The ECB is extending its QE programme but mixes up its communications

By Paul Hubert

On Thursday, March 10, after the meeting of its Governing Council, the European Central Bank (ECB) announced a series of additional measures for the quantitative easing of monetary policy. The aim is to prevent the onset of deflation and to boost growth in the euro zone. The key innovation lies in the measure for bank financing at negative rates. While the measures were well received by the markets at the time of the announcement, a lapse in Mario Draghi's communications during the press conference following the Board of Governors meeting greatly undercut some of the impact expected from the decisions taken.

What decisions were taken?

– The three key rates set by the ECB were lowered. The main refinancing rate went down from 0.05% to 0%, while the marginal lending rate was cut from 0.30% to 0.25%. Finally, the deposit facility rate, which compensates the excess reserves that banks hold on the ECB's balance sheets, is down from -0.30% to -0.40%. It thus now costs a bank more to have cash on the ECB's balance sheet.

– Quantitative easing (QE) has been extended in terms of its scale – securities purchases rose from €60 bn to €80 bn per month – but especially in terms of the types of securities eligible for purchase. While heretofore the ECB has bought government bonds (sovereign and/or local authority bonds), it will now buy high-quality corporate bonds, based on rating agency criteria. This measure is a direct response to the drying up of the supply of government securities and is expected to directly influence the conditions for corporations active on the bond markets.

– The most significant innovation concerns the new Targeted Longer-Term Refinancing Operations (TLTRO), which are intended to reboot the channels of bank lending and to provide financing to banks *on the condition that* they finance the real economy. These loans to banks will be at a zero or even negative rate, based on various criteria, including the amount of loans that the banks provide to households and businesses. In other words, the ECB will pay banks meeting these criteria, so that they in turn lend.

What is the expected impact?

The effect to be expected from these measures depends on the situation of the credit market. Numerous studies show that in normal times these measures have a positive effect on the economy. However, this holds true only if it is the *supply* of credit that is currently constricted in the euro zone. Conversely, if the problem lies in the demand for credit on the part of consumers and businesses who have poor prospects in terms of income and profits, then these measures will have little effect. In granting banks such favourable conditions, it is easy to imagine that the ECB is betting on increasing the solvent demand for credit, that is to say, that the ECB is providing banks with strong incentives to lend to households and individuals that might have appeared non-creditworthy in previous conditions. Another expected effect of the lower deposit facility rates and the increase in QE will pass through the channel of a lower exchange rate for the euro, which will promote euro zone exports and increase imported inflation, and therefore overall inflation in the euro zone. This channel is potentially even more important given that the US Federal Reserve has initiated a period of monetary tightening.

Nevertheless, a more relevant economic policy would be to make use of fiscal policy to support demand, especially as the conditions for State financing are at historically low levels: the French state in 2016 is earning money from issuing debt of less than 4 years. Monetary policy would then have all the more effect.

Why announce that there's no manoeuvring room left?

At the press conference following the meeting of the Governing Council, Mario Draghi announced that the ECB didn't expect "to reduce rates further", which had the effect of completely changing the financial markets' interpretation of the decisions announced just before that. While the aim of these very expansionary decisions is to further ease monetary and financial conditions and to lower the exchange rate for the euro, the announcement that future changes in the ECB's monetary policy could only be in a more restrictive direction transformed investor expectations.

As one of the main channels for the transmission of monetary policy involves expectations, several studies conducted on data from the US [1], Britain [2] and the euro zone [3] show that a central bank's communications need to be consistent with its decisions, otherwise the impact expected from monetary policy will be limited. This is called the "signal effect" of monetary policy. Mario Draghi's short statement is one such example. The following graph shows the exchange rate of the euro vis-à-vis the dollar during the course of 10 March. The sharp drop at mid-day corresponds to the publication of the decisions taken by the Board of Governors, while the equally sharp rise corresponds to the contradictory message issued a few minutes later at the press conference. We thus see that as a series of highly expansionary measures – one of whose goals is to push down the euro – was announced, the euro eventually rose vis-à-vis the US dollar as if restricting measures had been put in place.

This does not necessarily mean that these decisions will have no effect, but that some of the effect will be lessened, or even disappear. Some transmission channels other than the signal effect remain operative. While the exchange rate channel has now been limited by the restrictive effect generated by the channel of expectations, we will see in the weeks and months to come whether capital movements induced by the decisions taken will have the effect expected on the euro exchange rate.

Figure. Euro-dollar exchange rate, day of 10 March 2016.

Source: Boursorama.

[1] Hubert, Paul (2015), "The Influence and Policy Signalling Role of FOMC Forecasts", *Oxford Bulletin of Economics and Statistics*, 77(5), 655-680.

[2] Hubert, Paul, and Becky Maule (2016), "Policy and Macro Signals as Inputs to Inflation Expectation Formation", *Bank of England Staff Working Paper*, No. 581.

[3] Hubert, Paul (2015), "ECB Projections as a Tool for Understanding Policy Decisions", *Journal of Forecasting*, 34(7), 574-587, or Hubert, Paul (2016), "Disentangling Qualitative and Quantitative Central Bank Influence", *OFCE Working Paper*, No. 2014-23.

Matteo Renzi’s Jobs Act: A very guarded optimism

By Céline Antonin

At a time when the subject of labour market reform has aroused passionate debate in France, Italy is drawing some initial lessons from the reform it introduced a year ago. It should be noted that the labour market reform, dubbed the Jobs Act, had been one of Matteo Renzi’s campaign promises. The Italian labour market has indeed been suffering from chronic weaknesses, including segmentation, a duality between employees with and without social protection, high youth unemployment, and a mismatch between costs and labour productivity. Renzi’s reform takes a social-liberal approach, advocating flexicurity, with the introduction of a new permanent employment contract with graduated protection, lower social charges on companies, and better compensation and support for the unemployed. Although the initial assessment is surely positive in terms of both unemployment and job creation, there’s no cause for hasty triumphalism: the reform has been implemented in especially favourable circumstances, marked by a return of growth, an accommodative policy mix, and a stagnating work force.

***Jobs Act* Italian-style: The key points**

The Jobs Act is actually the latest in a series of measures adopted since the Fornero Act of 2012 that are aimed at a more flexible labour market. Act I of the Jobs Act, the Poletti Decree (DL 34/2014), was adopted on 12 May 2014, but went relatively unnoticed because it targeted fixed-term contracts and apprenticeships. It allowed in particular extending the duration of fixed-term contracts from 12 to 36 months, suppressing gap periods, and allowing for more fixed-term contracts to be renewed, all while limiting the proportion of fixed-term contracts within a single company[1].

The real change came with Act II of the Jobs Act, for which the Italian Senate passed enabling legislation on 10 December 2014. The eight implementing decrees adopted in the first half 2015 have four key points:

– The elimination of Article 18 of the Labour Code, which allowed reinstatement in cases of manifestly unfair dismissal: the reinstatement requirement was replaced by a requirement for indemnification that is capped[2], with reinstatement still being required in case of a dismissal involving discrimination;

– The creation of a new form of permanent (open-ended) contract and graduated protection, lying between permanent contracts and fixed-term contracts: dismissal was facilitated during the first three years on the job, with severance pay that increases with employee seniority;

– The suppression of the abuse of what are called "collaboration contracts", [3]precarious contracts that are often used to disguise an actual employment relationship, affecting about 200,000 people. These contracts will be transformed into wage labour contracts from 1 January 2016 (1 January 2017 for public administrations), except for a few limited cases;

– The reform of unemployment insurance, with an extension of compensation schemes. The benefit period, for instance, is extended to two years (from 12 months previously). As for compensation for short-time working ("technical unemployment"), this is extended to cover apprentices and companies with 5-15 employees[4]. A National Employment Agency (ANPAL), which introduces a one-stop system that helps to link training and employment, was also established.

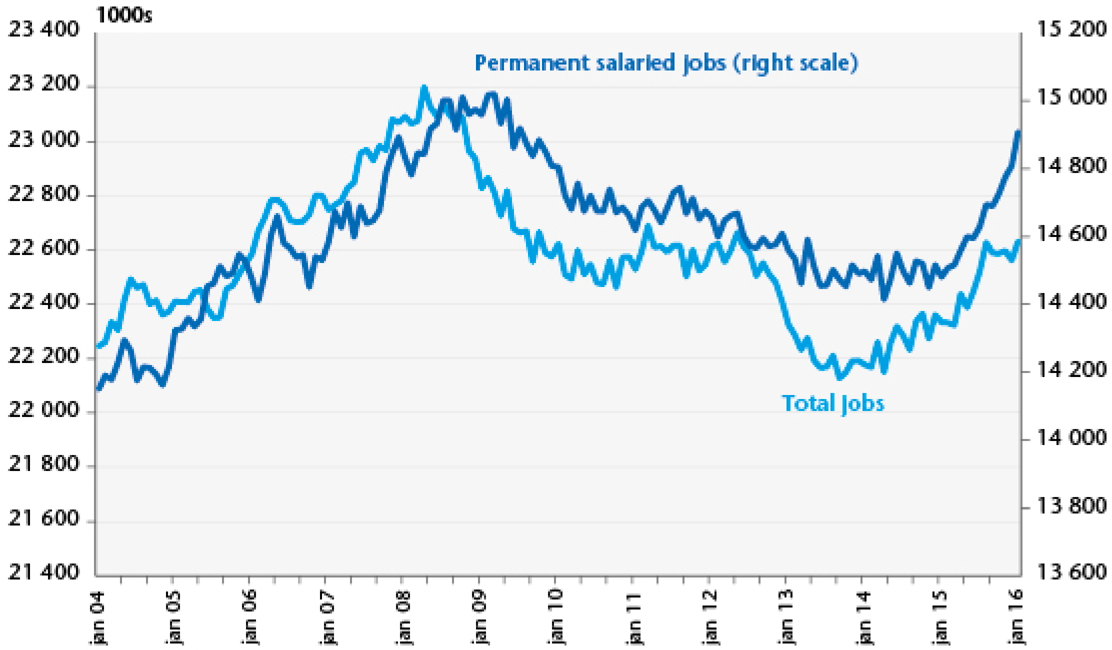
Note that only measures related to experimentation with a national minimum wage[5], which are contained in the enabling law in December 2014, were not addressed.

Alongside the Jobs Act, Italy opted to lower taxes on labour: in 2015, the wage part of the IRAP (equivalent to a business tax) for those employed on permanent contracts was eliminated, reducing the amount of the IRAP by about one-third. Above all, Italy's 2015 Budget Act eliminates social security contributions for 3 years on the new open-ended contracts with graduated protection, up to a limit of 8,060 euros per year for new hires taken on between January 1 and December 31, 2015 who did not have permanent job contracts in the six months preceding their hiring. This measure is expected to cost 3.5 billion euros between now and 2018. It was extended in 2016: companies that hire employees on the new permanent contracts in 2016 will be exempt from 40% of social security contributions for 2 years.

Strong jobs growth and a lower unemployment rate

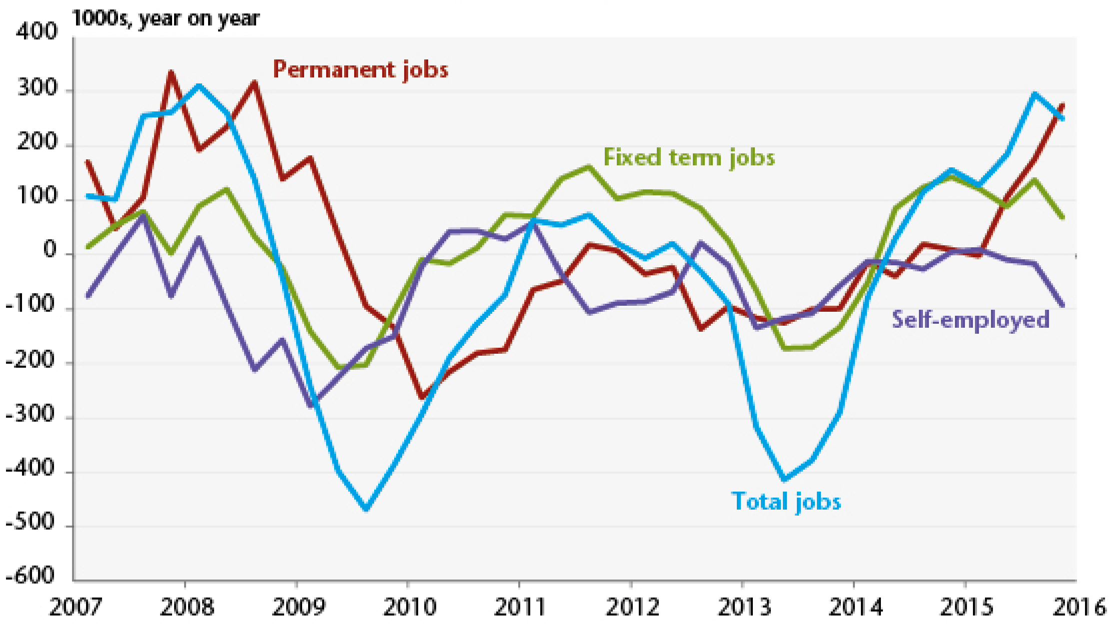
There has been strong growth in employment, in particular permanent jobs, since the start of 2015: between January 2015 and January 2016, the number of employed increased by 229,000, with strong growth in the number of salaried employees (+377,000) and a decline in the number of self-employed (-148,000). Among employees, there was a sharp increase in the number of permanent positions (+328,000). The number of permanent employees has now returned to the 2009 level of 22.6 million (Figure 1); as for total employment, even if it has not yet reached its pre-crisis level, the decline in the 2012-2014 period has been overcome. At the same time, the annual rate of job creation has returned to its pre-crisis level, with growth of about 250,000 per year (Figure 2).

Figure 1. Number of jobs (total and permanent), 2004-January 2016



Sources : Istat, author's calculations.

Figure 2. Annual change in number of jobs by contract type, Q1 2007 – Q4 2015

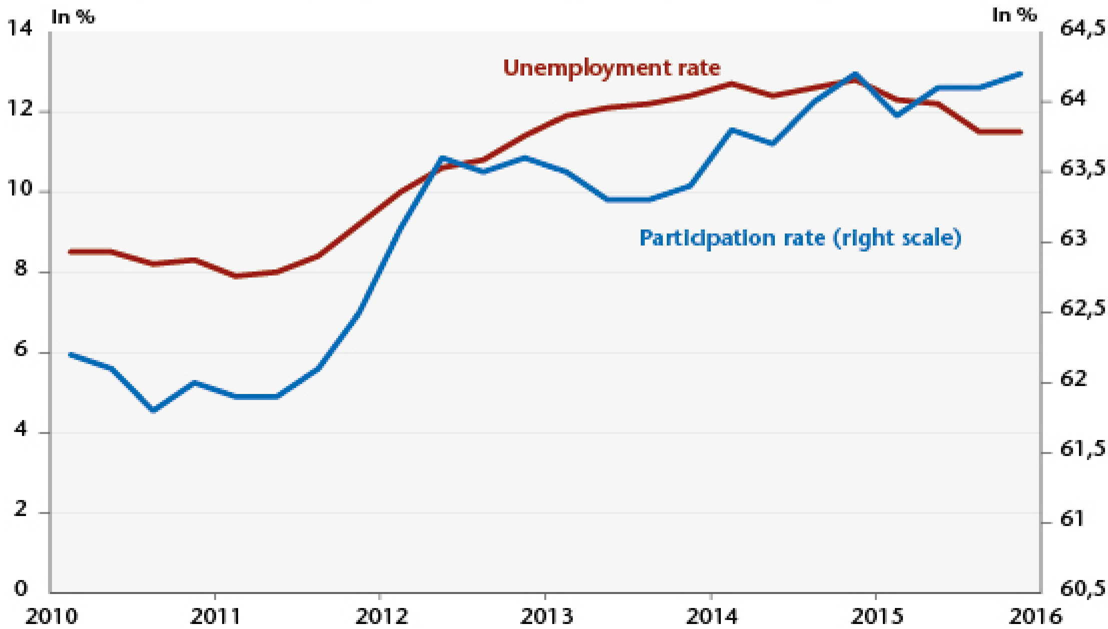


Sources : Istat, author's calculations.

In addition to new hires on permanent contracts, the Jobs Act has led to replacing precarious jobs with permanent jobs with increasing guarantees. Thus, 5.4 million new jobs were created in 2015 (+11% compared to 2014)[6], mainly permanent jobs. Of the 2.4 million permanent jobs created, there were 1.9 million new open-ended contracts and 500,000 fixed-term contracts that were converted into open-ended contracts (including 85,000 apprenticeship contracts), up sharply from 2014. There were also fewer collaboration contracts (a 45% decrease from Q3 2014 to Q3 2015) and apprenticeship contracts (-24.6%). Note also the 4.3% increase in the number of resignations and the 6.9% decrease in layoffs.

The corollary to this jobs growth is a marked fall in the unemployment rate (Figure 3), which fell to 11.4% in the last quarter of 2015 (from 12.8% one year earlier). However, the decline in unemployment was also due to stagnation in the labour force in 2015, unlike previous years that were marked by the pension reform.

Figure 3. Unemployment rate and participation rates, 2010-2015



Sources : Istat, author's calculations.

Uncertainties remain

Matteo Renzi seems to have won his bet. Yet this fall in unemployment should not be over-interpreted, as a number of positive factors have undoubtedly contributed to strengthening this trend.

First, there was a windfall effect related to the announcement of the exemptions on social contributions for hiring new permanent employees, which led some companies to put off new hiring planned for 2014 until 2015 (which led to a rise in unemployment in late 2014). Moreover, part of the fall in unemployment is related to the impact of replacing precarious short-term contracts with the new permanent contracts with graduated protection (see above). The question is whether the new flexibilities allowed by these new contracts will be used over the next three years, and consequently whether there will be an increase in contract terminations.

In addition, the stagnation of the work force (Figure 3) has significantly amplified the downward trend in unemployment. With the improvement observed in the labour market, we expect in the future that the growth in the workforce that began in the last quarter of 2015 will continue due to what is called in French an "effet de flexion", or "bending effect", [7] which would absorb some of the impact of the job creation in 2016 and 2017.

Furthermore, the Jobs Act was adopted when the economy was emerging from a recession, with a recovery that, while soft (+0.6% growth in 2015), still exceeded the growth potential [8]. The easing of fiscal constraints had a stimulus effect in 2015, which may partially explain the fall in unemployment. As for monetary conditions, they are particularly favourable, as Italy is one of the main beneficiaries of the quantitative easing measures taken by the ECB.

Notwithstanding these qualifications, it is undeniable that the cut in the social contributions level has had a positive impact. The February 2016 report of the National Social Security Institute (INPS) showed that, of the 2.4 million new permanent jobs created in 2015, 1.4 million benefited from exemptions on employer contributions, or almost two-thirds of these new jobs. Moreover, the reduction of precarious job contracts and their replacement by permanent contracts, even if they offer less protection than before, is a rather encouraging sign for access to long-term employment by groups that have traditionally been more marginal (self-employed, collaboration contracts).

Perhaps the main regret about this reform is the absence of a component aimed explicitly at vocational training, which is one of the main weaknesses of Italy's labour market. The country holds a dismal EU record for the number of young people (15-24) who are neither in employment nor in school or training. Moreover, the workforce has insufficient training, and investment in research and development is low, which results in low productivity. It is legitimate to want to take action on labour costs and the duality of the labour market, but this will not be enough to solve the problem of productivity and the inadequacy of the workforce. Matteo Renzi would therefore do well to foresee an Act III in his labour reforms to finally pull the country out of its stagnation.

[1] See C. Antonin, Réforme du marché du travail en Italie : Matteo Renzi au pied du mur, [Labour market reform in Italy: Matteo Renzi with his back to the wall], *Note de l'OFCE no. 48.*

[2] The monetary payment is determined by a scale based on the employee's seniority. It is equivalent to two months of the final salary per year of service, for a total that cannot be less than 4 months of salary and is capped at 24 months.

[3] "Intermediate status between salaried employment and self-employment, for workers not subject to a hierarchical subordination but 'coordinated' with the company and creator of certain social rights. These are self-employed workers who are, in fact, dependent on a single client company (which exercises limited management powers, for example in terms of the organization of work and the working time)." E. Prouet, Contrat de travail, les réformes italiennes [The job contract,

the Italian reforms], France Stratégie, *La Note d'Analyse*, no. 30, May 2015.

[4] Other measures concerning short-time work ("chomage technique") are also planned, including that an employee on short-time work may not have their hours cut by more than 80% of their total work hours. Furthermore, the period during which a company may resort to this procedure is a maximum of 24 months over five rolling years.

[5] There is no national minimum wage in Italy, with minimum wages instead set at the industry level, as was the case in Germany before 2015.

[6] This figure of 5.4 million represents gross job creation, including all forms of employment (including very short-term contracts), and without taking into account job destruction. In terms of net job creation between January 2015 and January 2016, we accept the figure of 229,000.

[7] When unemployment rises, working-age people are discouraged from reporting for the labour market. Conversely, when employment picks up again, some people are encouraged to return to the labour market, slowing the decline in unemployment; this phenomenon is called the "effet de flexion" in French, or the bending effect.

[8] Labour productivity tends to grow relatively slowly in Italy; consequently, an increase in production tends to create more jobs in Italy than in France for example, where labour productivity is higher.

Do QE programmes create bubbles?

By Christophe Blot, Paul Hubert and Fabien Labondance

Has the implementation of unconventional monetary policies since 2008 by the central banks created new bubbles that are now threatening financial stability and global growth? This is a question that comes up regularly (see here, here, here or here). As Roger Farmer shows, it is clear that there is a strong correlation between the purchase of securities by the Federal Reserve – the US central bank – and the stock market index (S&P 500) in the United States (Figure 1). While the argument may sound convincing at first glance, the facts still need to be discussed and clarified. First, it is useful to remember that correlation is not causation. Secondly, an increase in asset prices is precisely a transmission channel for conventional monetary policy and quantitative easing (QE). Finally, an increase in asset prices cannot be treated as a bubble: developments related to fundamentals need to be distinguished from purely speculative changes.

Higher asset prices is a factor in the transmission of monetary policy

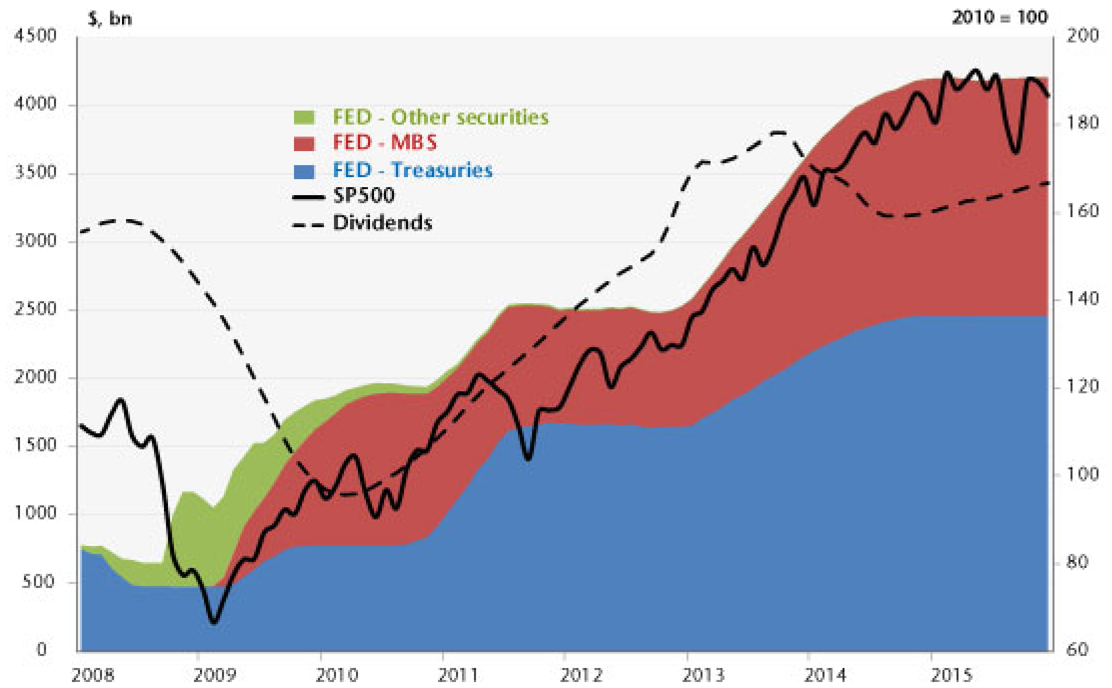
If the ultimate goal of central banks is macroeconomic stability [1], the transmission of their decisions to the target variables (inflation and growth) takes place through various channels, some of which are explicitly based on changes in asset prices. Thus, the effects expected from QE are supposed to be transmitted in particular by so-called portfolio effects. By buying securities on the markets, the central bank encourages investors to reallocate their securities portfolio to other assets. The objective is to ease broader financing conditions for all economic agents, not just those whose securities are targeted by the QE programme. In doing this, the central bank’s actions push asset prices up. It is therefore not surprising to see a rise in equity prices in connection with QE in the US.

Every increase in asset prices is not a bubble

Furthermore, it is necessary to make sure that the correlation between asset purchases and their prices is not just a statistical artefact. The increase observed in prices may also reflect favourable fundamentals and be due to improved growth prospects in the United States. The standard model for determining the price of a financial asset identifies its price as equal to the present value of anticipated income flows (dividends). Although this model is based on numerous generally restrictive assumptions, it nevertheless identifies a first candidate, changes in dividends, to explain changes in stock prices in the United States since 2008.

Figure 1 shows a clear correlation between the series of dividends [2] paid and the S&P 500 index between April 2010 and October 2013. Part of the rise in equity prices can be explained simply by the increase in dividends: the usual determinant of stock market prices. Looking at this indicator, only the period starting at the beginning of 2014 could then indicate a disconnect between dividends and share prices, and thus possibly point to an over-adjustment.

Figure 1. Quantitative easing and stock market prices in the US

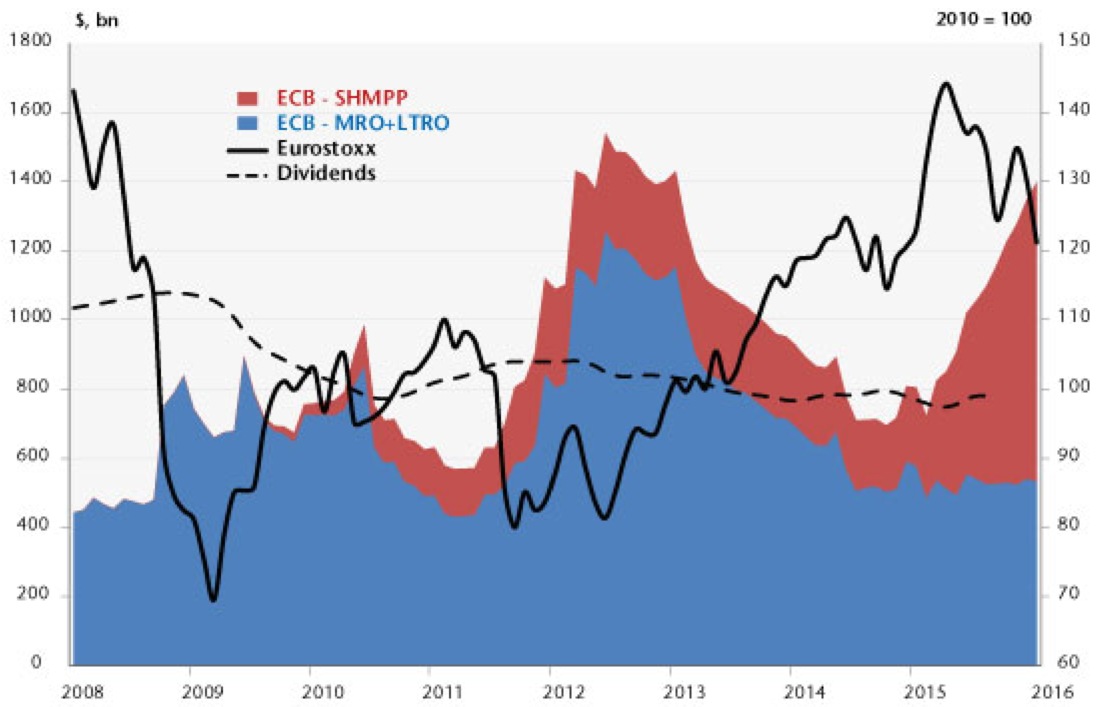


Sources: Datastream, Federal Reserve, and Bureau of Economic Analysis.

A correlation that isn't found in the euro zone

If the theory that unconventional monetary policies create bubbles is true, then it should also be observed in the euro zone. Yet performing the same graph as the one for the United States does not reveal a link between the liquidity provided by the European Central Bank (ECB) and the Eurostoxx index (Figure 2). The first phase in the increase in the size of the ECB's balance sheet, via its refinancing operations starting in September 2008, came at a time when stock markets were collapsing, following the bankruptcy of Lehman Brothers. Likewise, the very long-term refinancing operations carried out by the ECB at the end of 2011 do not seem to be correlated with the stock market index. The rise in share prices coincides in fact with Mario Draghi's statement in July 2012 that put a halt to concerns about a possible breakup of the euro zone. It is of course possible to argue that the central bank has played a role, but any link between liquidity and asset prices is simply not there. At the end of 2012, the banks paid back their loans to the ECB, which reduced the cash in circulation. Finally, the recent period is once again illustrating the fragility of the argument that QE creates bubbles. It is precisely at a time when the ECB is undertaking a programme of large-scale purchases of securities, along the lines of the Federal Reserve, that we are seeing a fall in world stock indices, in particular the Eurostoxx.

Figure 2. Quantitative easing and the stock market index in the euro zone



Sources: Datastream, ECB, and Eurostat.

So does this mean that there is no QE-bubble link?

Not necessarily. But to answer this question, it is necessary first to identify precisely the portion of the increase that is due to fundamentals (dividends and companies' share prospects). A bubble is usually defined as the difference between the observed price and a so-called fundamental value. In a forthcoming working paper, we endeavour to identify periods of over- or undervaluation of a number of asset prices for both the euro zone and the United States. Our approach involves estimating different models of asset prices and thereby to extract a component that is unexplained by fundamentals, which is then called a "bubble". We then show that for the euro zone, the ECB's monetary policy broadly speaking (conventional and unconventional) does not seem to have a significant effect on the “bubble” component (unexplained by fundamentals) of asset prices. The results are stronger for the United States, suggesting that QE might have a significant effect on the “bubble” component of some asset prices there.

This conclusion does not mean that the central banks and the regulators are impotent and ignorant in the face of this risk. Rather than trying to dissect every movement in asset prices, the central banks should focus their attention on financial vulnerabilities and on the ability of agents (financial and non-financial) to absorb sharp fluctuations in asset prices. The best prevention against financial crises thus consists of continuously monitoring the risks being taken by agents rather than trying to limit variations in asset prices.

[1] We prefer a broad definition of the end objective that takes into account the diversity of institutionalized formulations of the objectives of central banks. While the mandate of the ECB is primarily focused on price stability, the US Federal Reserve has a dual mandate.

[2] The series of dividends paid shows strong seasonality, so this has been smoothed by a moving average over 12 months.

A new EU arrangement for the United Kingdom: European lessons from the February

19th agreement

By Catherine Mathieu and Henri Sterdyniak

Following the demand made by David Cameron on 10 November 2015 for a new arrangement for the United Kingdom in the European Union, the European Council came to an agreement at its meeting of 18 and 19 February. On the basis of this text, the British people will be called to the polls on 23 June to decide whether to stay in the EU. This episode raises a number of questions about the functioning of the EU.

– The United Kingdom has challenged European policy on matters that it deems crucial for itself and largely got what it wanted. Its firmness paid off. This has given rise to regrets on this side of the Channel. Why didn't France (and Italy) adopt a similar attitude in 2012, for instance, when Europe imposed the signing of the fiscal treaty and the implementation of austerity policies? This is a cause for concern: will what has been accepted for a big country be tolerated for a smaller one? The UK's threat to leave is credible because the EU has become very unpopular among the population (especially in England), and because the UK is independent financially (it borrows easily on the capital markets) and economically (it is a net contributor to the EU budget). A country that is more dependent on Europe would have little choice. This raises worries: won't we see other countries follow suit in the future? Will Europe be able to avoid becoming a Europe á la carte (each country taking part in the activities that interest it)? But is a model based on forced participation preferable? Europe must allow a country to abstain from policies that it deems harmful.

– The United Kingdom will therefore organize a referendum, which is satisfactory from a democratic perspective. The most recent referendums have hardly yielded favourable results for European construction (France and the Netherlands in 2005, Greece in July 2015, Denmark in December 2015). The British will be limited to choosing between leaving the EU (the February agreement clearly rejects the possibility of new renegotiations if the referendum results in a majority in favour of an EU exit) or staying with a reduced status; the possibility of the UK remaining in the EU and seeking to strengthen its social dimensions, as advocated by some of the Labour Party and the Scottish Nationalists, will not be offered. Too bad.

– The United Kingdom is explicitly exempted from the need to deepen the EMU or from an “ever closer union” or “deeper integration”, all formulas contained in the treaties. The proposed arrangement clarifies that these notions are not a legal basis to extend the competences of the EU. States that are not members of the euro zone retain the right to take part or not in further integration. This clarification is, in our opinion, welcome. It would not be legitimate for the Union’s powers to be extended continuously without the consent of the people. In the recent period, the five presidents and the EU Commission have proposed new steps towards European federalism: creating a European Fiscal Committee; establishing independent Competitiveness Councils; conditioning the granting of Structural Funds on fiscal discipline; implementing structural reforms; creating a European Treasury department; moving towards a financial union; and partially unifying the unemployment insurance systems. These moves would strengthen the technocratic bodies to the detriment of democratically elected governments. Wouldn’t it be necessary to explicitly request and obtain the agreement of the peoples before embarking on such a path?

– The exit of the United Kingdom, a certain distancing by some Central and Eastern Europe countries (Poland, Hungary), plus the reluctance of Denmark and Sweden could push towards an explicit move to a two-tier Union, or even, to take David Cameron’s formulation, to an EU in which countries are heading to different destinations. The countries of the euro zone would for their part accept new transfers of sovereignty and would build a stronger fiscal and political union. In our opinion this proposal should be submitted to the people.

– At the same time, the draft agreement provides that the Eurogroup has no legislative power, which remains in the hands of the Council as a whole. The UK has had it clarified that a non-member state of the euro zone could ask the European Council to take up a decision on the euro zone or the banking union that it believes harms its interests. The principle of the euro zone's autonomy has thus not been proclaimed.

– The United Kingdom has had it clarified that it is not required to contribute financially to bail out the euro zone or the financial institutions of the banking union. This may be considered discomforting vis-à-vis the European principle of solidarity, but it is understandable. This is because the establishment of the euro zone has abolished the principle: "Every sovereign country is fully backed by a central bank, a lender of last resort", which is posed by the bailout problem. The UK (and its banks) are backed by the Bank of England.

– The United Kingdom has had the principles of subsidiarity reviewed. A new provision states that parliaments representing 55% of the Member States may challenge a law that does not respect this principle. The UK has had it noted that the issues of justice, security, and liberty remain under national competence. It is a pity that countries devoted to their specific social systems and their wage bargaining systems have not done the same.

– It is understandable that countries concerned about national sovereignty are annoyed (if not more) by the EU's relentless intrusions into areas under national jurisdiction, where Europe's intervention does not bring added value. It is understandable that these countries are refusing to have to incessantly justify to Brussels their economic policies or their economic, social or legal regulations when these have no impact on other Member States. Europe must undoubtedly take these feelings of exasperation into account.

– As regards the banking union, the draft text is deliberately confusing. It is recalled that the “single rule book” managed by the European Banking Agency (EBA) applies to all banks in the EU, and that financial stability and equal competitive conditions must be guaranteed. But at the same time, it says that Member States that do not participate in the banking union retain responsibility for their banking systems and can apply special provisions. Moreover, countries that are not members of the euro zone have a right of veto on the EBA. This raises the question of the very content of the banking union. Will it make it possible to take the measures needed to reduce the scale of speculative financial activity in Europe and steer the banks towards financing the real economy? Or is the objective to liberalize the markets for the development of financial activity in Europe so as to compete with London and non-European financial centres? In the first case, what was needed was to clearly take in hand the market in London, telling it that membership in the EU requires close monitoring of financial activities. And that its departure would allow the EU to take capital control measures to limit speculative activities and encourage banks in the euro zone to repatriate their activities.

– Likewise, Belgium, Luxembourg, the Netherlands and Ireland would have needed to be told that EU membership means the end of tax avoidance schemes for the multinationals.

– The United Kingdom has had a declaration passed affirming the need both to improve regulations and repeal unnecessary provisions to improve competitiveness while at the same time maintaining high standards of protection for consumers, labour, health and the environment. This compatibility undoubtedly amounts to wishful thinking.

– The text recognizes that the disparity in wage levels and social protection in European countries is hardly compatible with the principle of the free movement of persons in Europe. This has long been an unspoken part of European construction. The United Kingdom, which was one of the only countries not to take interim measures to restrict the entry of foreign workers at the time of the accession of central and eastern European countries in 2004, is now demanding that such measures be provided for in any future accessions. The draft agreement states that a European person's stay in a country other than his or her own is not the responsibility of the host country, meaning that the person either must have sufficient resources or must work.

– The question of the right to family benefits when children are not living in the same country as their parents is a tangled web. In most countries, family benefits are universal (not dependent on parental contributions). Both principles cannot be met at the same time: that all children living in a country are entitled to the same benefit; and that everyone working in a given country is entitled to the same benefits. The United Kingdom has won the right to be able to reduce these allowances based on the standard of living and family benefits in the child's country of residence. But fortunately this right cannot be extended to pension benefits.

– Most European countries currently have mechanisms to promote the employment of unskilled workers. Thanks to exemptions on social contribution, to tax credits and to specific benefits (like in-work credits or housing benefits in France), the income that they receive is largely disconnected from their wage costs. The British example shows that these programmes can become problematic in case of the free movement of workers. How does a country encourage its own citizens to work without attracting too many foreign workers? Here is another of the unspoken issues of open borders. It is paradoxical that it is the United Kingdom that is raising the question, while it is near full employment and is claiming that the flexibility of its labour market allows it to easily take in foreign workers. In any case, the UK was granted that a country facing an exceptional influx of workers from other EU Member States can obtain the right from the Council, for seven years, to grant non-contributory aid to new workers from other member countries in a graduated process over a period of up to four years from the start of their employment. The UK has also had it clarified that it can use this right immediately. This is a challenge to European citizenship, but this concept had already been chipped away for the inactive and unemployed.

The European Union, as currently constructed, poses many problems. The Member States have divergent interests and views. Because of differences in their national situations (the single monetary policy, freedom of movement of capital and people), many arrangements are problematic. Rules without an economic foundation have been introduced into fiscal policy. In many countries, the ruling classes, the political leaders, and the top officials have chosen to minimize these problems so as not to upset European construction. Crucial issues concerning the harmonization of taxes, social conditions, wages and regulations have been deliberately forgotten.

The UK has always chosen to keep its distance from European integration, safeguarding its sovereignty. Today it is putting its finger on sensitive points. To rejoice at its departure would be irrelevant. To use this to move mindlessly towards an “ever closer union” would be dangerous. Europe should seize this crisis to acknowledge that it has to live with a contradiction: national sovereignty must be respected as much as possible; Europe has no meaning in and of itself, but only if it implements a project that supports a specific model of society, adapting it to integrate the ecological transition, to eradicate poverty and mass unemployment, and to solve European imbalances in a concerted and united manner. If the agreement negotiated by the British could contribute to this, it would be a good thing – but will Europe's countries have the courage to do so?

Unemployment: an ambiguous fall, but an unambiguous rise in long-term jobless

Analysis and Forecasting Department (France team)

The unemployment figures for the month of January 2016 published by France's Pôle Emploi job centre show a fall of 27,900 in the number of job seekers who are not working (category A), which follows an increase recorded in the month of December (+15,800). While this fall might seem encouraging (a decline of this magnitude has not been seen since 2007), it must be qualified. First, recent changes in administrative practices made by Pôle Emploi [1] have resulted in an abnormal increase in exits from the jobless rolls due to failures to update (239,000, against a monthly average of 207,000 in 2015). Second, the high volatility of the monthly figures in recent months is a sign of a labour market in which job creation is insufficient to reduce unemployment on a sustainable basis.

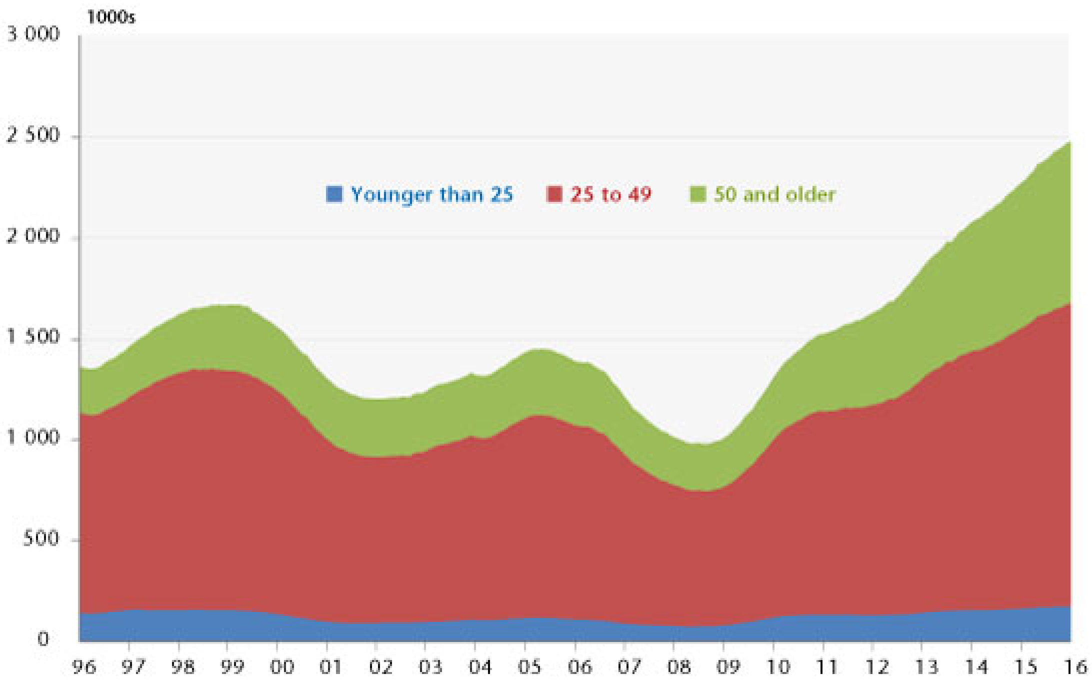
It is true that the increase in the numbers exiting the job centre due to regaining work (+ 5.1% over three months) is a positive sign, suggesting that the expected recovery is underway. Nevertheless, even though a pickup in employment has occurred, it has not been strong enough to halt the steady rise in the number of long-term unemployed (+9.1% in one year). Thus, in a context of near-zero average growth since

2008 and a continuing deterioration in the labour market, the share of the unemployed registered for a year or more in categories A, B or C has increased since mid-2009 (by 31% approximately) and is now at a historical high, representing 45.4% of all jobseekers in categories A, B or C (Figure 1).

This increase is explained by the rise in unemployment among older workers (+ 8.9% yoy): the implementation of a series of pension reforms (2003, 2010), coupled with the elimination of job search waivers for seniors, has led to prolonging the working life and to a later retirement age. In a context of weak growth, the increase in the employment rate of older workers has been insufficient to absorb the growth in the working population in this age group, with a consequent rise in unemployment among those over age 50 (see La suppression de la Dispense de recherche d'emploi: quand les gouvernements augmentent volontairement le décompte des chômeurs ! [The elimination of job search waivers: when governments voluntarily increase the unemployment count – *in French]*.

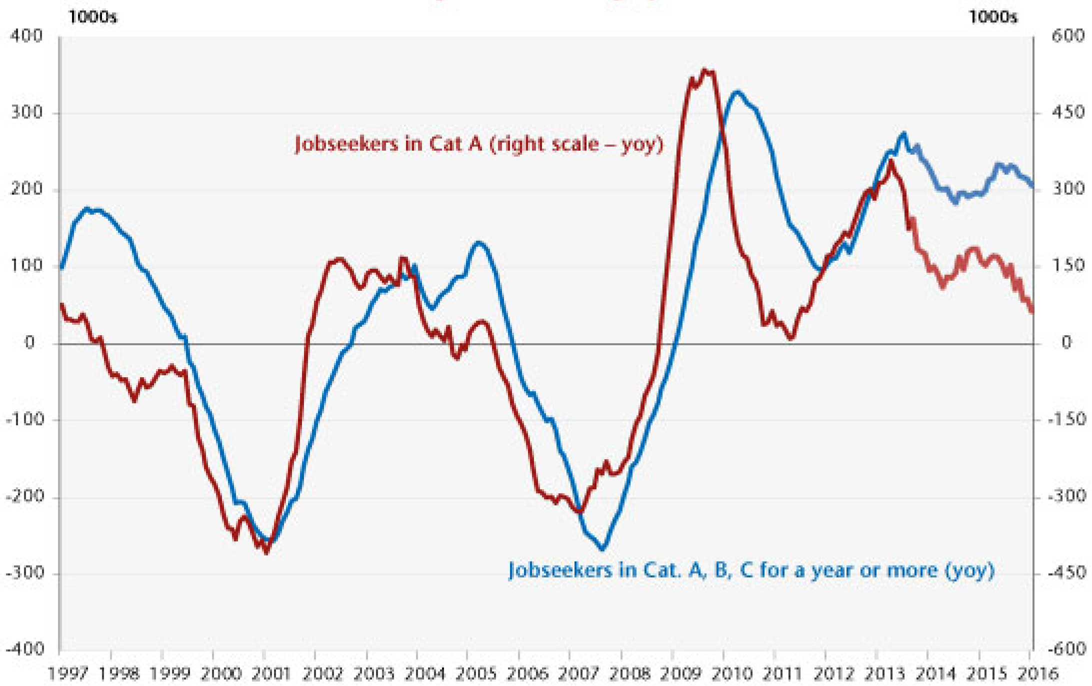
The relative improvement in the labour market expected in the coming months would stem from a slight improvement in growth and from the implementation of a training plan for the unemployed, announced by President François Hollande in late December 2015. However, it will take a long time for this improvement to affect the long-term unemployed. Indeed, the time taken for a fall in the numbers of Category A jobless to be transmitted to the long-term unemployed is relatively long (Figure 2). In the late 2000s, a period that saw a significant drop in jobless numbers, it took almost a year and a half for the fall in Category A jobless to result in a significant drop in the number of the long-term unemployed. The mechanisms for a pickup in jobs are clearly subject to considerable inertia.

Figure 1. Jobseekers recorded for a year or more in Category A, B or C, based on age



Sources: Pôle Emploi job center; Dares; OFCE calculations.

Figure 2. Jobseekers registered in Categories A, B or C for a year or more and jobseekers registered in Category A



Sources: Pôle Emploi job center; Dares; OFCE calculations.

[1] Because of this change in methodology, the unemployed have had one day less to complete their updates, leading in practice to a significant increase in the number of those

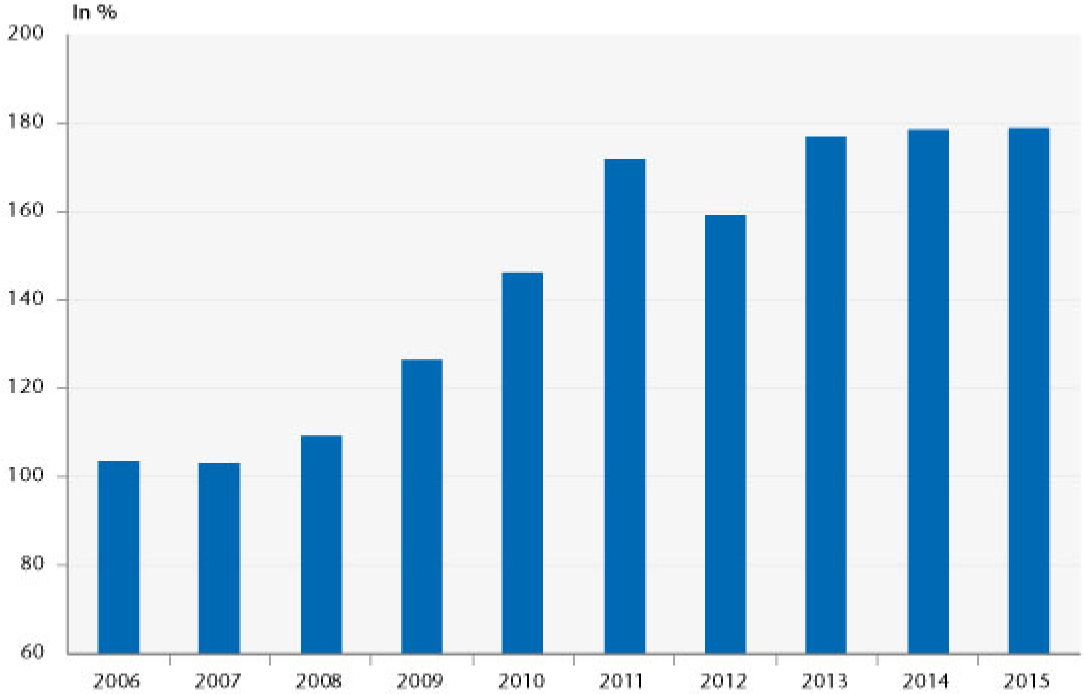
struck off due to a failure to update (+1.5% in three months).

Why can’t Greece get out of debt?

By Sébastien Villemot

Between 2007 and 2015, Greece’s public debt rose from 103% to 179% [1] of its GDP (see chart below). The debt-to-GDP ratio rose at an uninterrupted pace, except for a 12-point fall in 2012 following the restructuring imposed on private creditors, and despite the implementation of two macroeconomic adjustment programs (and the beginning of a third) that were aimed precisely at redressing the Greek government’s accounts. Austerity has plunged the country into a recessionary and deflationary spiral, making it difficult if not impossible to reduce the debt. The question of a further restructuring is now sharply posed.

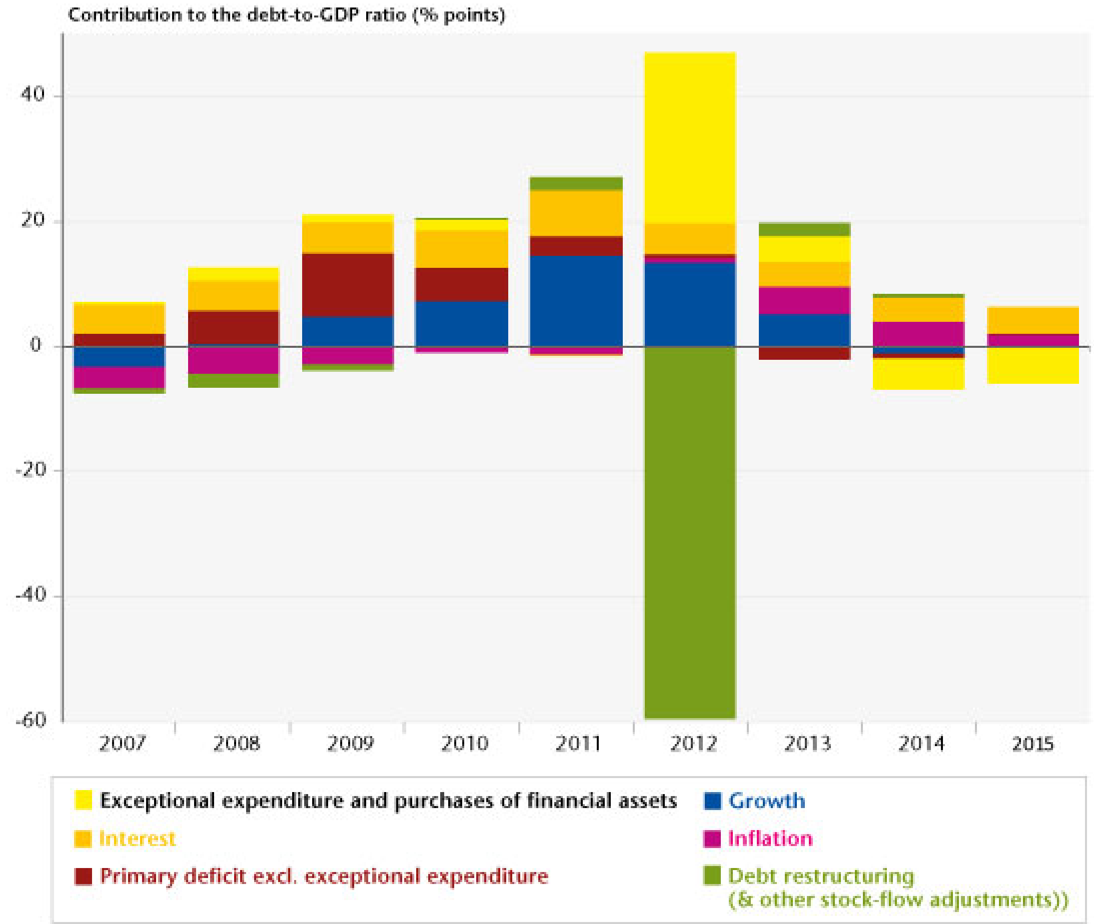
Figure 1. Greece's public debt as % of GDP, 2006-2015



Sources: Eurostat, European Commission..

What explains this failure? How much have the various factors involved (public deficit, austerity, deflation, restructuring, bank recapitalization, etc.) contributed to changes in the debt? To provide some answers, we conducted an accounting breakdown of the changes in the debt ratio: the result is given in the graph below for the period 2007-2015.

Figure 2. Accounting breakdown of changes in the debt ratio



Sources: Eurostat, European Commission, author's calculations.

Several phases, which correspond to various developments in the Greek crisis, are clearly identifiable on the chart.

In 2007, prior to the financial storm, the GDP-to-debt ratio was stable: the negative effect of the budget deficit (including interest), which increases the ratio's numerator, was offset by the positive impact of growth and inflation, which increase the denominator. So the situation was stable, at least temporarily, even though the debt level was already high (103% of GDP, which also explains the significant interest burden).

This stability was upset with the onset of the global financial crisis in 2008 and 2009: growth disappeared and even entered negative territory, while the primary deficit was rising, partly due to the "automatic stabilizers", and by 2009 came to 10 percentage points of GDP.

Given the intensity of the fiscal crisis, an initial adjustment plan was implemented in 2010. As the austerity measures began to bite, the primary deficit began to fall (to almost zero in 2012, excluding extraordinary expenses). But austerity also resulted in intensifying the recession: in 2011, growth (very negative) contributed nearly 15 GDP points to the increase in debt. Austerity also led to reducing inflation, which dropped to almost zero, and which is therefore no longer playing its natural role of cushioning debt. Meanwhile, the interest burden remained high (rising to 7.2 GDP points in 2011).

It should be recalled that the accounting breakdown presented here tends to underestimate the negative impact of growth and to overestimate the impact of the budget deficit. Indeed, a recession generates a cyclical deficit, through the automatic stabilizers, and therefore indirectly contributes to debt through the channel of the budget balance. However, to identify the structural and cyclical components of the budget deficit, an estimate of potential growth is needed. In the Greek case, given the depth of the crisis, this exercise is quite challenging, and the few estimates available diverge considerably; for this reason, we preferred to stick to a purely accounting approach.

2012 was a year for big manoeuvres, with two successive debt restructurings in March and December. On paper, there was a substantial cancellation of debt (measured in terms of the stock-flow adjustment): almost 60 GDP points. But what should have been a significant reduction was largely offset by opposing forces. The recession remained exceptionally intense and accounted for 13.5 GDP points of the increase in debt. Above all, the main negative effect came from bank recapitalizations, which were necessitated by the writing off of public debt securities, which were largely held by domestic banks. In accounting terms, these recapitalisations take two forms: grants to banks (recorded as extraordinary expenses) or purchases of newly issued shares (recorded as purchases of financial assets) [2], which is why these two categories are grouped on the graphic. The category of purchases of financial assets also recognizes the establishment of a financial cushion to finance future bank recapitalizations [3].

In 2013, the debt-to-GDP ratio once again rose sharply, even though the primary balance (excluding exceptional expenses) showed a surplus. Bank recapitalizations (19 billion euros) were a heavy burden and were only partially covered by the sale of financial assets. The recession, although less intense, and deflation, now well established, made the picture even gloomier.

In 2014 and 2015, the situation improved, but without leading to any decline in the debt-to-GDP ratio, even though the primary deficit excluding exceptional spending was almost zero. Deflation persisted, while growth failed to restart (the 2014 upturn was moderate and short-lived), and the banks had to be recapitalized again in 2015 (for 5 billion euros). The interest burden remained high, despite the decision of the European creditors to lower rates on the loans from the European Financial Stability Facility (EFSF): several years would be needed before this shows up in the effective interest burden. Only the sales of financial assets made it possible to hold down the increase in debt, which is clearly not sustainable in the long run since there is a limited stock of these assets.

The table below shows the cumulative contribution of each factor for the period as a whole, and for the sub-period during which Greece was under programme (2010-2015).

Cumulative contribution of each factor

	2007-2015	2010-2015
Growth	41.7	39.7
Inflation	-1.8	8.7
Primary deficit excl. exceptional expenditure	23.9	6.2
Interest	44.7	30.3
Exceptional expenditure & purchase of fin. assets	25.7	22.1
Debt restructuring (& other stock-flow adjustments)	-58.7	-54.6
Total	**75.4**	**52.4**

Sources: Eurostat, European Commission, author's calculations..

The two main contributors to the increase in debt are growth (negative) and the cost of interest. In other words, the total increase in debt is due primarily to a "snowball effect", which means the automatic increase due to the differential between the real interest rate and growth (the infamous "r-g"). The debt forgiveness in 2012 was not even sufficient to offset the snowball effect accumulated over the period. The bank recapitalizations that became necessary due in particular to the cancellation of debt were a heavy burden. The primary deficit, which is under the more direct control of the Greek government, comes only in 4th position from 2007 to 2015 (and doesn't contribute much at all over the period 2010-2015).

It is therefore clear that the sharp rise in the debt-to-GDP ratio since 2007 (and especially since 2010) was not primarily the result of the Greek government's fiscal irresponsibility, but resulted instead from an erroneous consolidation strategy that was based on a logic of accounting austerity and not on coherent macroeconomic reasoning. An upturn in growth and inflation will be necessary to achieve any substantial debt reduction. But the new austerity measures set out in the third adjustment plan could cause a return to recession, while the constraints of price competitiveness within the euro zone make it impossible to foresee any renewal of inflation. A significant reduction of debt that is not conditional on a new destructive phase of austerity would allow a fresh start; in a previous study[4], we showed that a restructuring that cut Greece's debt to 100% of its GDP would correspond to a sustainable scenario. However, Europe's member states, which are now Greece's main creditors, are currently rejecting such a scenario. The path to reducing Greek debt now looks more uncertain than ever…

[1] The data for 2015 are not yet fully available. The figures quoted for this year are projections by the European Commission published on 4 February 2016.

[2] These holdings in bank capital are recorded here at their purchase value. Any subsequent deterioration in these holdings is not reflected in the chart, because this would not lead to a further increase in the gross debt (although it would increase the net debt).

[3] In 2012, Greece bought 41 billion euros worth of EFSF bonds. Of this total, 6.5 billion were immediately given to the Bank of Piraeus, while 24 billion were lent to 4 big banks (which benefited from partial cancellation of their debt in 2013 against equity participations by the Greek State for a lesser value). The remaining 10 billion were returned unused by Greece to the EFSF in 2015, following the agreement of the Eurogroup on 22 February.

[4] See Céline Antonin, Raul Sampognaro, Xavier Timbeau and Sébastien Villemot, 2015, "La Grèce sur la corde raide" [Greece on the tightrope], *Revue de l'OFCE*, no. 138.

Is missing disinflation a uniquely American phenomenon?

By Paul Hubert, Mathilde Le Moigne

Are the dynamics of inflation after the 2007-2009 crisis atypical? According to Paul Krugman, "If inflation had responded to the Great Recession and aftermath the way it did in previous big slumps, we would be deep in deflation by now; we aren't." In fact, after 2009, inflation in the US has remained surprisingly stable in terms of changes in real activity. This phenomenon has been called "missing disinflation". Can a phenomenon like this be seen in the euro zone?

Despite the worst recession since the 1929 crisis, the inflation rate has remained stable at around 1.5% on average between 2008 and 2011 in the US and 1% in the euro zone. Does this mean that the Phillips curve, which links inflation to real activity, has lost its empirical validity? In a note in 2016, Olivier Blanchard argued instead that the Phillips curve, in its simplest original version, is still a valid instrument for understanding the relationship between inflation and unemployment, in spite of this "missing disinflation".

Blanchard nevertheless noted that the relationship between the two variables has weakened, because inflation increasingly depends on inflation expectations, which are themselves anchored to the inflation target of the US Fed. In an article in 2015, Coibion and Gorodnichenko explained this missing disinflation in the US by the fact that inflation expectations are influenced by variations in the most visible prices, such as fluctuations in the price of oil. Furthermore, since 2015 inflation expectations have declined concomitantly with oil prices.

The difficulty of accounting for recent trends in inflation through the Phillips curve led us to evaluate its potential determinants in a recent working paper and to consider whether this “missing disinflation” phenomenon was also present in the euro zone. Based on a standard Phillips curve, we did not come up with the results of Coibion and Gorodnichenko when the euro zone was considered in its entirety. In other words, real activity and inflation expectations do describe changes in inflation.

However, this result appears to come from an aggregation bias between the behaviours of national inflation within the euro zone. In particular, we found a significant divergence between the countries of Northern Europe (Germany, France), which demonstrate a general tendency towards *missing inflation*, and countries on the periphery (Spain, Italy, Greece), which exhibit periods of *missing disinflation*. This divergence nevertheless appears right from the start of our sample, that is to say, in the early years of the creation of the euro zone, and seems to reverse around 2006, without any significant change during the crisis of 2008-2009.

Unlike what happened in the US, it appears that the euro zone has not experienced missing disinflation as a result of the economic and financial crisis of 2008-2009. It seems instead that divergences in inflation in Europe preceded the crisis, and tended to subside with the crisis.

Measuring well-being and

sustainability: A special issue of the Revue de l'OFCE

By Eloi Laurent

This issue of the *Revue de l'OFCE (no. 145, February 2016)* presents some of the best works that are being produced at a rapid clip on indicators of well-being and sustainability.

Why want to measure well-being? Because the idea that economic growth represents human development, in the sense that growth represents a good summary of its various dimensions, is simply false. GDP growth is not a prerequisite for human development; on the contrary, it is now often an impediment (as is illustrated by the exorbitant health costs of air pollution in India and China, two countries that concentrate one-third of the human population).

Achieving growth is not therefore sufficient in itself for human development; there is a need for specific policies that deal directly with education, health, environmental conditions and democratic quality. If the multiple dimensions of well-being are not taken into account, one dimension, typically the economic dimension, is imposed on and crushes the others, mutilating the human development of both individuals and groups (the example of health in the United States is particularly striking in this regard).

Why want to measure sustainability? Because today's global growth rate of 5% is of little importance if the climate, the ecosystems, the water and air that underpin our well-being have irrevocably deteriorated in two or three decades due to the means deployed to achieve that growth. Or to put it in the words of the Chinese Minister of the Environment, Zhou Shengxian, in 2011: "If our land is ravaged and our health destroyed, what benefit does our growth bring?" We need to update our understanding of well-being so that it is not a mirage. Our economic and political systems exist only because they are underpinned by a set of resources that make up the biosphere, whose vitality is the condition for the perpetuation of these systems. To put it bluntly, if ecological crises are not measured and controlled, they will eventually do away with human welfare.

Indicators of well-being and sustainability must therefore enter a new, performative age: after measuring in order to understand, we now need to measure in order to make change – to evaluate in order to evolve. Because the change called for by these new visions of the global economy is considerable. This time of action invariably involves choices and trade-offs that are far from simple. This underscores the dual purpose of this issue of the *Revue de l'OFCE*: to show that indicators of well-being and sustainability have reached maturity and that they now can change not only our vision of the economic world but also the economic world itself; they can make clear the types of choices available to public and private decision-makers so as to carry out the change needed. In this respect the two sections of this special issue clearly highlight the issue of the relevant scale for measuring well-being and sustainability.

The first part of this issue is devoted to the relatively new topic of measuring regional well-being in France. Measuring well-being where it is actually lived presupposes moving down the scale to the local level: the need to measure and improve human well-being as close as possible to people's lived reality, along with the scale of spatial inequalities in contemporary France, demands a territorial perspective. There are at least two good reasons why territories (regions, cities, *départements*, towns), more than nation-states, are the vectors of choice for the transition towards well-being and sustainability. The first is that they have grown in importance due to the impact of globalization and urbanization. The second is their capacity for social innovation. Following on from the late Elinor Ostrom, we talk about a "polycentric transition" to mean that each level of government can seize on the well-being and sustainability transition without waiting for a push from the top.

Monica Brezzi Luiz de Mello and Eloi Laurent ("Beyond GDP, beneath GDP: Measuring regional well-being in the OECD" – *all* OFCE Revue *articles in French*) gives the initial results of the theoretical and empirical work currently underway in the OECD framework (interactive access on the site http://www.oecdregionalwellbeing.org/) that measures certain dimensions of well-being at the regional level and applies these new indicators to the French case in order to draw useful lessons for public policy.

Robert Reynard ("Quality of life in the French regions") provides an overview of recent findings by the INSEE using regional quality-of-life indicators. These can be used to develop a new typology of French spaces, highlighting eight major types of territories, which are distinguished both by the living conditions of their inhabitants (employment, income, health, education, etc.) and the amenities that these areas provide for their people (living environment, access to services, transport, etc.). The new representation of France that emerges constitutes a valuable decision-making tool for those in charge of policies aimed at promoting equality between the regions.

Kim Antunez, Louise Haran and Vivien Roussez ("Diagnoses of quality of life: Taking into account people's preferences") looks back at the approach developed by France's regional monitoring body (*Observatoire des territoires*) and highlights indicators, offered at appropriate geographical scales, that can be used to account for the multidimensional character of quality of life in France. Here too, regional typologies explore the link between the diverse amenities in people's environments and the diverse aspirations of the people who live in them, so as to highlight the imbalances that exist and the public policy levers that can be used to reduce these.

Finally, Florence Jany-Catrice (“Measuring regional well-being: Working *on* or *with* the regions?”) discusses a fundamental aspect of the debate about measuring well-being in the French regions: the participation of citizens in defining their own well-being. She shows in particular that the impact of the indicators depends on whether those who develop them work on the regions or with them – it is only in the latter case that the region and its inhabitants become active players in the development of a common vision.

But, in contrast to these localized approaches, the measurement of sustainability requires moving up the geographical scale to the national or even global level. This is the subject of the articles in the second part of this issue, which deal with a subject whose importance has been emphasized by the recent law on the energy transition: the circular economy. Here there is a crucial difference to be made between a seemingly circular economy, which concerns a product or business, and genuine economic circularity, which can be understood only by enlarging the loop to develop a systemic vision.

This is what Christian Arnsperger and Dominique Bourg aim to demonstrate (“Towards a truly circular economy: Reflections on the foundations of an indicator of circularity”) by examining the main issues and questions that designers of an indicator of a truly circular economy would need to take into account, if it were ever to be developed formally and technically. They conclude in particular that without a systemic vision oriented towards the reduction, rationing and stationarity intrinsic to the permaculture approach, the notion of the circular economy will forever remain vulnerable to misuse that, however well intentioned, is ultimately short-sighted.

Vincent Aurez and Laurent Georgeault (“Indicators of the circular economy in China”) attempt to assess the relevance and the actual scope of the assessment tools developed in recent years by China to flesh out an integrated circular economy policy that aims at ensuring the transition to a low-carbon model with a restrained use of resources. These instruments, which in many respects are unique, but still inadequate, are distinguished by their systemic and multidimensional character, and therefore constitute an original contribution to the field of sustainability indicators.

Finally, Stephan Kampelmann (“Measuring the circular economy at the regional level: A systemic analysis of the management of organic matter in Brussels”) draws on the theory of social-ecological systems to carry out a particularly innovative exercise. He uses a battery of indicators to compare the economic, social and environmental impact of two possible pathways for the municipal management of flows of organic matter in Brussels: a centralized treatment using anaerobic digestion, and a process based on decentralized composting.

Thus while well-being is best measured at the local level, to assess sustainability properly, including at the regional level, the impact felt beyond local and national borders has to be taken into account. The trade-offs between these dimensions, including the exploration and possible transformation into synergies at regional and national levels, then turn out to be the most promising projects opened up by the welfare and sustainability transition.

The secular stagnation equilibrium

By Gilles Le Garrec et Vincent Touzé

The economic state of slow growth and underemployment, coupled with low inflation or even deflation, has recently been widely discussed, in particular by Larry Summers, under the label of "secular stagnation". The hypothesis of secular stagnation was expressed for the first time in 1938 in a speech by A. Hansen, which was finally published in 1939. Hansen was worried about insufficient investment and a declining population in the United States, following a long period of strong economic and demographic growth.

In a *Note by the OFCE (*no. 57 dated 26 January 2016 [in French]*),* we studied the characteristics and dynamics of a secular stagnation equilibrium.

A state of secular stagnation results when an abundance of savings relative to demand for credit pushes the "natural" real interest rate (what is compatible with full employment) below zero. But if the real interest rate permanently remains above the natural rate, then the result is a chronic shortage of aggregate demand and investment, with a weakened growth potential.

To counter secular stagnation, the monetary authorities first reduced their policy rates, and then, having reached the zero lower bound (ZLB), they implemented non-conventional policies called quantitative easing. The central banks cannot really force interest rates to be very negative, otherwise private agents would have an interest in keeping their savings in the form of banknotes. Beyond quantitative easing, what other policies might potentially help pull the economy out of secular stagnation?

To answer this crucial question, the model developed by Eggertsson and Mehrotra in 2014 has the great merit of clarifying the mechanisms behind a fall into long-term stagnation, and it is helping macroeconomic analysis to update its understanding of the multiplicity of equilibria and the persistence of the crisis. Their model is based on the consumption and savings behaviour of agents with a finite lifespan in a context of a rationed credit market and nominal wage rigidity. As for the monetary policy conducted by the central bank, this is set at a nominal rate using a Taylor rule.

According to this approach, secular stagnation was initiated by the 2008 economic and financial crisis. This crisis was linked to high household debt, which ultimately led to credit rationing. In this context, credit rationing leads to a fall in demand and excess savings. Consequently, the real interest rate falls. In a situation of full employment, if credit tightens sharply, the equilibrium interest rate becomes negative, which leaves conventional monetary policy toothless. In this case, the economy plunges into a lasting state of underemployment of labour, characterised by output that is below potential and by deflation.

In the model proposed by Eggertsson and Mehrotra, there is no capital accumulation. As a result, the underlying dynamic is characterized by adjustments without transition from one steady state to another (from full employment to secular stagnation if there’s a credit crisis, and vice versa if credit doesn’t tighten much).

To extend the analysis, we considered the accumulation of physical capital as a prerequisite to any productive activity (Le Garrec and Touzé, 2015.). This highlights an asymmetry in the dynamics of secular stagnation. If the credit constraint is loosened, then capital converges on its pre-crisis level. However, exiting the crisis takes longer than entering it. This property suggests that economic policies used to fight against secular stagnation must be undertaken as soon as possible.

There are a number of lessons offered by this approach:

- To avoid the ZLB, there is an urgent need to create inflation while avoiding speculative asset “bubbles”, which could require special regulation. The existence of a deflationary equilibrium thus raises the question of the appropriateness of monetary policy rules that are overly focused on inflation.
- One should be wary of the deflationary effects of policies to boost potential output. The right policy mix is to support structural policies with a sufficiently accommodative monetary policy.
- Cutting savings to raise the real interest rate (e.g. by facilitating debt) is an interesting possibility, but the negative impact on potential GDP should not be overlooked. There is a clear trade-off between exiting secular stagnation and depressing potential GDP. One interesting solution could be to finance infrastructure, education or R&D (higher productivity) through government borrowing (raising the real equilibrium interest rate). Indeed, an aggressive investment policy (public or private) funded so as to push up the natural interest rate can meet a dual objective: to support aggregate demand and to develop the productive potential.

How do French people look at equality of opportunity?

By Michel Forsé (CNRS) and Maxime Parodi

Do the French people believe in equal opportunity? The Dynegal survey asked the question in 2013 to a representative sample of 4,000 individuals, whose responses were very mixed. In a recent article in the *Revue de l'OFCE* (no. 146, 2016 [in French]), we show that it is the middle classes who prove to be a little more convinced than others by the idea that schooling gives everyone a chance and that one's success in life does not depend on social origin. This result is in line with the thesis by Simmel that makes the middle-class the site of social mobility.

The survey also raises questions about the link between the belief in equal opportunity and social expectations in terms of recognition of merit and equality of results. As might be expected, the less one believes in equality of opportunity, the less one defends the recognition of merit, and the greater the demand for equality of results. On the other hand, French people who are perfectly convinced that everyone has the same chance of success defend not only the recognition of merit, but also equality of place. This unexpected result highlights, in fact, a risk inherent in a society that is conceived of as totally meritocratic: the risk of completely discrediting the losers and of not finding them a place in society.