

The ECB on neutral ground?

By [Christophe Blot](#) and [Jérôme Creel](#)

The involvement of the European Central Bank (ECB) in the fiscal management of the euro area member states has been a subject of ongoing controversy. Since the implementation of the ECB programme to purchase sovereign debt, it has been accused of [profiting off of troubled states](#) and taking the risk of [socializing losses](#). The rise of these controversies results from the difficulty in understanding the relationship between the ECB, the national central banks (NCBs), and the governments. The European monetary architecture comes down to a sequence of delegations of power. Decisions on the conduct of monetary policy in the euro area are delegated to an independent institution, the European Central Bank (ECB). But, under the European subsidiarity principle, the implementation of monetary policy is then delegated to the national central banks (NCBs) of the euro area member states: the ECB and NCBs taken together are called the Eurosystem. While up to now this dimension of the organization of the euro area's monetary policy has not attracted much attention, debate has recently arisen in the course of the implementation of the quantitative easing programme. According to commentators and journalists, some national central banks are profiting more than others from the policy of buying and supporting their national public debts, which are riskier than the debt in more "virtuous" countries[1]. The profiting banks are viewed as escaping the ECB's control and not strictly applying the policy decided in Frankfurt.

In a [recent paper](#) prepared as part of the European Parliament's Monetary Dialogue with the ECB, we show that these concerns are unfounded for the simple good reason that, on average, since the beginning of the implementation of this policy, the theoretical distribution key has been respected (graphic). This distribution key stipulates that purchases of

bonds by the Eurosystem are to be made pro rata to a state's participation in the ECB's capital. Remember that part of the purchases – 10 of the 60 billion in monthly purchases made under the programme – are made directly by the ECB[21]. The other purchases are made directly by the NCBs. As each central bank buys securities issued by its own government, the NCBs' purchases of public bonds do not entail risk-sharing between member states. Any profits or losses are kept on the NCBs' balance sheets or transferred to the national governments in accordance with the agreements in force in each country.

This distribution of public bond purchases, which is intended to be neutral in terms of risk management, isn't entirely so, but not for the reasons that seem to have worried the European Parliament's Committee on Economic and Monetary Affairs. This distribution favours the maintenance of very low rates of return on the debts of certain member states. In fact, by not basing itself on the financing needs of the member states or on the size of their public debts, it can produce distortions by reducing the supply of public bonds available on the secondary markets. Such may be the case in Germany, Spain and the Netherlands, whose shares of the European public debt are smaller than their respective shares in the ECB's capital (table). Conversely, the purchases of Italian bonds are smaller with the current distribution key than they would be with a distribution key that took into account the relative size of the public debt. The ECB's policy therefore has less impact on the Italian debt market than it does on the German market.

This orientation could also constrain the ECB's decision about continuing quantitative easing beyond December 2017. Let's agree that the ECB's best policy would be to continue the current policy beyond December 2017, but to stop it once and for all in July 2018. Given the current distribution rules, this policy would be subject to all countries having exchangeable government bonds until July 2018, including those

who issue public debt only rarely because they have low financing needs. It could be that it is impossible to continue this policy under the rules currently adopted by the ECB, because some countries do not have sufficient debt available. It would then be necessary to implement a different policy by drastically reducing the monthly purchases of short-term securities (say in January 2018), while possibly pursuing this policy for a longer time period (beyond the first half of 2018). The decision not to use risk-sharing in the management of European monetary policy is therefore far from being neutral in the way this policy is actually implemented.

Figure. Distribution by the cumulative securities purchases by the national central banks



Table. Weighting by country using different measures

In %

	ECB capital distribution key	Weighting based on relative size of... ...GDP	...the public debt
BEL	3.5	3.9	4.6
DEU	25.6	29.2	21.8
EST	0.3	0.2	0.0
IRL	1.6	2.6	2.0
GRC	2.9	1.6	3.2
ESP	12.6	10.3	11.3
FRA	20.1	20.7	21.9
ITA	17.5	15.5	22.6
CYP	0.2	0.2	0.2
LAT	0.4	0.2	0.1
LTH	0.6	0.4	0.2
LUX	0.3	0.5	0.1
MAL	0.1	0.1	0.1
NLD	5.7	6.5	4.4
AUT	2.8	3.2	3.0
PRT	2.5	1.7	2.5
SLV	0.5	0.4	0.3
SLK	1.1	0.8	0.4
FIN	1.8	2.0	1.4

Sources: ECB and Eurostat.

[\[1\]](#) Mario Draghi was questioned about the distribution of the public sector purchase programme (PSPP) at the press conference he held on 8 September 2017.

[\[2\]](#) There is risk-sharing on this sum: the gains or losses are shared by all the NCBs in proportion to their contribution to the ECB's capital.

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.

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

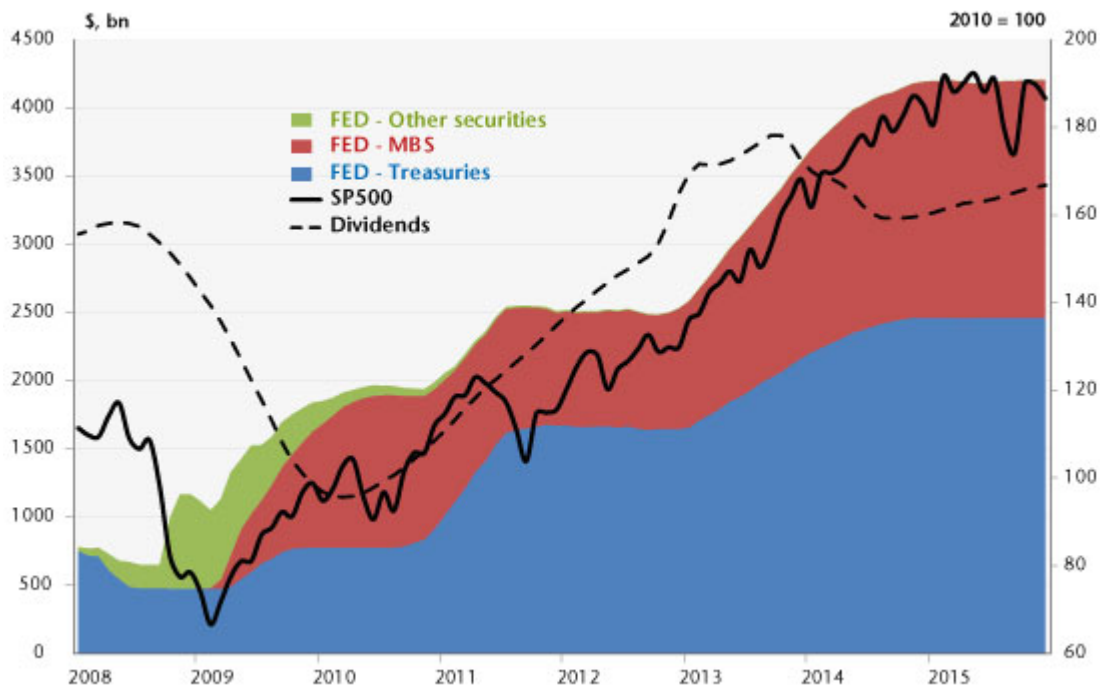
securities portfolio to other assets. The objective is to ease broader financing conditions for all economic agents, not just those whose securities are targeted by the QE programme. In doing this, the central bank's actions push asset prices up. It is therefore not surprising to see a rise in equity 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



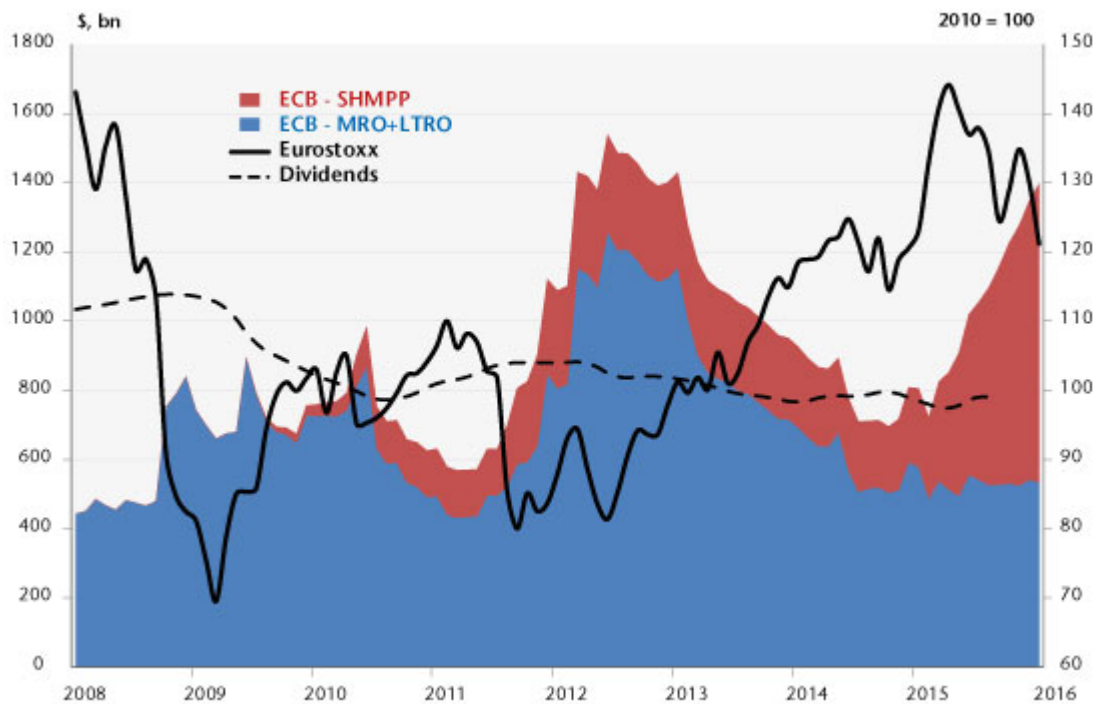
Sources: Datastream, Federal Reserve, and Bureau of Economic Analysis.

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.

What would be the risks of extending QE?

By [Christophe Blot](#), [Paul Hubert](#) and Fabien Labondance

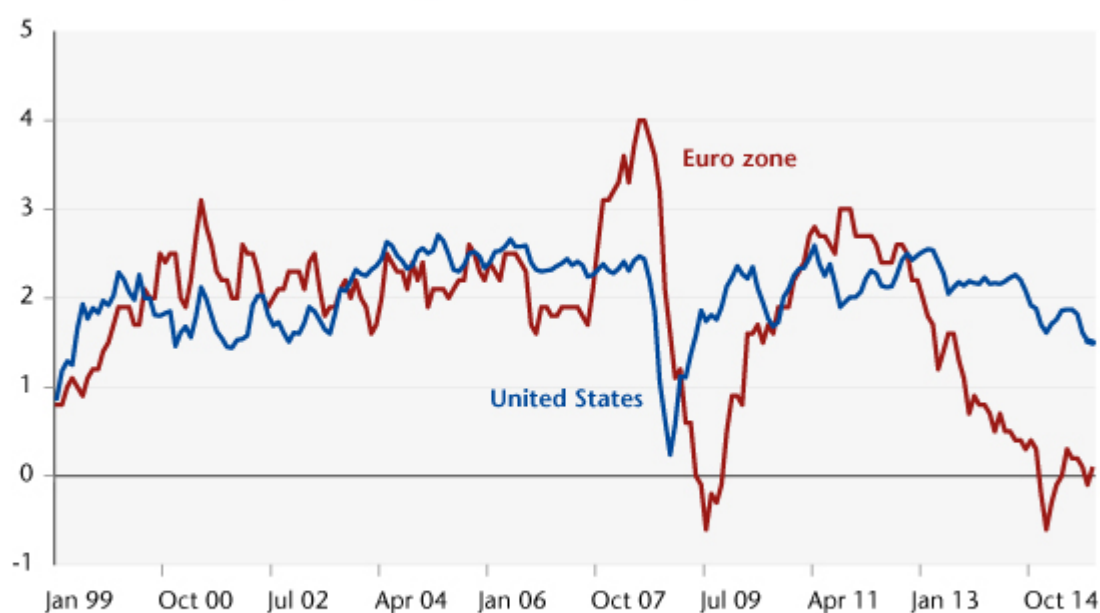
Following the [last meeting of the ECB Governing Council on 22 October](#), Mario Draghi said that on Thursday, December 3rd, the Bank would review the orientation of its monetary policy in

the light of economic and financial developments and the new Eurosystem staff forecasts, which will be disclosed at that time. The main issue facing the meeting is whether the ECB will take new steps to support activity. It could for instance announce further cuts in the [deposit facility](#) rate or an extension of quantitative easing (QE). Up to now the ECB has been careful to show its determination to meet its primary objective of price stability, even though in return it is encountering criticism that these waves of monetary expansion have had little effect on inflation but are fuelling asset price bubbles.

With inflation at 0.1% in October, the ECB is far from meeting its goal of achieving inflation rates below but close to 2% over the medium term. While the low level of euro zone inflation is due in part to lower oil prices, the fact remains that, even when adjusted for energy and food components, so-called "headline inflation" has not exceeded 1% since September 2013, reflecting a persistent state of low inflation. Note that the figure for October is the last observed value of inflation and provides only imperfect information about how it is changing in the medium term. The central banks are thus particularly sensitive to changes in inflation expectations. Market indicators however point to a further decline in long-term inflation expectations, whereas these rose in January after the announcement of QE (see graphic). So while there has been only very gradual confirmation of a recovery in the euro zone, the fear of deflation has not abated, which should push the ECB to strengthen its support. [In a previous analysis](#), which was based on quantitative easing programmes undertaken by the US Federal Reserve and the Bank of England, we emphasized the positive effects that QE was expected to have in the euro zone. The trends in euro exchange rates seen after the ECB's announcements in January 2015 and at the October meeting suggest that there is an impact via exchange rate channels.

Beyond these channels is the question of how QE affects asset prices. Several studies show that an expansionary monetary policy based on asset purchases supports financing and results in higher asset prices. However, some observers are also concerned about the risks associated with these operations, arguing that they feed asset price bubbles, that is to say, increases in prices that are not justified by economic fundamentals. Nevertheless, this kind of analysis relies solely on the rise in share prices to support these arguments. In a [recently published study \(Revue de l'OFCE, issue 144, November 2015, in French\)](#), we focus on the effects of monetary policy on three asset prices in the euro zone: the markets for equities, bonds and property. Our analysis suggests that monetary policy decisions would have no impact on asset prices that is not due to fundamentals. Thus, an interest rate cut does not seem to fuel bubbles, just as a tightening of monetary policy does not lead to a decline beyond what is indicated by the usual determinants of asset prices. While the channel of asset prices [\[1\]](#) does seem to be at work, monetary policy has no additional effects on the component of asset prices beyond what is due to economic fundamentals.

Figure. Long-term inflation expectations



Note: Expectations are measured here by the difference between the yields of 10 year indexed and non-indexed bonds. The measure obtained thus reflects inflation expectations over this 10 year horizon.

Source: ECB, Federal Reserve.

[1] This channel may be divided in two: Tobin's Q channel and the channel of wealth effects. The first suggests that a reduction in interest rates is likely to have a favourable impact on share prices, since share prices correspond to the present value of future dividends. An increase like this in share prices lowers the cost of capital for businesses, and supports their investments (like traditional capital, but via a different mechanism, as higher share prices make share issues more attractive). The second suggests that household consumption may also benefit from lower interest rates: the increase in the prices of financial or property assets resulting from lower interest rates increases their total value and promotes consumption. In a model where households seek to smooth consumption over the life cycle, they spend more when their wealth rises.

Quels sont les risques d'une extension du QE ?

par [Christophe Blot](#), [Paul Hubert](#) et [Fabien Labondance](#)

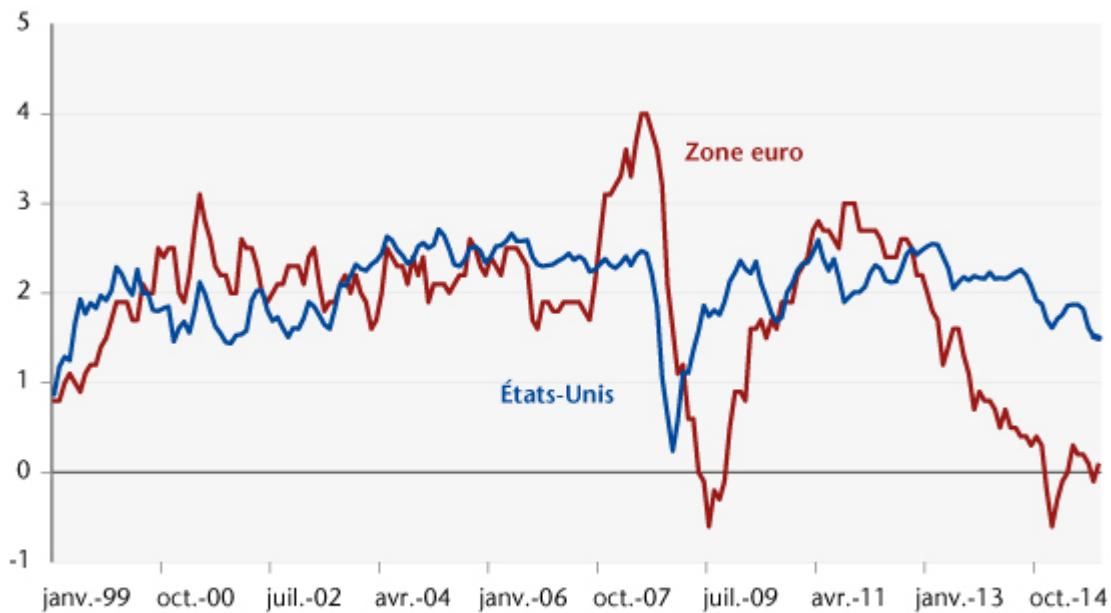
A l'issue de la [dernière réunion du Conseil des gouverneurs](#) du 22 octobre, Mario Draghi a indiqué que la BCE réexaminerait, ce jeudi 3 décembre, l'orientation de sa politique monétaire à l'aune des développements économiques et financiers et des nouvelles prévisions du staff de l'Eurosystème qui seront divulguées à cette occasion. Le principal enjeu de cette

réunion est de savoir si la BCE mettra en œuvre de nouvelles mesures de soutien à l'activité. Elle pourrait par exemple annoncer une nouvelle baisse du taux des [facilités de dépôts](#) ou une extension du programme d'assouplissement quantitatif (*QE*). La BCE a jusqu'ici pris soin de montrer sa détermination à remplir son objectif premier de stabilité des prix, quitte à essuyer en retour certaines critiques arguant que ces vagues d'expansion monétaire n'ont que peu d'effet sur l'inflation mais alimentent des bulles de prix d'actifs.

Avec un taux d'inflation de 0,1 % en octobre, la BCE est loin de satisfaire son objectif d'inflation à moyen terme, proche mais inférieur à 2 %. Si la faiblesse de l'inflation en zone euro s'explique en partie par la baisse du prix du pétrole, il n'en demeure pas moins que même corrigée des composantes énergie et alimentaire, l'inflation – dite sous-jacente – ne dépasse pas 1 % depuis septembre 2013, ce qui reflète bien une situation persistante de faible inflation. Notons que le chiffre du mois d'octobre correspond à la dernière valeur observée de l'inflation et ne renseigne qu'imparfaitement de son évolution à moyen terme. C'est pourquoi, les banques centrales sont particulièrement attentives aux évolutions anticipées de l'inflation. Or, les indicateurs de marché indiquent un nouveau repli des anticipations d'inflation à long terme alors qu'elles avaient augmenté en janvier après l'annonce du *QE* (voir graphique). Ainsi, alors que la reprise ne se confirme que très doucement dans la zone euro, les craintes d'une situation déflationniste ne sont pas écartées, ce qui devrait pousser la BCE à amplifier son soutien. Dans une [analyse précédente](#), partant des expériences d'assouplissement quantitatif menées par la Réserve fédérale américaine ou la Banque d'Angleterre, nous soulignons les effets positifs attendus du *QE* dans la zone euro. La dynamique du taux de change de l'euro observée après l'annonce de la BCE en janvier 2015 et lors de la réunion d'octobre suggère un effet *via* le canal du taux de change.

Au-delà de ces canaux se pose la question de l'effet du *QE* sur les prix d'actifs. Plusieurs travaux montrent qu'une politique monétaire expansionniste *via* des achats d'actifs soutient les conditions financières et entraîne une hausse des prix d'actifs. Néanmoins, certains s'inquiètent aussi des risques associés à ces opérations annonçant qu'elles alimenteraient des bulles de prix d'actifs, c'est-à-dire une augmentation des prix non justifiée par les fondamentaux de l'économie. Pourtant, ce genre d'analyse s'appuie uniquement sur la montée des cours boursiers pour avancer de tels arguments. Dans une étude [publiée récemment, \(Revue de l'OFCE, n°144, novembre 2015\)](#) nous nous intéressons aux effets de la politique monétaire sur 3 prix d'actifs dans la zone euro : les cours boursier, obligataire et immobilier. Notre analyse suggère que les décisions de politique monétaire n'auraient pas d'impact sur la composante des prix d'actifs non-expliquée par les fondamentaux. Ainsi, une baisse des taux d'intérêt ne semble pas alimenter les bulles, de même qu'un durcissement de politique monétaire ne conduit pas à une baisse au-delà ce qu'indiquent les déterminants usuels des prix d'actifs. Alors que le canal du prix des actifs^[1] semble bien à l'œuvre, la politique monétaire n'a pas d'effets additionnels sur la composante des prix d'actifs non-expliquée par les fondamentaux.

Graphique. Anticipations d'inflation à long terme



Note : Les anticipations sont ici mesurées à partir de l'écart entre les rendements des obligations à 10 ans non-indexées et indexées. La mesure ainsi obtenue reflète l'inflation anticipée sur cet horizon de 10 ans.

Source : BCE, Réserve fédérale.

[1] Ce canal peut-être décomposé en deux : le canal du Q de Tobin et le canal des effets de richesse. Le premier suggère qu'une baisse des taux d'intérêt est susceptible d'avoir un effet favorable sur les cours des actions dans la mesure où le prix d'une action correspond à la valeur actualisée des dividendes futurs. Cette augmentation du prix des actions diminue le coût des fonds propres pour les entreprises et soutient leurs investissements (à l'instar du capital traditionnel mais *via* un mécanisme différent, la hausse des cours boursiers rendant les émissions d'actions plus attractives). Le second suggère que la consommation des ménages peut aussi tirer profit d'une baisse des taux d'intérêt : l'augmentation du prix des actifs financiers ou immobiliers résultant d'une baisse des taux d'intérêt augmente la valeur de leur patrimoine et soutient leur consommation. Dans un modèle où les ménages cherchent à lisser leur consommation sur le cycle de vie, ils dépensent davantage lorsque leur richesse augmente.

The planetary alignment has not always been favourable to the euro zone countries

By [Eric Heyer](#) and Raul Sampognaro

In 2015, the euro zone economies will benefit from a favourable [“planetary alignment”](#) (with the euro and oil prices down and financial constraints on the economy easing), which should trigger [a virtuous circle of growth](#). Over the previous four years (2011-2014), the “planetary alignment” that existed was in a diametrically opposite direction: the euro and oil prices were high, with financing conditions and the fiscal stance very tight.

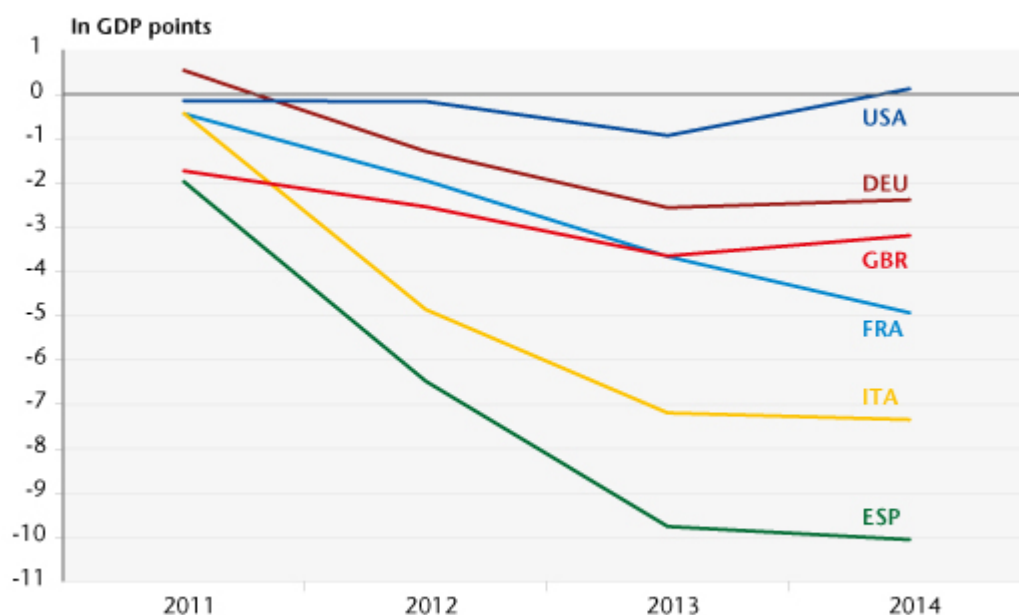
In [a recent article](#), we propose an evaluation of the impact of these four factors on the economic performance of six major developed countries since 2011 (France, Germany, Italy, Spain, the UK and USA).

It is clear from our analysis that the combination of these shocks explains a large part of the differences in growth recorded during the period 2011-2014 between the United States and the major European economies. A non-negligible part of this performance gap is explained in particular by the difference in the economic policies adopted, with a policy mix that has been much more restrictive in the euro zone than in the case of the US. In particular, a very sharp fiscal adjustment took place in the countries experiencing pressure on their sovereign debt, such as Spain and Italy. In addition, the effects of the pressure on sovereign debt were multiplied by financial fragmentation, which can be seen in the

deterioration of private sector financing terms, whereas the quantitative easing measures taken by the Fed and the Bank of England helped to prop up financing conditions in these countries. It was not until Mario Draghi's speech in July 2012 and [the announcement of the OMT programme](#) in September 2012 that the ECB's actions were sufficient [to reduce the financial pressure](#). While exchange rate trends tended to support activity in the euro zone throughout 2011-2014, the contribution of this factor depended on the way the various countries were integrated with global trade flows [\[1\]](#) and on the scale of wage disinflation, which was particularly pronounced in Spain. Finally, the rise in oil prices held back Europe's growth, while it had less impact in the United States, which [benefited from the exploitation of shale oil](#).

The cumulative loss in GDP was very significant in Spain (-10 points between 2011 and 2014), Italy (-7.5 points) and France (-5 points) and more moderate in the UK (-3 points) and Germany (-2.5 points). In contrast, the cumulative impact since 2011 on growth in the United States was zero, suggesting that real growth in the US was in line with spontaneous growth [\[2\]](#) (Figure 1).

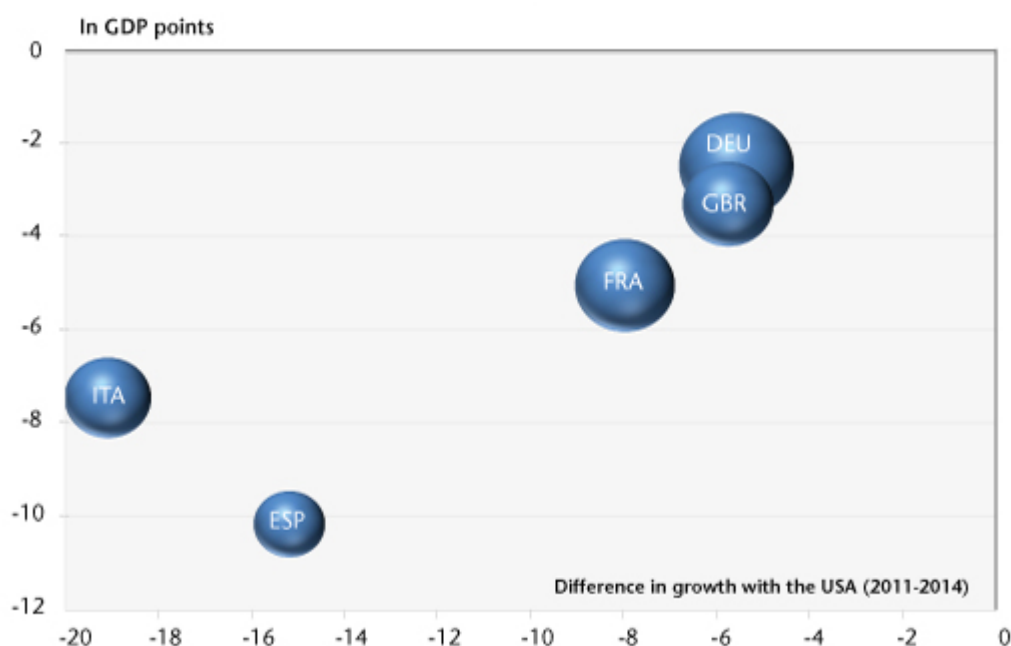
Figure 1. Cumulative impact on GDP of various shocks since 2011



Sources: National accounts, OFCE calculations.

Thus, in the absence of these shocks, Europe's spontaneous growth could have exceeded the rate of potential growth, as in the United States (Figure 2). This would have led in the euro zone countries in particular to a long-term convergence of GDP with its potential level, to a reduction in imbalances on the labour market, to the normalization of capacity utilization, and to a recovery in the public accounts.

Figure 2. Difference in growth and the cumulative impact on GDP of various shocks for countries over the period 2011-2014



Sources: OECD eo96 for the output gap, national accounts, OFCE calculations for the impact of the shocks.

[Go to the full version of our study.](#)

[1] The impact of these competitiveness shocks differs across countries because of differences in the elasticity of foreign trade, but also due to variations in the countries' degree of exposure to trade and to intra / extra euro zone competition. For more on this, see [Ducoudré and Heyer \(2014\)](#).

[2] An economy's spontaneous growth results from its long-term potential growth (which depends on structural factors that

determine in particular changes in the global productivity of the factors and the labour force) and the rate of closing the output gap, which was deepened in most countries by the 2008-2009 crisis and which depends on an economy's capacity to absorb the shocks that hit it.

The coming recovery

By the Analysis and Forecasting Department, under the direction of [Eric Heyer](#) and [Xavier Timbeau](#)

This text summarises the [OFCE 2015-2016 economic outlook for the euro zone and the rest of the world](#)

While up to now the euro zone had not been part of the global recovery, the conjunction of a number of favourable factors (the fall in oil prices and depreciation of the euro) will unleash a more sustained process of growth that is shared by all the EU countries. These developments are occurring at a time when the massive and synchronised fiscal austerity that had pushed the euro zone back into recession in 2011 is easing. The brakes on growth are gradually being lifted, with the result that in 2015 and 2016 GDP should rise by 1.6% and 2%, respectively, which will reduce unemployment by half a point per year. This time the euro zone will be on the road to recovery. However, with an unemployment rate of 10.5% at the end of 2016, the social situation will remain precarious and the threat of deflation is not going away.

The expected demand shock

After a period during the Great Recession of 2008-2009 when

growth was boosted by expansionary fiscal policy, the euro zone countries quickly reversed their policy orientation and adopted a more restrictive one. While the United States also chose to reduce its budget deficit, austerity has had less effect there. First, the negative demand shock at the euro zone level was amplified by the synchronisation of the consolidation. Second, in a context of rising public debt, the lack of fiscal solidarity between the countries opened up a breach for speculative attacks, which pushed up first sovereign rates and then bank rates or the non-financial agents market. The euro zone plunged into a new recession in 2011, while globally the momentum for growth gathered pace in the other developed countries (chart). This episode of consolidation and financial pressure gradually came to an end. In July 2012, the ECB made a commitment to support the euro; fiscal austerity was eased in 2014; and the Member States agreed on a draft banking union, which was officially initiated in November 2014, with new powers on banking supervision entrusted to the ECB. All that was lacking in the euro zone then was a spark to ignite the engine of growth. The transfer of purchasing power to households that resulted from the fall in oil prices – about one percentage point of GDP if oil prices stay down until October 2015 – represents this positive demand shock, which in addition has no budget implications. The only cost resulting from the shock comes from the decline in income in the oil-producing countries, which will lead them to import less in the coming quarters.

An external demand shock will combine with this internal demand shock in the euro zone. The announcement of a quantitative easing programme in the euro zone represents a second factor accelerating growth. This programme, under which the ECB is to purchase more than 1,000 billion euros of securities at a pace of 60 billion per month until September 2016, not only will amplify the fall in sovereign yields but more importantly will also lead to a reallocation of portfolio assets and drive the euro (further) down. Investors looking

for higher returns will turn to dollar-denominated securities, especially as the prospect of a gradual monetary tightening in the US improves the outlook for earnings on this side of the pond. The rising dollar will lift the currencies of the Asian countries with it, which will increase the competitive advantage of the euro zone at the expense this time of the United States and some emerging countries. It is unlikely that the fragility induced in these countries and in the oil-producing countries by the oil shock and by the decline in the euro will offset the positive effects expected in the euro zone. On the contrary, they will also be vectors for the rebalancing of growth needed by the euro zone.

Investment is the factor that will complete this growth scenario. The anticipation of higher demand will remove any remaining reluctance to launch investment projects in a situation where financing conditions are, overall, very positive, representing a real improvement in countries where credit constraints had weighed heavily on growth.

All this will lead to a virtuous circle of growth. All the signals should turn green: an improvement in household purchasing power due to the oil impact, increased competitiveness due to the lower euro, an acceleration in investment and, ultimately, growth and employment.

A fragile recovery?

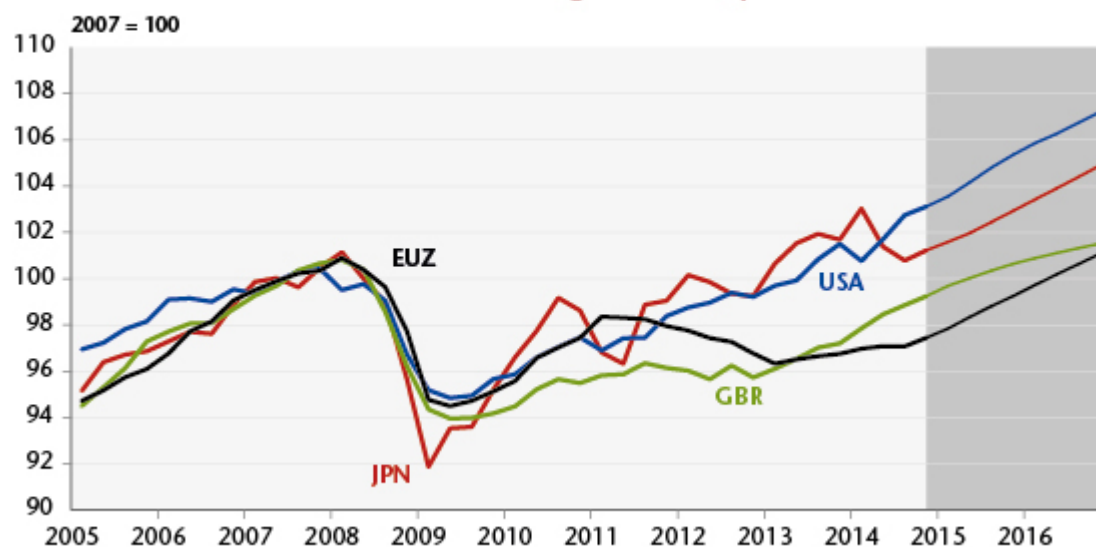
While the elements promoting the euro zone's growth are not mere hypotheticals about the future but represent a number of tangible factors whose effects will gradually make themselves felt, the fact remains that they are somewhat fragile. The falling price of oil, for instance, is probably not sustainable. The equilibrium price of oil is closer to USD 100 than USD 50 and, ultimately, a rise in energy prices is in the cards: what has a positive effect today could undermine the resumption of a recovery tomorrow. The decline of the euro seems more long-term; it should last at least until the end of

the ECB's quantitative easing programme, which officially is at least September 2016. The euro should not, however, fall below a level of 0.95 dollar per euro. The time it takes for changes in exchange rates to translate into trade volumes, however, should allow [the euro zone to benefit in 2016 from a gain in competitiveness](#).

It is worth noting that a Greek exit from the euro zone could also put a halt to the nascent recovery. The firewalls set up at the European level to reduce that risk should limit any contagion, at least so long as the political risk has not been concretised. It will be difficult for the ECB to support a country where a party explicitly calling for leaving the euro zone is at the gates of power. The contagion that is now considered extinguished could then catch fire again and reignite the sovereign debt crisis in the euro zone.

Finally, the constraints of the Stability Pact have been shifted so as to leave more time to the Member States, particularly France, to get back to the 3% target. They have therefore not really been lifted and should soon be reinforced once it comes to assessing the budgetary efforts being made by the countries to reduce their debt.

Figure. The GDP of the euro zone, the United States, the United Kingdom and Japan



Source : National accounts, OFCE forecasts April 2015.

The ECB's quantitative easing exercise: you're never too young to start

By [Christophe Blot](#), [Jérôme Creel](#), [Paul Hubert](#) and Fabien Labondance

The ECB decision to launch a quantitative easing (QE) programme was widely anticipated. Indeed, on several occasions in the second half of 2014 Mario Draghi had reiterated that the Governing Council was unanimous in its commitment to take the steps needed, in accordance with its mandate, to fight against the risk of a prolonged slowdown in inflation. Both the scale and the characteristics of the ECB plan announced on 22 January 2014 sent a strong, though perhaps belated signal of the Bank's commitment to fight the risk of deflation, which has been spreading in the euro zone, as can be seen in particular in inflation expectations over a two-year horizon (Figure 1). In a [special study entitled, "Que peut-on attendre du l'assouplissement quantitatif de la BCE?"](#) ["What can we expect from the ECB's quantitative easing?"], we clarify the implications of this new strategy by explaining the mechanisms for the transmission of quantitative easing, drawing on the numerous empirical studies on previous such programmes in the US, the UK and Japan.

Figure. Inflation expectations in the euro



Source : ECB (Survey of Professional Forecasters).

The terms of the quantitative easing decided by the ECB are indeed similar to those adopted by other central banks, especially by the US Federal Reserve and the Bank of England, which make comparisons legitimate. It appears from the American, British and Japanese experience that the measures implemented have led to a decline in sovereign interest rates and more generally to an improvement in the financial conditions of the overall economy[1]. This has been the result of sending a signal about the present and future stance of monetary policy and a reallocation of investors' portfolios. Some studies [2] also show that the US QE caused a depreciation of the dollar. The transmission of QE from the ECB to this variable could be critical in the case of the euro zone. An analysis using VAR models shows that the monetary policy measures taken by the ECB will have a significant impact on the euro but also on inflation and inflationary expectations. It is likely that the effects of the depreciation of the euro on European economic activity will be positive (cf. [Bruno Ducoudré and Eric Heyer](#)), which would make it easier for Mario Draghi to bring inflation back on target. The measure would therefore have the positive effects

expected; however, it might be regrettable that it was not implemented earlier, when the euro zone was mired in recession. Inflation in the euro zone has fallen constantly since late 2011, reflecting a gathering deflationary risk month after month. In fact, the implementation of QE from March 2015 will consolidate and strengthen a recovery that would undoubtedly have occurred anyway. Better late than never!

[\[1\]](#) The final impact on the real economy is, however, less certain, in particular because the demand for credit has remained stagnant.

[\[2\]](#) Gagnon, J., Raskin, M., Remache, J. and Sack, B. (2011). "The financial market effects of the Federal Reserve's large-scale asset purchases," *International Journal of Central Banking*, vol. 7(10), pp. 3-43.

What is a weaker euro likely to mean for the French economy?

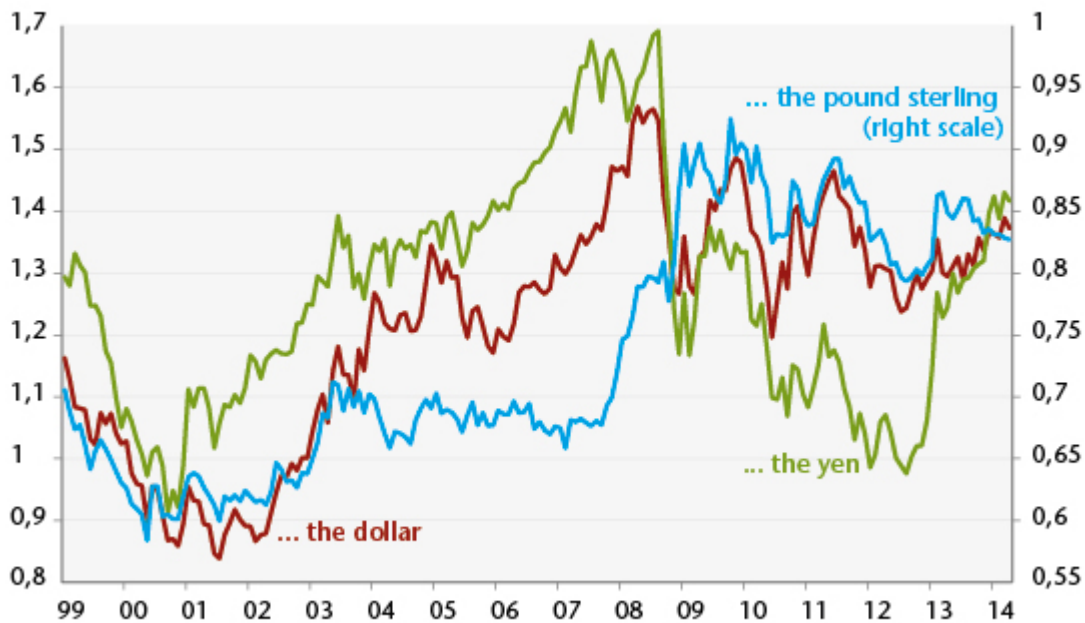
By [Bruno Ducoudré](#) and [Eric Heyer](#)

Faced with the rising risk of deflation in the euro zone,

which has been reinforced since mid-2012 by the continued appreciation of the euro against other currencies, the heads of the European Central Bank have begun to change their tone in their communications with the financial markets: [they are now evoking the possibility of conducting a new round of quantitative easing](#). These measures are likely to lower the exchange rate of the euro. This would provide valuable support for the euro zone economies by shoring up their price competitiveness vis-à-vis competitors outside the zone, in a context where fiscal consolidation policies will continue to dampen [the growth expected in the zone in 2014 and 2015](#). What are the likely consequences for the French economy from reducing the euro's value against other currencies? We briefly review past episodes of exchange rate changes, and then present the impact expected from a 10% depreciation of the euro against other currencies using the *emod.fr* model. These effects are more moderate than those projected by the government.

Quantitative easing measures have been used extensively by the US Federal Reserve, the Bank of England and the Bank of Japan. Since mid-2012, the balance sheets of these three banks has continually increased, by respectively 6.5 percentage points of GDP, 1.3 GDP points and 15.3 GDP points. [During this same period, the ECB balance has on the contrary declined by 8.4 GDP points](#). This difference in strategy has led to a continued rise in the strength of the euro: now at 1.38 dollars, the euro has seen its value against the dollar increase by 12% since June 2012. During the same period, the single currency has appreciated 49% against the yen and about 3% against the pound sterling (Figure 1).

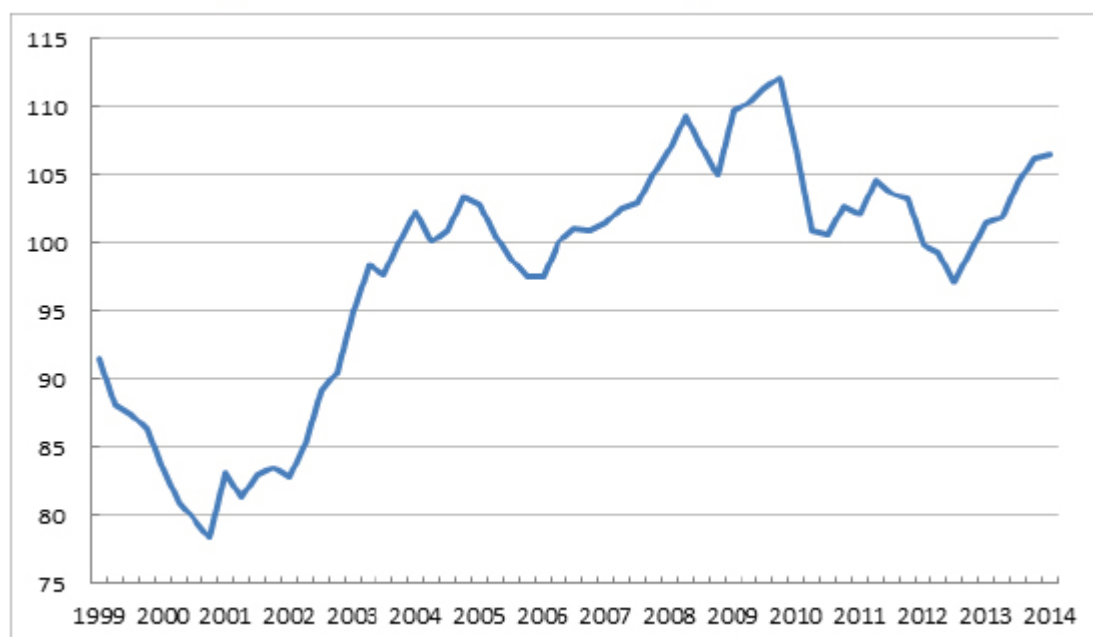
Figure 1. Exchange rate of the euro against...



Source : Datastream.

The nominal effective exchange rate of the euro, which weights the different exchange rates depending on the structure of trade in the euro zone, has thus appreciated by 9.5% since the third quarter of 2012 (Figure 2). This appreciation, combined with austerity policies and the competitive disinflation carried out within the euro zone, has held down GDP growth in the zone, which was negative in 2012 and 2013, as well as inflation. The absence of inflationary pressures and the past appreciation of the euro have now given the ECB leeway to try to influence the course of the euro against other currencies.

Figure 2. Nominal effective exchange rate of the euro



Source : OECD.

What would be the impact of a devaluation of the euro against all currencies?

The depreciation of the euro would have a dual effect:

- **An income effect:** a weak euro would increase the prices of imports. This would result in higher energy costs, a rise in companies' prices of production and a loss of household purchasing power;
- **A substitution effect:** a weak euro would decrease the prices of exports and increase their volume. Depreciation would also decrease the competitiveness of rival manufacturers, causing a decline in imports in favour of domestic production.

These opposite effects would apply only to trade outside the euro zone. Trade with our European partners would not be directly impacted, as the prices of imports and exports to and from this area would remain unchanged. On the other hand, intra euro zone trade would be impacted by a weaker euro. But this involves the channel of addressed demand.

Table 1. Impact on the French economy of a 10% depreciation in the exchange rate of the euro against all currencies combined

(Difference with the reference scenario in %)	n	n+1	n+2	n+8
GDP	0,3	0,4	0,5	0,0
Total waged employment (1000s)	22	53	74	34
Household consumer prices	0,9	1,4	1,9	3,9
Public financing capacity (% of GDP)	0,0	0,2	0,3	0,2

Note: The euro's depreciation would be favourable to short-term activity due to an improvement in France's price competitiveness relative to countries outside the euro zone. The positive impact of the euro's depreciation on the activity of our euro zone partners and the negative impact on our partners outside the zone are taken into account.

Source : *emod.fr*

As is summarized in Table 1, a 10% depreciation of the euro against all currencies leads to a gain in price competitiveness for French exports vis-à-vis the rest of the world. Other countries in the euro zone would benefit from the same gain in competitiveness across all export markets. In this case, the impact on activity would amount to 0.3% in the first year, 0.5% after three years, and none after nine years. The increase in demand due to this improvement in the activity of our European partners would be broadly offset by a reduction in demand addressed to France from the rest of the world. As for the labour market, this depreciation would create 22,000 jobs in the first year and 74,000 jobs after 3 years. The public deficit would in turn improve by 0.3 GDP point within 3 years.

These results, while more moderate than those [published by the DG Treasury\[1\]](#), are nonetheless significant and are welcome in an economic situation like today's that is marked by sluggish growth and the risk of deflation. A depreciation of the single currency would also undercut the process of competitive deflation engaged in by countries in the euro zone.

[1] The publication of the DG Treasury argues that a 10% decrease in the effective exchange rate of the euro (against all currencies) would do the following: increase our GDP by

0.6 percentage point of GDP in the first year and 1.2 GDP points after three years; create 30,000 jobs in the first year and 150,000 jobs within three years; and reduce the government deficit by 0.2 GDP point in the first year and 0.6 GDP point after three years.

The ECB – or how to become less conventional

By [Jérôme Creel](#) and [Paul Hubert](#)

The gloomy economic situation in the euro zone and the deflationary risks it is facing are leading the members of the European Central Bank (ECB) to consider a new round of quantitative easing, as can be seen in [recent statements by German, Slovakian and European central bankers](#). What might this involve, and could these measures be effective in boosting the euro zone economy?

Quantitative easing (QE) includes several different types of unconventional monetary policy. To define them, it is necessary to start by characterizing conventional monetary policy.

Conventional monetary policy involves changing the key interest rate (the rate for so-called medium-term refinancing operations) by what are called open market operations so as to influence financing conditions. These operations can change the size of the central bank's balance sheet, including by means of money creation. So there is a stumbling block in distinguishing between conventional and unconventional policy:

increasing the size of the central bank's balance sheet is not sufficient in itself to characterize an unconventional policy.

In contrast, strictly speaking an unconventional quantitative easing policy gives rise to an increase in the size of the central bank's balance sheet but without any immediate additional money creation: the extra liquidity provided by the central bank to the commercial banks serves to increase their reserves with the central bank, so long as these reserves are ultimately used for the subsequent acquisition of securities or to grant loans. These reserves, which are the commercial banks' safe assets, help to consolidate their balance sheets: risky assets decrease in proportion, while safe assets increase.

Another type of unconventional monetary policy, qualitative easing, consists of modifying the structure of the central bank's balance sheet, usually on the assets side, but without changing the size of the balance sheet. This may mean that the central bank purchases riskier securities (not AAA rated) to the detriment of safer securities (AAA). In doing this, the central bank reduces the amount of risk on the balance sheets of the banks from which it has acquired these higher-risk securities.

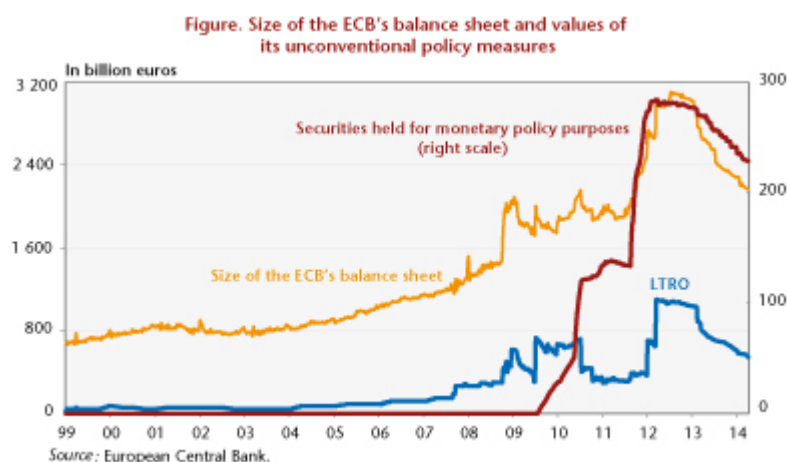
A final type of unconventional monetary policy involves conducting an easing policy that is both qualitative and quantitative: credit easing, *i.e.*, the size of the balance sheet of the central bank and the resulting risk increase in concert.

Unconventional monetary policies that are often attributed to the ECB include operations to provide long-term liquidity (3 years) at low interest rates, as was done in November 2011 and February 2012, and which were described as very long-term refinancing operations (VLTRO). But were these really unconventional large-scale operations? On the one hand, these operations involved not trillions of euros but an amount

closer to 500 billion, which is not negligible after correcting for bank repayments to the ECB. On the other, the LTRO operations are part of the ECB's conventional policy arsenal. Finally, these operations were partially sterilized: the loans granted by the ECB to the commercial banks were offset by sales of securities by the ECB, thereby altering the structure of its assets. So we can conclude that the VLTRO operations were in part "conventional" and in part "unconventional".

The situation is different for the Securities Market Programme mechanism, which consisted, on the part of the ECB, of purchasing government debt on the secondary markets during the sovereign debt crisis. This mechanism led to increasing the size of the ECB's balance sheet, but also the risk involved: the policy of credit easing has indeed been an unconventional policy.

Given the different definitions of unconventional policy in current use, it is helpful to recall that the ECB explicitly indicates the amounts it has agreed within the framework that it sets for its unconventional policies, which are called Securities held for monetary policy purposes. These amounts are graphed in the figure below. They show the frequency and magnitude of the monetary activities that the ECB itself defines as unconventional.



The three different measures shown in the figure (size of the

ECB's balance sheet, LTRO amounts, and amounts of Securities held for monetary policy purposes) are expressed in billions of euros. The first two went up in the fourth quarter of 2008 after the bankruptcy of Lehman Brothers, whereas the third measure of unconventional policy started only in June 2009. We then see a new joint deepening of these measures at end 2011. Following this episode, the amount of LTRO operations came to 1090 billion euros, which represented about 50% of euro zone GDP (2,300 billion euros), i.e., about one-third of the ECB's balance sheet, while the amount of Securities held for monetary policy purposes was only 280 billion euros, or 13% of euro zone GDP, about a quarter of the LTRO operations. It is interesting to note that the ECB's monetary policy, which depends on the banks' demand for liquidity, changed in 2013. One can interpret the reduction in the balance sheet size as a sign of a less expansionary policy or as a reduction in the demand for liquidity from the banks. In the first case, this would indicate that the strategy for ending the monetary easing policy probably came too early in terms of the European economy – hence the recently evoked recourse to new unconventional measures.

Until then, these measures had been formally introduced to restore the channels for transmitting the ECB's monetary policy to the real economy, channels that in some euro zone countries have been scrambled by the financial crisis and the euro zone crisis. The way to restore these channels was to inject liquidity into the economy and to increase the reserves of the banking sector in order to encourage banks to start lending again. Another objective of these policies was to send a signal to investors about the central bank's ability to ensure the stability and sustainability of the euro zone, as reflected in Mario Draghi's famous "whatever it takes" [\[1\]](#) statement on 26 July 2012.

In a recent working paper with Mathilde Viennot, we consider the effectiveness of conventional and unconventional policies

during the financial crisis. We estimate how much the conventional instrument and the purchases of securities held for monetary policy purposes under the ECB's unconventional policies have affected interest rates and the volumes of new loans granted in various markets: loans to non-financial corporations, to households and on the sovereign debt market, the money market and the deposit market.

We show that unconventional policies have helped to reduce interest rates on the money market, on the government securities market and on loans to non-financial companies. These policies have not, however, affected the volume of loans granted. At the same time, it turns out that the conventional instrument, whose lack of effectiveness was one of the justifications for implementing unconventional measures, had the expected impact on almost all the markets surveyed, and more so in the southern euro zone countries than in the northern ones on the market for 6-month sovereign debt and for real estate loans to consumers.

So it seems that unconventional policies have had a direct impact on the sovereign debt market as well as indirect effects, helping to restore the effectiveness of the conventional instrument on other markets. One of the reasons that helps to explain the weak impact of both instruments on the volumes of loans granted is the need facing the commercial banks [2] to shed debt and reduce the size of their balance sheets by adjusting their portfolio of risk-weighted assets, which has pushed them to increase their reserves rather than to play their intermediation role and to demand relatively higher compensation for each exposure taken.

Though legitimate, this behaviour is affecting the transmission of monetary policy: interest rates fall but lending doesn't restart. It thus seems important that monetary policy is not based exclusively on the banking sector. If there is a new round of unconventional operations, it should be focused directly on the acquisition of sovereign or

corporate debt in order to bypass the banking sector. This workaround would undoubtedly lead to amplifying the transmission of monetary policy to the real economy. And it would be welcomed for helping to avoid the risk of deflation in the euro zone.[\[3\]](#)

[\[1\]](#) “The ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough.”

[\[2\]](#) The reasoning behind unloading debt also applies to their customers: the non-financial agents.

[\[3\]](#) See the [post](#) by Christophe Blot on this subject as well as the recent [Council of Economic Analysis \(CAE\) report](#) by Agnès Bénassy-Quéré, Pierre-Olivier Gourinchas, Philippe Martin and Guillaume Plantin.