP with respect to the

1 This section distinguishes between recessions that take place after financial crises and those that are not preceded by such a crisis. Among financial crises, we focus on banking crises (as opposed to currency or sovereign debt crises). The literature [see, for example, Laeven and Valencia (2013)] tends to distinguish between systemic and non-systemic banking crises, the former being those in which banking systems show clear signs of stress (in terms of losses, bank runs and/or bank failures) and also require significant intervention by the economic authorities.

CHANGE IN THE LEVEL OF REAL GDP IN THE RECESSION AND IN THE RECOVERY

CHART 1

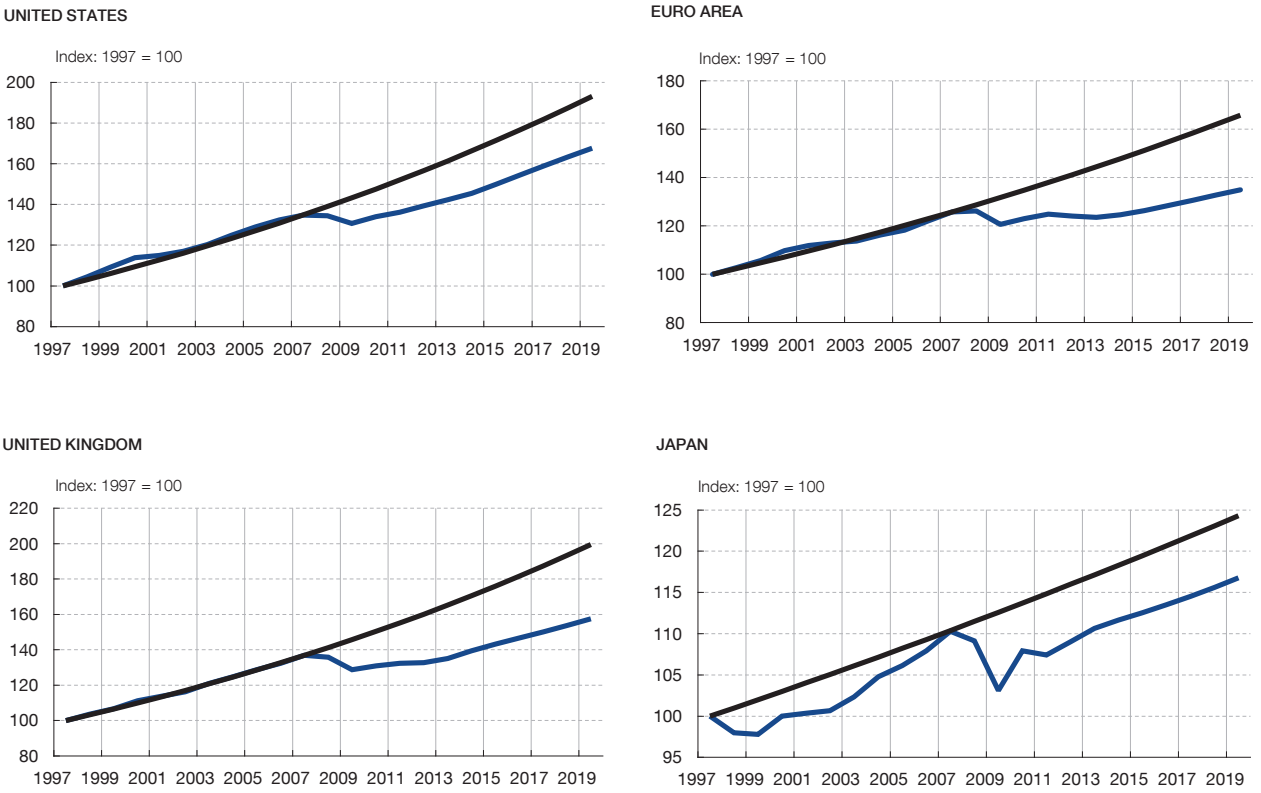


SOURCES: National statistics and Datastream.

a Contribution in percentage points (pp) to the change in GDP in each period.
b Rate of change in GDP between 2008 Q2 and 2014 Q3.

PERFORMANCE OF REAL GDP IN ADVANCED ECONOMIES FOLLOWING THE CRISIS. COMPARISON WITH THE PREVIOUS TREND (a)

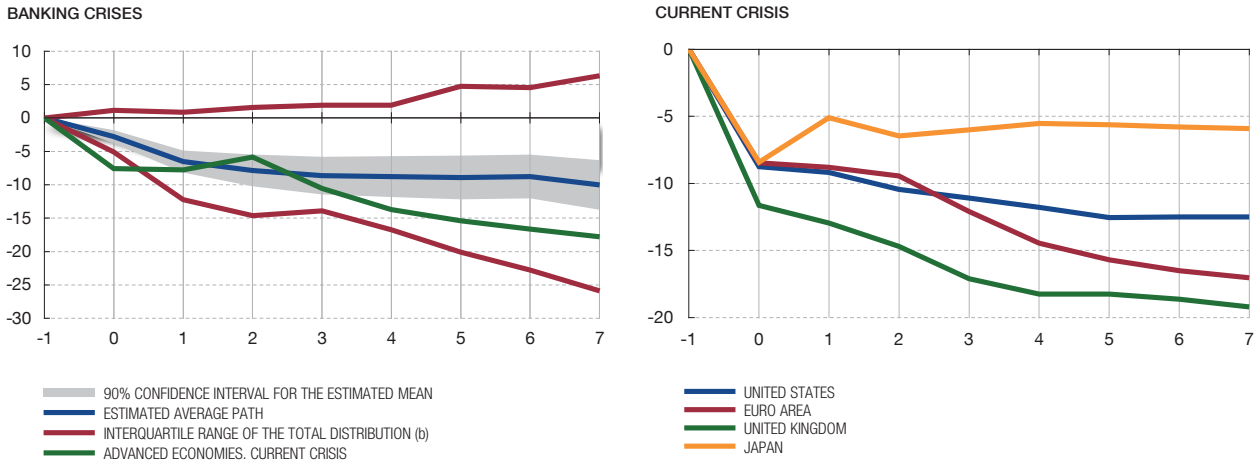
CHART 2



SOURCE: October 2014 WEO data. Forecasts from 2014.

a Previous trend based on the average growth over the ten-year period leading up to the crisis.

GDP PERFORMANCE WITH RESPECT TO THE PRE-CRISIS TREND (a) IN ADVANCED ECONOMIES. CURRENT CRISIS VS. BANKING CRISES SINCE 1970 CHART 3



SOURCES: IMF, October 2009 WEO and Banco de España.

a Previous trend based on the average growth in the ten-year period leading up to the crisis.
b The interquartile range represents the middle 50% of all the crises.

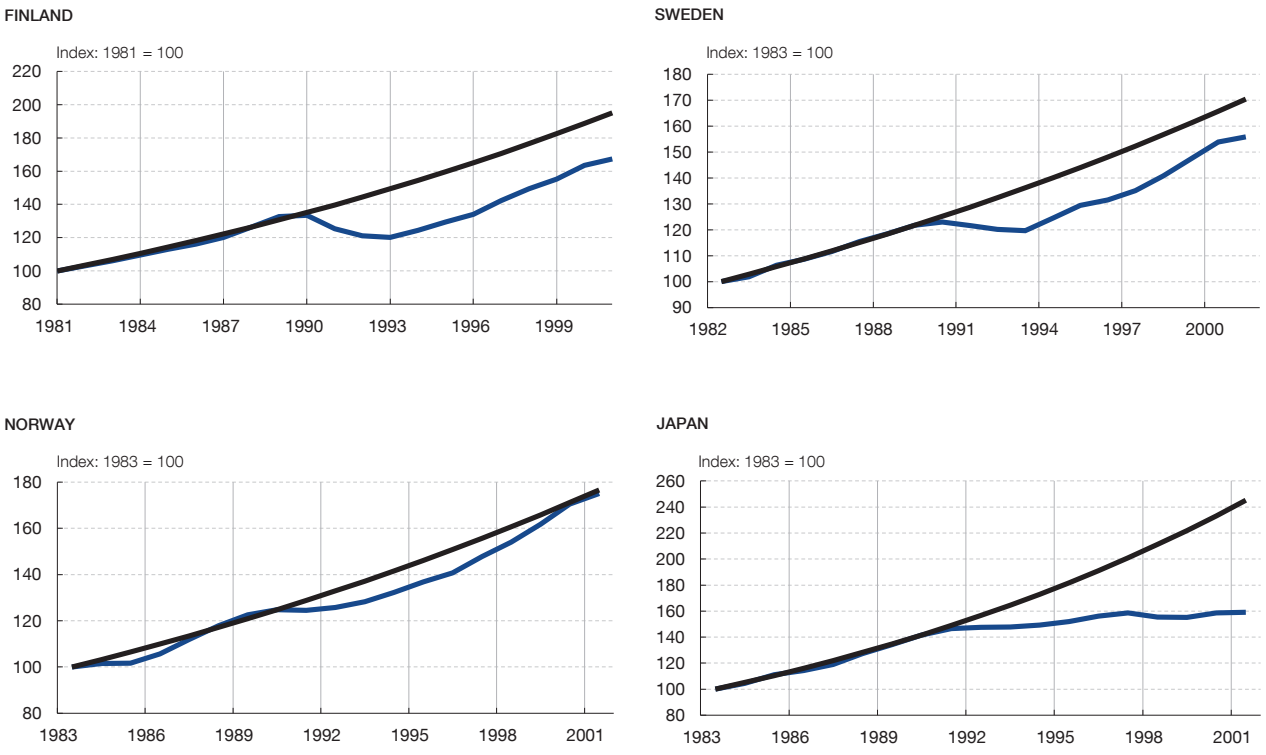
previous trend, the subsequent growth very rarely allowing such levels to be recovered. More specifically, the historical evidence suggests that a distinction can be drawn between cases in which medium-term GDP growth returns to pre-crisis rates and cases where growth rates remain slower. This may be due to the consequences of pre-crisis excesses, an inadequate economic policy response, or the fact that pre-crisis growth was not sustainable[2].

Studies of recessions linked to financial crises suggest that GDP losses are twice as large as in other recessions and that they last at least twice as long. Reinhart and Rogoff (2009) find that GDP levels in severe financial crises fall by close to 9%, on average, over a period of around two years, while non-financial recessions only last one year. This decline in activity is followed by a significant deterioration in the labour market, with an average increase in the unemployment rate of 7 percentage points (pp) over an average period of four years. In order to make a comparison with financial crises of the same severity as the most recent episode, Reinhart et al. (2014) examine the performance of real GDP per capita in a wide sample of systemic crises[3], and they find that, on average, advanced economies record losses of 9.6% and it takes them more than seven years to regain previous GDP levels. Beyond the short-term losses caused by the crisis, empirical studies show that financial crises generally have a permanent effect on GDP levels and they may even have an impact on long-term potential growth. Cerra and Saxena (2008), the standard reference in this type of study, find that the recovery of real GDP does not fully offset the losses from the crisis and that, in 50% of cases, growth rates ten years after the crisis are lower than before the crisis.

By way of a summary, Chart 3 compares the performance of the developed economies in the current recovery with the average observed in the recovery phases of financial crises that have taken place since the 1970s [IMF (2009b)]. In these episodes, seven years after the onset of the crisis, the GDP of advanced economies stood, on average, 10 pp below the pre-crisis trend. In the current crisis, after seven years, the average GDP of the advanced

2 See Alberola et al. (2013) and Borio et al. (2013).
3 63 in advanced economies since 1857.

PERFORMANCE OF REAL GDP IN JAPAN, FINLAND AND SWEDEN AFTER THE CRISES OF THE 1990s. COMPARISON WITH THE PREVIOUS TREND (a) CHART 4



SOURCES: October 2014 WEO data.

a Previous trend based on the average growth in the ten-year period leading up to the crisis.

economies is 17% below the previous trend, although there are notable differences among countries: the loss of output was close to 20% in the UK, 17% in the euro area, 12% in the United States and 6% in Japan.

The aggregate analysis of financial crises may be supplemented with specific case studies, which allow the determinants and the impact of economic policies to be assessed. The crises in the Scandinavian countries (Sweden, Finland and Norway) and in Japan in the early 1990s are of particular interest, although these episodes did not have the global nature of the current crisis, a factor which tends to intensify the depth and duration of crises [IMF (2009a)]. Chart 4, which depicts the evolution of GDP trend growth in these four episodes, shows a variety of outcomes: Japan experienced a lasting drop in growth (possibly due to inappropriate management of the crisis, combined with adverse demographic factors) and, therefore, the loss in GDP with respect to the previous trend kept increasing; in the Scandinavian countries, however, structural reforms and the reorientation of their production boosted growth rates again, in some years even to slightly above pre-crisis levels, so that GDP losses were gradually recovered.

CERTAIN FEATURES OF FINANCIAL CRISES

There is, therefore, a consensus that recessions which follow financial crises are unusually severe and long, especially if they are global, and that subsequent recoveries tend to be weak, although outcomes vary depending on the starting conditions and accumulated imbalances, the economic policy response and whether the external environment is more or less favourable. Various articles have explored which factors help explain the severity and duration of recessions associated with financial crises. On the one hand, certain

studies[4] highlight the importance of the interaction between macroeconomic and financial variables. In particular, recessions associated with financial crises are often synchronised across countries and tend to coincide with declines in credit and in the prices of assets, such as equities and housing, which tend to be prolonged and severe.[5]

On the other hand, there is an extensive literature linking the cost of financial crises and the subsequent rate of adjustment to the previously accumulated external imbalances. In general, it is observed[6] that in deficit economies the expansion phase tends to be financed by external resources and, therefore, the decline in inflows of foreign funds during the crisis forces the private sector (households and companies) to reduce its consumption and investment, leading to a greater GDP correction during the adjustment. In contrast, the domestic savings available in economies with external surpluses at the beginning of the crisis make them less vulnerable to external shocks and better able to implement stabilisation measures.

Certain studies that focus on the imbalances generated by the intensity in credit creation (or leverage) during the expansion prior to the crisis conclude that the size of the credit boom is an indicator of the decline in GDP. According to these studies, the recovery after a recession associated with a financial crisis is slower if there has previously been excessive credit creation, such that the larger the prior excess credit, the worse the recession and the weaker the subsequent recovery.[7]

Lastly, there are studies that focus on recovery processes that occur without credit growth (creditless recoveries). The data show that around one in five recoveries is of this type, that the resulting economic growth tends to be lower than in "normal" recoveries[8] and that these recoveries are more common following banking crises, credit booms and boom-bust cycles in real estate prices. However, other authors show that a decline in credit to the private sector need not necessarily restrict the economic recovery following a financial crisis and that the fastest recoveries are due to gains in competitiveness, via exchange rate depreciation, regardless of the deleveraging that takes place.[9]

The legacy of the Great Recession and demand-side secular stagnation

The accumulation of significant interrelated imbalances in the previous expansion phase shows that growth in many advanced countries was, in reality, unsustainable[10] and led, ultimately, to the onset of the global financial crisis, which in turn prompted the emergence of other imbalances that had remained dormant during the boom period. More than six years after the collapse of Lehman Brothers, the crucial point of the global financial crisis, progress in correcting these imbalances has varied from one country to another. Meanwhile,

4 Such as that of Claessens et al. (2012) and others by the same authors. A credit crunch tends to last two and a half years, with a 20% decline in credit; a stock market crisis tends to last the same length of time, with 50% price falls in real terms; and a housing crisis tends to last even longer (four and a half years) with 30% drops in real house prices.

5 Various BIS studies have focussed on the characteristics of financial cycles and their interaction with business cycles [see BIS (2014) for a summary].

6 See Nuño (2011), who draws a distinction regarding the pattern of adjustment following a financial crisis depending on whether the economies presented a current account deficit or surplus at the beginning of the crisis.

7 See Jordà et al. (2011) and Schularick and Taylor (2012), who use the increase in the credit-to-GDP ratio with respect to a historical average to measure excess credit. However, Gadea and Pérez-Quirós (2015) point out that the use of credit as a leading indicator is problematic and that the relationship between credit and the occurrence of recessions, if there is one, is very weak, even though it was a feature of the last recession.

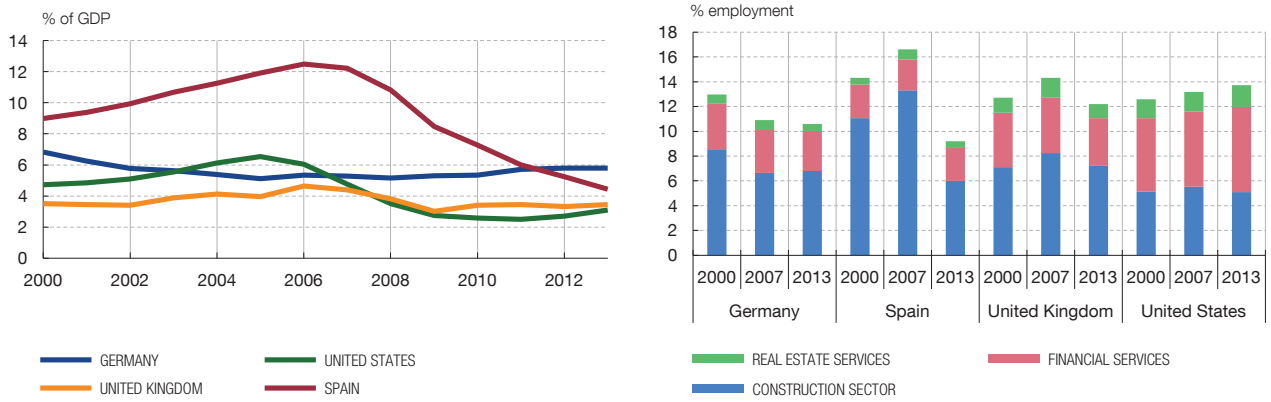
8 See Abiad et al. (2011).

9 Takats and Upper (2013) examine data relating to 39 financial crises preceded by credit booms and they do not find any significant correlation between changes in credit and growth in activity during the initial years of the recovery.

10 This qualifies, to a certain extent, the losses calculated with respect to the previous trend discussed above.

RESIDENTIAL INVESTMENT AND EMPLOYMENT IN THE CONSTRUCTION AND REAL ESTATE AND FINANCIAL SERVICES SECTORS

CHART 5



SOURCE: OECD, Eurostat and Bureau of Labor Statistics (US).
NOTE: In the 2000 and 2007 data (except for the US) the NACE Rev. 1.1 classification with 2-digit disaggregation is used.

economic recovery remains hesitant and overly dependent on very lax macroeconomic policies, creating a feedback loop: the adjustments pending hamper the exit from the crisis and low growth hinders further progress in economic rebalancing.

Among the most costly adjustments are those deriving from the excessive size of certain sectors, primarily residential construction, and the excessive accumulation of private debt. But other developments are also significant, such as increased income inequality or the scarcity of safe assets,[11] which hinder economic recovery. In addition to their impact on the recovery, these developments, together with other longer-term trends, may have encouraged a persistent weakness in aggregate demand. These matters are discussed below.

RESIZING OF THE FINANCIAL AND REAL ESTATE SECTORS AND SECTORAL REALLOCATION OF EMPLOYMENT

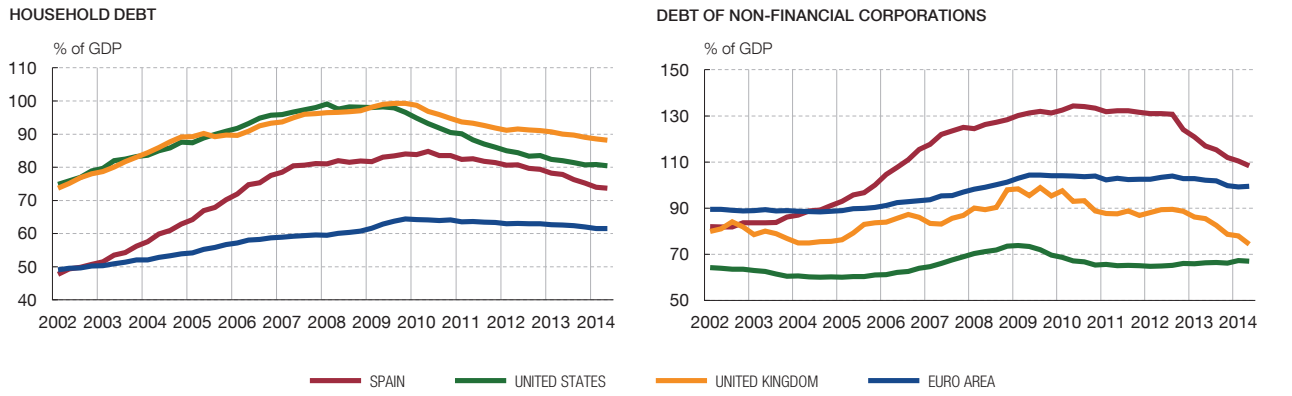
One of the developments at the origin of the crisis was the excessive growth in house prices in some countries, favoured by buoyant lending. The boom in the housing sector and in lending – which created a feedback loop during the upswing as real estate assets were used as collateral – had a notable impact on the productive structure of some economies. As Chart 5 shows, in countries such as the United States or Spain which experienced a real estate boom, the weight of residential investment in terms of GDP and the weight of construction and of real estate and financial services in terms of employment soared. In other countries, such as the United Kingdom, where growth in house prices was mainly in response to supply constraints, the financial services industry expanded but there was no significant increase in construction or real estate services.

The stagnation of the real estate market following the outbreak of the crisis prompted a radical change in these sectoral patterns, particularly in construction. The drop in the number of real estate transactions halted the upward trend in house prices and increased the unsold housing stock, initially in the United States and subsequently in other countries, causing a sharp contraction in new house building and heavy job losses in the construction sector.

11 According to Caballero and Fahri (2014), in view of the extremely low real interest rates and low rates of investment in many advanced economies, the scarcity of safe assets is likely to continue to pose an obstacle to recovery. If nominal interest rates are already close to zero, they cannot be cut to correct the scarcity of safe assets and the weakness of aggregate demand. Safe assets have a notable impact on the provision of credit to the real economy, given their crucial role in financial intermediaries' access to wholesale market financing.

NON-FINANCIAL PRIVATE SECTOR DEBT

CHART 6



SOURCE: National sources.

The speed of the adjustment in the financial sector varied according to the nature of the problems. In the United States there was a sudden loss in the value of complex financial assets (whose underlyings were, in many cases, real estate loans) on the balance sheets of financial institutions, and banking system problems soon emerged, making it possible to act rapidly to recapitalise troubled institutions. Since a return to pre-crisis activity levels in these sectors is unlikely, it is essential that the surplus employment be reabsorbed in other branches of activity. In any event, this process poses huge challenges, particularly in the case of the redeployment of construction workers, since their low skill levels make it difficult for them to move into other production sectors. This could result in hysteresis which would push up the structural unemployment rate.[12]

DELEVERAGING OF THE NON-FINANCIAL PRIVATE SECTOR

The excessive size of the financial and real estate sectors in numerous advanced economies – reflecting an inefficient allocation of productive resources – was encouraged by a protracted period of extraordinarily lax financial conditions, which allowed a notable increase in the debt of households and non-financial firms. Rising asset (and specifically housing) prices generated, in parallel, an increase in agents' wealth, so debt-to-asset ratios remained quite stable. As would subsequently become apparent, this concealed growing vulnerability.

As Chart 6 illustrates, in the latest upturn private-sector debt rose significantly in Spain, the US and the UK, peaking in 2009 in all cases. The different features of the upswing explain certain differences in the composition of debt: in Spain the increase was more marked among non-financial firms, while in the US it was more notable in households and in the UK it was similar in both sectors.

The outbreak of the financial crisis, with the consequent correction of house prices, triggered a deterioration in private-sector balance sheets and cut off flows of financing to households and firms. However, the sharp drop in activity and the inertia of debt stock delayed the start of the deleveraging process which, with slight variations by country and institutional sector, began in mid-2009. Since then, the correction of indebtedness has differed by country and agent: in general, the process has been more intense in the US and the UK and somewhat more pronounced in the case of households.

12 In this regard, Chen et al. (2011) show that the sectoral shocks that occurred in the Great Recession – primarily in construction but also in the financial sector – contributed decisively to the rise in long-term unemployment.

The adjustment channels for the deleveraging process have also differed from one country to another.[13] In the United States the improvement in economic activity and household debt restructuring has contributed significantly to the reduction of the debt ratio, while in the United Kingdom moderate inflation rates above the central bank target – which erode the real value of debt – have played an important role. In Spain, there has been a significant reduction in net financing flows. In short, until the excessive debt levels are corrected, high private-sector indebtedness will curb spending and slow the recovery.[14]

CONSOLIDATION OF PUBLIC FINANCES

At the height of the crisis, the economic authorities in the main advanced regions responded swiftly and emphatically, thus preventing paralysis of the international financial markets and intensification of the feedback loop between the real economy and the financial sector. Together with the introduction of unconventional monetary policy measures, fiscal policy played a prominent role, through automatic stabilisers and the approval of stimulus plans aimed at strengthening the financial system and reactivating aggregate demand. The introduction of fiscal stimuli was widespread, reflecting a high degree of consensus regarding their use.

The initial intense use of fiscal policy led to a substantial deterioration of public finances, reflected in a sharp rise in government deficit and debt figures, which has severely reduced the room for manoeuvre in this area. The need for budgetary consolidation is particularly urgent in economies where fiscal sustainability has worsened substantially, triggering a significant increase in the cost of public sector financing. In other countries, such as the United States, the financial markets have not exerted pressure on the cost of financing, leaving more scope to adapt the pace of fiscal consolidation to the pace of the recovery. But in these cases also the commitment to credible medium and long-term fiscal adjustment strategies is important because, as Chart 7 illustrates, the fiscal effort needed to stabilise the debt-to-GDP ratio is very great.

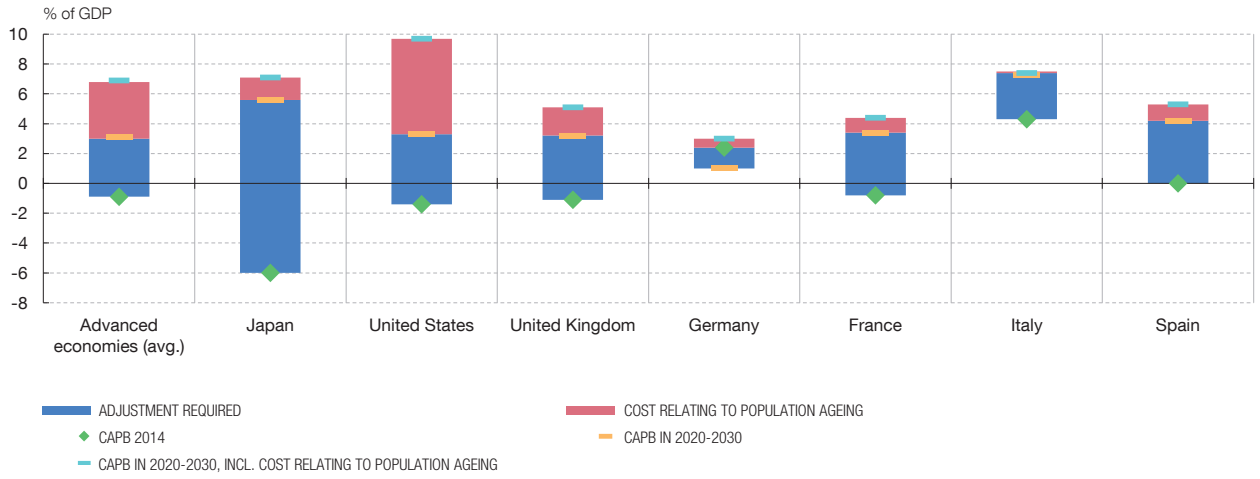
Prolonged economic weakness has generated a debate on the effects of fiscal austerity on activity and, in short, on the optimal pace of fiscal consolidation. Empirical evidence shows that fiscal consolidation comes with a cost in terms of activity in the short term, although the scale of this effect varies substantially depending on the economic conditions and the composition of the adjustment; i.e. the fiscal multiplier is positive but its size is uncertain. Fiscal multipliers tend to be higher when monetary policy cannot operate effectively, when the economy has experienced a prolonged recession and when there is a synchronised adjustment of numerous economies.[15] All these circumstances can currently be observed to a greater or lesser extent in most developed countries. In any event, fiscal consolidation has beneficial effects in the long term;[16] moreover, the scale of the impact of the adjustment in the short term can be mitigated, particularly in situations of stress in the financial markets, by the confidence effects associated with the fiscal consolidation process.

THE SECULAR STAGNATION HYPOTHESIS

Six years after the outbreak of the global financial crisis, advanced economies show very modest growth rates, despite the extraordinary monetary stimuli they have received and the easing of some of the burdens that have curbed recovery, such as the tightening of financial conditions or the intensity of fiscal consolidation. In consequence, certain authors

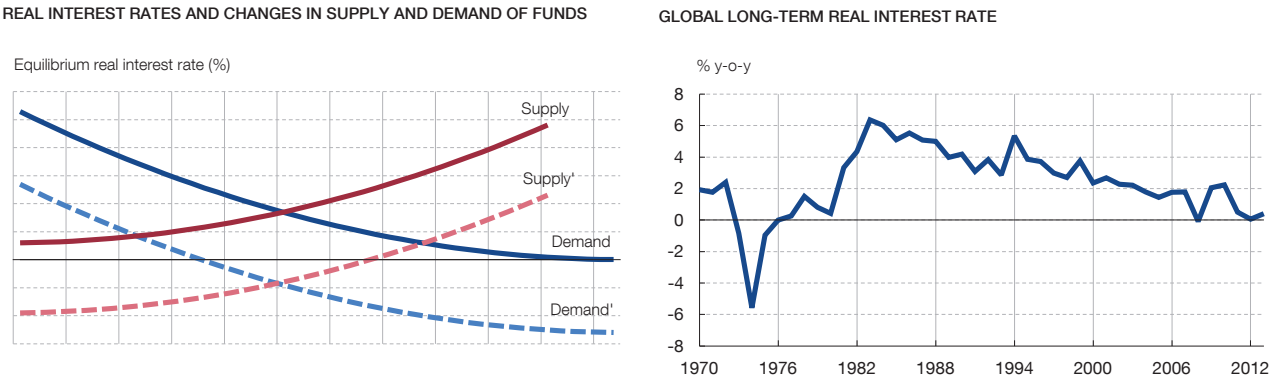
13 See Garrote et al. (2013) for a detailed analysis.
14 Mian and Sufi (2009) and Estrada et al. (2014) extensively document the role played in the gestation of the crisis by household over-indebtedness, which precedes the problems in the banking system and hampers a recovery in spending even after the banking system has been restored to health.
15 See Estrada and Vallés (2013) for a summary of the recent literature on fiscal multipliers.
16 As indicated by Hernández de Cos and Thomas (2012).

ADJUSTMENT REQUIRED IN CYCLICALLY ADJUSTED PRIMARY BALANCE (CAPB) CHART 7



SOURCE: Fiscal Monitor, October 2014.

REAL INTEREST RATES AND CHANGES IN SUPPLY AND DEMAND OF FUNDS CHART 8



SOURCE: IMF (2014).

have considered the hypothesis that advanced economies may be facing secular stagnation, with persistent weakness of aggregate demand permanently hampering economic growth. According to this hypothesis,[17] over the last two decades the natural or equilibrium real interest rate compatible with full employment would have declined and could even have reached negative levels.

The equilibrium interest rate is determined by shifts in global savings and investment curves (see Chart 8). The increase in international reserves and savings in the emerging economies and the effects of progressive population ageing and of greater inequality in the developed economies would have caused the global savings curve to rise, heightening, in particular, the demand for safe assets, while slower demographic growth, greater inequality, the slowdown in productivity or lower capital goods prices in relative terms would have led to a downward trend in investment rates in the advanced economies in recent decades. These trends would have intensified as a result of the crisis, owing to lower confidence and heightened risk aversion, or to the effects of the public and private debt overhang.

17 Proposed by Summers (2013).

In this setting, the zero lower bound on nominal interest rates and low inflation rates would prevent effective real interest rates from reaching the negative levels of the equilibrium real interest rate, making it increasingly difficult for the economic authorities to revitalise aggregate demand and restore full employment. This could even generate a deflationary spiral of falling prices and wages and rising real interest rates, as seen in Japan since the 1990s. Attempts to stimulate aggregate demand with ever lower nominal interest rates for longer periods – or through other unconventional measures – would have the side effect of increased risk to financial stability, as was the case in the years before the global crisis when the advanced economies were able to grow at reasonable rates without generating inflation, but at the cost of unsustainable expansion of the financial cycle.

Although there are other explanations that justify the prolonged sluggishness of the advanced economies, there are elements of the secular stagnation hypothesis that give it a certain plausibility. In particular, long-term real interest rates have been falling in recent decades (see Chart 8) and the current estimates of natural or equilibrium interest rates in the advanced economies[18] show a decline in the last two decades, posting negative figures following the crisis (in the case of Japan, since the mid-1990s).

If secular stagnation were to exist, the economic policy implications would be considerable. Given the limitations of monetary policy to achieve the equilibrium interest rate and the risks to financial stability arising from protracted very low interest rates, it would be necessary to encourage private investment or increase public investment through an expansionary fiscal policy. One alternative that has been put forward to prevent the possibility of reaching the zero lower bound on interest rates and more negative real interest rates is to raise the inflation target,[19] although this option entails clear risks in terms of central bank credibility.

A particularly adverse consequence of the demand stagnation scenario is that weak investment and the possible hysteresis effects on the labour market could have affected supply, reducing potential growth. For some authors, the main reason for the sluggish recovery is precisely the lower potential growth,[20] resulting from various factors that were in play before the crisis and that were aggravated by it: slower demographic growth, less educational progress, greater inequality of income and wealth and lower productivity gains.[21]

Potential growth outlook

In order to discern the channels through which crises can affect potential growth, GDP is usually expressed by means of a production function, to analyse separately the possible effects on its various components: capital, labour and total factor productivity.[22]

A short-lived crisis could result in a moderate fall in employment levels, without permanently affecting the growth of the labour factor, leaving its contribution to long-term potential growth unchanged. A slow adjustment of prices and wages and of the sectoral allocation

18 See Rawdanowicz et al. (2014).
19 As proposed by Blanchard et al. (2010) or Krugman (2014).
20 See Gordon (2012).
21 Rogoff (2014) gives an alternative explanation for the slow pace of the recovery, i.e. that it is a logical consequence of the debt overhang. Other factors that may have weakened demand growth in the short term are greater income inequality, which tends to dampen consumption owing to the lower propensity to consume of higher-income households [(Berg and Ostry (2011) or Estrada and Valdeolivas (2012)], higher demand for safe assets [(Caballero and Farhi (2014)] and growing uncertainty associated with economic policy, which curbs spending [Bloom (2009)].
22 See, for example, the European Commission (2009).

of employment could temporarily drive up unemployment during the crisis, but the rise should not be permanent in the absence of significant structural rigidities. Similarly, despite the possible effect on the participation rate[23] and on hours worked in the short term, these variables should return to their previous trend if the recession is short-lived. However, if the crisis persists, incentives to work and labour market flows might decrease, resulting in inefficient reallocation and a higher NAIRU. Also, if labour market institutions are inefficient, a rise in unemployment might become structural, reducing potential GDP. Therefore, the duration of the recession will be decisive in determining the possible damage to this factor.

The effects of the crisis on investment are felt through the rise in risk premiums and the tightening of financing conditions and, in sectors where there has been over-investment, through adjustment towards more normal investment ratios. These effects can be exacerbated – particularly if the investment process is characterised by irreversibilities and sunk costs – if there is heightened uncertainty, which drives up risk premiums and the value of deferring investments. The prospect of permanently higher financing costs or of a deterioration in the productive reallocation process in the economy increases the considerable risk of a decline in the rate of capital accumulation in the long term.

Lastly, the impact on total factor productivity is ambiguous. On the one hand, a series of mechanisms – reduction in the weight of highly productive activities (such as financial services), decline in investments in R&D, difficulties in the restructuring process post-crisis due to financial constraints, increase in the weight of the services sector, which is less productive than manufacturing – would tend to reduce TFP growth. On the other hand, the crisis might act as a catalyst for the restructuring of the economy, reducing the weight of less productive activities, such as construction. However, if the restructuring process is slow, due to structural problems, total factor productivity could deteriorate significantly (as was the case in Japan in the 1990s).

Apart from these direct channels, financial crises can have indirect effects on potential GDP, triggered by policies designed to mitigate economic slowdown. On the one hand, higher public investment in infrastructure may boost potential GDP. On the other, fiscal stimuli may permanently increase public spending and debt levels, with negative effects on growth, while other policies may introduce distortions or lead to the assumption of excessive risks. But financial crises may also promote structural reforms that increase potential GDP.

ESTIMATE OF POTENTIAL GROWTH POST-CRISIS

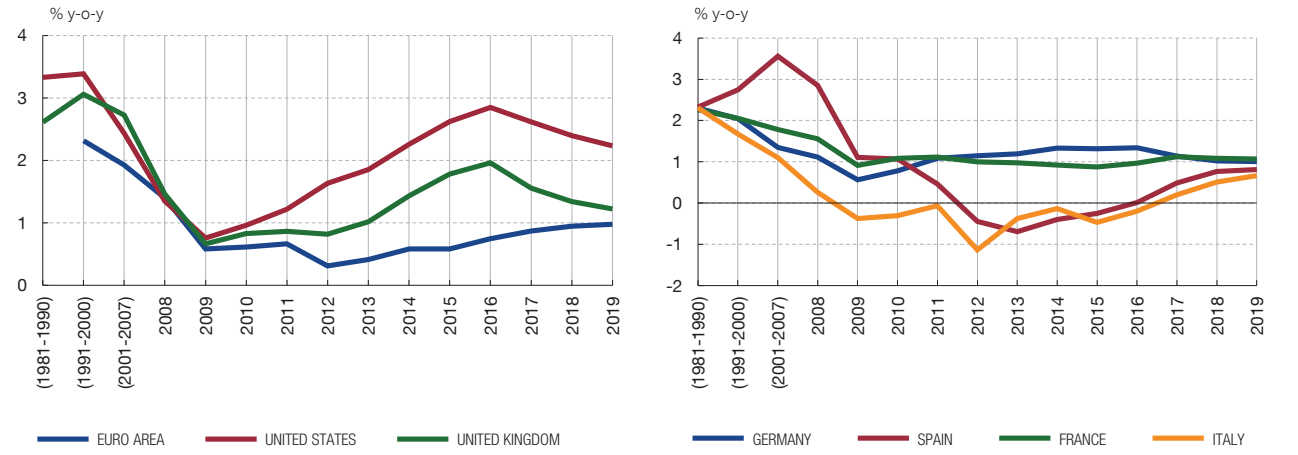
In any event, the effects of financial crises on potential GDP are an empirical question. The European Commission's forecasting exercises that are published regularly quantify, for a short and medium-term horizon, the evolution of potential growth using a production function, separating the contribution of labour, capital and total factor productivity.[24] The latest update, corresponding to the autumn 2014 forecast, shows that the crisis has prompted a substantial downward revision of potential growth rates in the short term in the main advanced economies, which, combined with a relatively slow recovery in the medium term (with somewhat lower rates compared to the pre-crisis period), would give rise to permanent losses in GDP. In terms of potential medium-term growth, there are substantial differences between countries: thus, while in some cases, such as the US, potential growth

23 Note that the effect on the participation rate is also ambiguous, given that in times of economic difficulties other household members may enter the labour market to help offset the decline in household income or wealth.

24 This procedure improves the potential growth estimates, in comparison to the simple extrapolation of the pre-crisis pattern. However, estimating potential growth is subject to many difficulties, since it is a non-observable variable and, therefore, its measurement depends on the method used to estimate it, the assumptions and simplifications made in each case, the data limitations and the econometric techniques used.

ESTIMATES OF POTENTIAL GROWTH OF PRINCIPAL ADVANCED ECONOMIES

CHART 9



SOURCE: European Commission. Autumn Forecast 2014.

rates are almost returning to their previous levels, in certain European economies the reductions are substantial (see Chart 9).

In the US, potential medium-term growth would be 2.2%, only slightly below the average for 2001-07 (2.4%), after posting a low of 0.8% during the crisis years. In the medium term, the contribution of capital and total factor productivity would decline slightly, while the contribution of the labour factor, which was negative during the crisis, would exceed its pre-crisis level.[25] In contrast, in the euro area, potential growth would drop from 1.9% before the crisis to 1% in the medium term, after reaching a low of 0.3% during the most intense period of the crisis in the region. By component, the contribution of the labour factor would be negligible, while the contribution of capital would be halved and that of total factor productivity would drop slightly. In the UK, potential growth would also fall substantially, from 2.8% to 1.2% in the medium term (after a low of 0.7% during the crisis), mainly due to the lower contribution of total factor productivity.

In any event, it is important to note that the pre-crisis potential growth rates might be over-estimated. The imbalances accumulated in that period would seem to indicate that such growth was not sustainable, so the output losses calculated today would be lower. In this context, certain recent studies have shown the importance of taking into account both financial factors and macroeconomic imbalances to estimate potential output.[26] The standard conceptual framework for identifying potential GDP, based exclusively on maintaining stable inflation, may no longer be appropriate, since it overlooks the fact that in the period prior to the recent crisis, although inflation was low and reasonably stable, other macroeconomic or financial imbalances increased.[27] The aforementioned studies propose

25 Gordon (2012) is much more pessimistic with respect to the possibilities of growth in the US in the medium term, in view of the combination of unfavourable demographics, growing inequality, less educational progress, the high public debt burden and slower productivity growth.

26 See Alberola et al. (2013) and Borio et al. (2013).

27 Potential growth is usually defined as output growth compatible with stable inflation, so that in the standard estimate the only imbalance taken into consideration is unemployment, which takes the form of inflationary pressures. However, in recent years, as a result of factors such as globalised production, product and labour market reforms and central banks' success in controlling inflation, the relationship between inflation and fluctuations in developed economies' activity has been less intense than in the past. Moreover, inflation appears to have decoupled from other external imbalances (high current account deficits) and internal imbalances (accelerated growth in credit or asset prices) and is no longer a sufficient synthesis of other economic imbalances [(Alberola et al. (2013)].

alternatives for estimating sustainable output using a broader set of indicators of imbalances, and their estimates of sustainable growth in countries with profound imbalances are generally lower than those based on the traditional definition in the pre-crisis phase.

In the longer term, regardless of the effects of the crisis, a substantial reduction can be expected in potential growth deriving from demographic factors, in particular from the fall in the working-age population.[28] This demographic decline, which began in Japan two decades ago but is now noticeable in many advanced economies, entails a decrease in the labour force and, therefore, in potential growth. The decline in the working-age population and the slower output growth may create a feedback loop, insofar as the slowdown in growth reduces immigration since there are fewer job opportunities. Also, the decline in the working-age population makes public and private debt less sustainable, since it distributes the associated burden between a stable or shrinking population, and the growing number of retirees entails higher spending on state pensions (and lower savings rates), all of which may impact the capacity for growth.

Apart from the effect on the demand for safe assets and real interest rates mentioned above, population ageing can have a negative impact on the price of other assets, such as housing, due to the contraction in demand, with potentially significant consequences for the balance sheets of households and financial institutions and, ultimately, growth. The decline in growth in the advanced economies over the next two decades could exceed 1 pp, in comparison with pre-crisis rates, due solely to demographic considerations,[29] although with notable differences from one country to another: countries most affected by the demographic decline (Germany, Italy and Japan) would record growth significantly below the rates seen in the decade from 1998 to 2007, while countries with a more favourable demographic outlook (the US and the UK) would record higher growth, although it would also be slower than in the decade before the crisis.

It should be noted, however, that even if the demographic prospects are not favourable for many advanced economies, other factors, such as the possibility of increasing the quantity and quality of production factors and allocating resources more efficiently, could boost productivity growth. In any event, this outlook poses significant challenges for economic policy, which must introduce the necessary reforms to be in a better position to face a potentially adverse growth scenario in the long term.

The role of economic policies in boosting growth

In short, the weakness of the recovery in the advanced economies, following the profound and prolonged financial crisis, is due both to cyclical and structural factors. In these circumstances, economic policies face a dual challenge: to stimulate demand in the short term, in order to close the output gap, and to introduce the reforms needed to boost potential growth. While negative output gaps persist, macroeconomic policies must maintain an expansionary stance. However, the high levels of public debt in many of these economies require that the leading role be given to monetary policy, which in turn is the subject of some debate as to its effectiveness and the risks associated with maintaining an ultra-expansionary stance for a long time.[30] Meanwhile, fiscal consolidation should continue in most of these economies, but gradually, so as not to hinder the consolidation of the recovery, and by means of credible measures, in order to achieve fiscal equilibrium in the medium term.

28 See Nuño et al. (2012).
29 See Nuño et al. (2012).
30 See, for example, Berganza et al. (2014).

Increasing global potential growth has become a priority for the main multilateral economic institutions. Particularly noteworthy is the implementation in the G20 of the Framework for Growth, an initiative that has made it possible, firstly, to identify the factors that have hampered recovery in the member countries and, subsequently, to demand the introduction of measures to overcome those obstacles. The progress made in implementing the reforms adopted as a result of this analysis will be supervised [OECD (2014)]. Among the measures to boost potential growth, a distinction can be drawn between those aimed at increasing production factor endowment (labour and capital), and those aimed at increasing productivity.

Job destruction in sectors such as real estate or finance, which had become too big in the latest expansionary phase, has driven up long-term unemployment since it has been difficult to relocate surplus workers to other industries, given their specific training. The discouragement effect, combined with regulations in some areas (employment, social insurance, tax) that have provided the wrong incentives, has contributed to reducing the participation rate. In the labour market, policies aimed at increasing worker training, raising the participation rate and reducing long-term unemployment are crucial.

Increasing the capital endowment of the economy is another essential factor in the expansion of potential growth. In particular, the modernisation of infrastructure is a key objective in certain advanced economies, requiring reforms that increase the provision of long-term financing (regulatory framework, promotion of public-private partnerships, removal of barriers to the entry of foreign capital in certain sectors), and improve management mechanisms to make infrastructure more profitable and more viable.

Higher economic productivity is linked to a shift in the technology frontier, or rather to the spread of technology to foster convergence. Various regulations hinder the achievement of significant productivity gains. At the domestic level, many sectors show a lack of competitiveness that can limit innovation. In certain advanced economies there is still scope to improve the business climate and to reinforce compliance with competition legislation. At the international level, restrictions on the entry of foreign competitors and a protectionist stance may also limit potential productivity gains.

Although there is a general consensus on the positive long-term impact of the above-mentioned structural reforms, in recent years there has been some debate about the appropriate moment to introduce them. It has been argued that structural reforms – particularly those intended to increase competitiveness in factor and product markets – adopted when monetary policy is limited by close-to-zero official interest rates might intensify the recession, heighten deflationary pressures and drive up real interest rates. However, it is also possible that the deflationary effects may be offset, even in the short term, by the improved expectations for growth and recovery of collateral values.[31]

Lastly, from a global standpoint, the possibility of global imbalances widening as the recovery process advances puts the achievement of sustainable growth rates in the medium term at risk. This is the line taken by the G20's habitual recommendations, advising reforms aimed at boosting domestic demand in surplus economies and reorienting the economy towards the external sector in deficit economies. In the case of the advanced economies, the recommendations for surplus economies focus on boosting investment, promoting the liberalisation of services and increasing public investment, while for deficit

31 Eggertsson et al. (2014) for the first argument and Andrés et al. (2014) for the counter argument.

economies the focus is on improving external competitiveness. Also, it is essential to intensify international cooperation in various areas (financial regulation, international trade and taxation) to avoid suboptimal outcomes. As regards trade, it is necessary to review some of the protectionist measures implemented as a result of the crisis, expand the liberalisation of services and reduce trade barriers in industrial and agricultural goods.

Conclusions

The recovery of the advanced economies following the Great Recession is markedly weak: growth rates are in general below pre-crisis trends and some economies have relapsed into recession. History suggests that crises with financial origins usually generate a more intense contraction of activity and a more gradual recovery of growth; in fact, the prolonged weakness of the advanced economies and their heavy reliance on monetary stimuli have led to repeated downward revisions of their growth projections.

Although the debate on the factors underlying the fragility of the current recovery phase remains open, it seems reasonable to assume that there are multiple causes. On the one hand, imbalances accumulated before the global financial crisis (high indebtedness and the excessive size of the financial and real estate sectors) curb a recovery in demand, and sluggish demand in turn hampers the correction of imbalances. But beyond this vicious circle of over-indebtedness and slack demand, the sluggishness of demand may also respond, in part, to higher saving and lower investment patterns, on a global scale, which have been present over the last three decades and have intensified as a result of the crisis.

On the other hand, the weakness of demand has affected the accumulation of physical capital and the quality of human capital (through the deterioration deriving from long-term unemployment). If it were to continue, it could have an impact, through hysteresis effects, on the potential growth of the economy. In any event, the empirical evidence points to a genuine reduction in potential growth associated with various factors: population ageing, lower investment rates and a slowdown in technological progress.

Against this backdrop, the challenges for economic policy are enormous and there are multiple areas of action. Demand policies must remain expansionary in order to close the negative output gaps and prevent a chronically weak demand scenario from becoming entrenched, but without overlooking the risks to the sustainability of public finances. Structural reforms are needed to reverse some of the downturn in potential growth: reforms that will increase productive factor accumulation and reforms that will facilitate genuine productivity gains.

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