

# Do QE programmes create bubbles?

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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

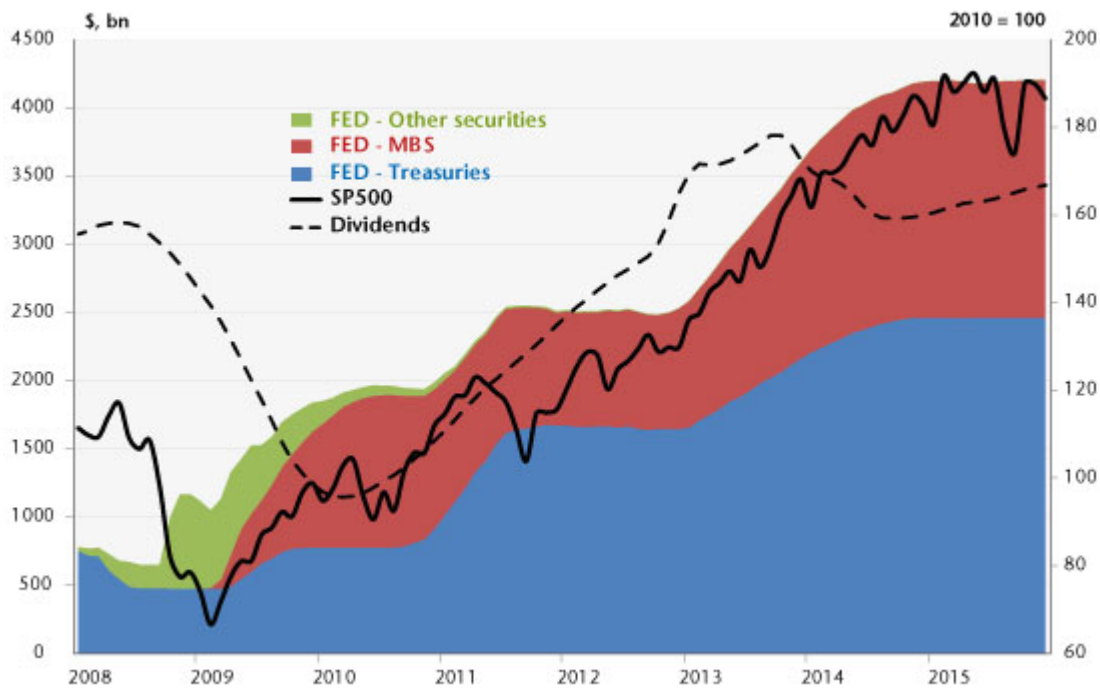
doing this, the central bank's actions push asset prices up. It is therefore not surprising to see a rise in equity prices in connection with QE in the US.

### ***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 [\[21\]](#) 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



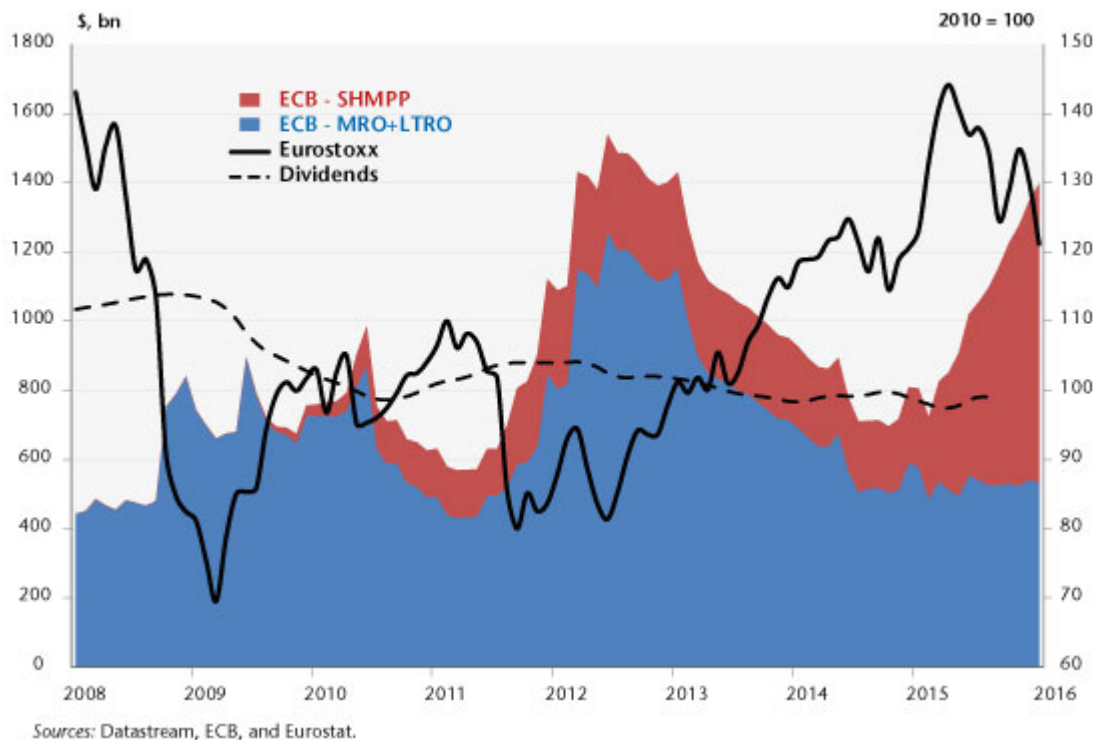
Sources: Datastream, Federal Reserve, and Bureau of Economic Analysis.

### ***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



**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.

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## **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 à 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?