Thoughts on Monetary Policy
A European Perspective

Jacques de Larosière
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Mr. de Larosière is a Member of the Académie des Sciences Morales et Politiques of the Institut de France; Grand Officier of the Legion d’Honneur, KBE; and Member of the French Society of the Cincinnati.

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Introduction

Monetary policy has, since the 2007–08 global financial crisis, been the subject of increased interest and scrutiny. Monetary policy is executed through various actions that include modifying interest rates, buying or selling government bonds, and changing the amount of money banks are required to keep in reserve.

But what is the purpose of monetary policy? After two decades of refinements, the answer is now generally agreed. The role of monetary policy is to ensure monetary stability as well as the stability of the financial system, with the aim of fostering sustainable long-term economic growth. The objective concerning the stability of the financial system has been widely accepted only since the end of the 2007–08 global financial crisis.

In this context, this paper discusses monetary policy from a European perspective, that is, as applied in the eurozone.
I. Price stability in the eurozone

From the creation of the euro in 1999 to the 2007–08 global financial crisis, monetary policy has been faithful to its objective of ensuring monetary stability. Indeed, the European Central Bank (ECB) has been vigilant in adhering to its inflationary guideline (measured in terms of the Harmonised Index of Consumer Prices, the consumer price index [CPI] of the European Union). The guideline is inflation should be less than 2 percent but close to 2 percent. This objective was approximately achieved until 2013, as shown in table 1.

The fact that the inflation target was, on average, respected during the first 15 years of the euro (1999–2013) may be a source of satisfaction. But, there are two caveats to consider when assessing the efficiency of monetary policy.

The first caveat has to do with the fact that the ECB’s monetary policy from 1999 to 2007–08 did not prevent the explosion of a huge private credit bubble (especially linked to real estate) in a significant part of the eurozone. Note particularly the exuberant housing markets in countries like Ireland and Spain.

It is a fact that monetary policy has played an important role in such developments. Since, by definition, the ECB can have only one interest rate, if several members of the eurozone have divergent inflation performances, the central bank rates will inevitably prove to be “too low” in countries where inflation is highest—all the more so that the average ECB rates are strongly influenced by the few most stable core
countries\textsuperscript{1} of the eurozone, who play a predominant part (because of their share in European Union gross domestic product [GDP]) in the determination of central interest rates.

In other words, while the objective of maintaining an inflation rate similar to the one observed before the crisis (that is, close to 2 percent) was, on average, attained, the peripheral\textsuperscript{2} countries that had let their inflation soar, their budgetary deficits derail, and their real estate markets explode had, in a way, taken advantage of the low interest rates of the ECB (whose rates were obviously too low for them, while they were more in line with the needs of the stabler core countries of the eurozone).

Because an excessive increase in credit is an essential factor behind the deterioration of current account imbalances, it is understandable why countries with high inflation and, therefore, very low interest rates in real terms (Greece, Portugal, Spain, Ireland), have, because of credit expansion, seen their current account deficits soar (see figure 1).

\begin{table}
<table>
<thead>
<tr>
<th>PERIOD</th>
<th>ANNUAL PERCENTAGE CHANGE</th>
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<tbody>
<tr>
<td>Before the euro (1996–2000)</td>
<td>1.6</td>
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<tr>
<td>From 2001 to 2005</td>
<td>2.2</td>
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<tr>
<td>From 2006 to 2010</td>
<td>1.9</td>
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<tr>
<td>2010</td>
<td>1.6</td>
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<td>2011</td>
<td>2.7</td>
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<tr>
<td>2012</td>
<td>2.5</td>
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<tr>
<td>2013</td>
<td>1.4</td>
</tr>
<tr>
<td>2014</td>
<td>0.5</td>
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<tr>
<td>2015</td>
<td>0</td>
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<tr>
<td>2016 (March)</td>
<td>0</td>
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<tr>
<td>2016 (April)</td>
<td>-0.2</td>
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<td>2016 (May)</td>
<td>-0.1</td>
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<tr>
<td>2016 (June)</td>
<td>0.1</td>
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<tr>
<td>2016 (July)</td>
<td>0.2</td>
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<tr>
<td>2016 (August)</td>
<td>0.2</td>
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\textit{Source:} Bloomberg.

\textsuperscript{1} The core countries are Germany, France, Belgium, Netherlands, and Austria.

\textsuperscript{2} The peripheral countries are Italy, Spain, Ireland, Portugal, and Greece.
To avoid such a contradiction inherent to a heterogeneous monetary zone, there should have been macroprudential surveillance.

From that perspective, it would have been wise to better assess the magnitude of macroeconomic discrepancies in the context of a single monetary policy, and to take measures in countries prone to overheating that would have avoided credit explosion (such as increased down payments for mortgage borrowers).

The second caveat has to do with the reasons behind the Great Moderation³ of inflation that was observed, on average, during the first years after the creation of the euro. It seems difficult to argue that monetary policy has been the dominant—let alone exclusive—cause of the Great Moderation.

While the continuous reaffirmation of the 2 percent target has probably contributed to anchoring price expectations at that level, other more fundamental factors were at work.

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³ The Great Moderation was a period of low macroeconomic volatility experienced in most of the advanced economies from the mid-1980s through to the onset of the crisis in 2007.
The structural slowing down of growth

For a number of years, fundamental long-term trends have been dampening advanced countries’ growth. The demographic decline and the aging of our societies are, indeed, weighing on growth perspectives. In an environment of weak investment, low productivity gains, and lackluster potential growth, it is not surprising that inflationary expectations are subdued.

Table 2 shows that economic growth in the eurozone has significantly declined since the 2007–08 crisis and that such a decline has been more pronounced than the average of other advanced countries.

### TABLE 2. EVOLUTION OF ECONOMIC GROWTH IN ADVANCED COUNTRIES AND IN THE EUROZONE; GDP YEARLY AVERAGES IN REAL TERMS, 1994–2003

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<tbody>
<tr>
<td>Advanced countries</td>
<td>+2.8%</td>
<td>+3.1%</td>
<td>+2.6%</td>
<td>+3</td>
<td>+2.8%</td>
<td>0</td>
<td>+3.2%</td>
<td>+1.6%</td>
<td>+1.4%</td>
<td>+2</td>
<td>+1.8%</td>
<td>+1.9%</td>
<td></td>
</tr>
<tr>
<td>Eurozone</td>
<td>+2.2%</td>
<td>+2.2%</td>
<td>+1.7%</td>
<td>+3.3%</td>
<td>+3</td>
<td>-0.4</td>
<td>+4.3%</td>
<td>+1.4%</td>
<td>+0.3%</td>
<td>+0.6</td>
<td>+0.9</td>
<td>+1.6%</td>
<td>+1.5%</td>
</tr>
</tbody>
</table>

Sources: BNP Paribas.

Table 2 shows that while in the eurozone GDP growth hovered at around 2.3 percent (yearly average) from 1994 to 2006, it slowed to 1 percent on average from 2010 to 2015 (not counting the negative post-crisis years of 2008–09). By contrast, growth of “advanced” countries, taken as a whole, has been twice as high (2 percent compared to 1 percent) during 2010–15.

The issue is whether potential growth in the eurozone is or is not going to remain for a long time at the present rate of less than 1 percent (which is the convergent estimate of international organizations such as the International Monetary Fund, the Organisation for Economic Co-operation and Development, and the European Commission). Table 3 shows the actual and estimated potential and real rates of growth from 2006 to 2017 in the eurozone according to these three organizations. The table shows that potential growth in the eurozone is today close to 1 percent and therefore less than the observed real growth (1.5 percent).
### TABLE 3. ACTUAL AND ESTIMATED POTENTIAL AND REAL RATES OF GROWTH IN THE EUROZONE, 2006–17

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<tr>
<td>EU Commission February 2016</td>
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<tr>
<td>GDP</td>
<td>3.17</td>
<td>2.95</td>
<td>0.43</td>
<td>-4.45</td>
<td>2.06</td>
<td>1.56</td>
<td>-0.92</td>
<td>-0.33</td>
<td>0.84</td>
<td>1.58</td>
<td>1.72</td>
<td>1.85</td>
</tr>
<tr>
<td>Pot.</td>
<td>1.75</td>
<td>1.72</td>
<td>1.31</td>
<td>0.53</td>
<td>0.56</td>
<td>0.63</td>
<td>0.28</td>
<td>0.31</td>
<td>0.53</td>
<td>0.83</td>
<td>1.03</td>
<td>1.10</td>
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<tr>
<td>Gap</td>
<td>1.30</td>
<td>2.52</td>
<td>1.63</td>
<td>-3.41</td>
<td>-1.96</td>
<td>-1.06</td>
<td>-2.24</td>
<td>-2.87</td>
<td>-2.56</td>
<td>-1.84</td>
<td>-1.17</td>
<td>-0.44</td>
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<td>IMF World Economic Outlook April 2016</td>
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<tr>
<td>GDP</td>
<td>3.24</td>
<td>3.05</td>
<td>0.47</td>
<td>-4.54</td>
<td>2.06</td>
<td>1.60</td>
<td>-0.88</td>
<td>-0.30</td>
<td>0.89</td>
<td>1.64</td>
<td>1.51</td>
<td>1.63</td>
</tr>
<tr>
<td>Pot.</td>
<td>1.57</td>
<td>1.42</td>
<td>1.25</td>
<td>0.64</td>
<td>0.83</td>
<td>0.69</td>
<td>0.44</td>
<td>0.45</td>
<td>0.74</td>
<td>1.01</td>
<td>1.03</td>
<td>1.11</td>
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<tr>
<td>Gap</td>
<td>1.47</td>
<td>3.11</td>
<td>2.32</td>
<td>-2.86</td>
<td>-1.63</td>
<td>-0.73</td>
<td>-2.04</td>
<td>-2.79</td>
<td>-2.64</td>
<td>-2.01</td>
<td>-1.53</td>
<td>-1.00</td>
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<tr>
<td>OECD Economic Outlook November 2015</td>
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</tr>
<tr>
<td>GDP</td>
<td>3.33</td>
<td>3.01</td>
<td>0.35</td>
<td>-4.45</td>
<td>2.01</td>
<td>1.63</td>
<td>-0.83</td>
<td>-0.28</td>
<td>0.88</td>
<td>1.50</td>
<td>1.75</td>
<td>1.94</td>
</tr>
<tr>
<td>Pot.</td>
<td>1.65</td>
<td>1.61</td>
<td>1.49</td>
<td>0.96</td>
<td>0.81</td>
<td>0.78</td>
<td>0.60</td>
<td>0.56</td>
<td>0.72</td>
<td>0.88</td>
<td>0.99</td>
<td>1.06</td>
</tr>
<tr>
<td>Gap</td>
<td>1.93</td>
<td>3.33</td>
<td>2.20</td>
<td>-3.21</td>
<td>-2.01</td>
<td>-1.17</td>
<td>-2.60</td>
<td>-3.44</td>
<td>-3.27</td>
<td>-2.66</td>
<td>-1.89</td>
<td>-1.02</td>
</tr>
</tbody>
</table>

Sources: International Monetary Fund, the Organisation for Economic Co-operation and Development, the European Commission, and Datastream.

But because actual growth is hampered, and even sometimes blocked, by insufficient structural reforms (which, in turn, negatively impacts the dynamism of potential growth), it is legitimate to ask: Is the creation of additional central bank liquidity and lower and lower interest rates the right answer?

### The slowing of wage earnings

Wage moderation has characterized eurozone economies over the last decade, a trend influenced by globalization. The opening of European Union borders to manufactured goods from countries like China, where labor costs are much lower than in advanced economies, has played a significant role. To protect their competitiveness, and to limit delocalizations, advanced importing countries have been forced to moderate their own labor costs.

These two structural factors have no direct link with the monetary policy of advanced economies, although some believe it is appropriate to correct—that is, expand—its stance.

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4 Confronted to increased competition, firms tend to close their plants in “Western countries” and invest in emerging markets.
Factors that might have contributed to an excess easing of monetary policy

At this point of the analysis, one can ask whether the fact that the CPI objective was reached, in part for external (nonmonetary) reasons, might have contributed to an excess easing of monetary policy. Indeed, with a strategy almost exclusively geared to inflation targeting (such as the one that has prevailed since the 1990s), central banks were tempted to relax monetary policy as long as the CPI had not exceeded the magic figure of 2 percent.

This strategy carried a risk: what to do if inflation remains subdued (in large part for structural reasons) while money creation and credit expansion are booming? It remains a fact that the existence of asset bubbles (real estate or financial) is a manifestation of inflation, excessive debt, and inadequate resource allocation. Normally, such bubbles should have pushed central banks into monetary tightening. But the exclusive use of the CPI target might have contributed to reassuring them and to have kept them from reacting to asset and credit bubbles, which were, in fact, the harbingers of the crisis. As distinguished economist William White recently noted, “History should have taught us that [consumer] price stability does not guarantee macro-economic stability” (White 2015, 6).

It is a fact that the Fed, particularly during 2003–05, was acting with extreme accommodation, setting interest rates below the levels justified by the Taylor rule. By the same token, precrisis monetary policy was asymmetric, quicker to counter an economic slowdown than to tighten monetary policy in the face of signs of overheating. This was an illustration of the views of Alan Greenspan, then chairman of the Board of Governors of the Federal Reserve System, who thought that it was more “efficient” to “pick up the pieces” after a period of excessive credit expansion than to “lean against the wind” in order to prevent overheating.

We know too well the cost of such a gamble: excess debt and the reversal of extremely high real estate prices triggered in 2007 the worst financial crisis in half a century. As British economist Sir Andrew Crockett used to say, “Risks accumulate in periods of euphoria and materialize in recessions.” When the crisis broke out, central banks

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5 The Taylor rule is a decision-making process that links needed changes in the policy rate to the output gap and deviations of actual and expected inflation from targeted levels.
were left with only one option: to mop up the most dangerous losses that could have threatened the survival of the financial system and to buy enough assets to avoid a disastrous one-sided selling on the markets where panic selling would force a downward spiral and collapse in prices.

We should certainly acknowledge the quick reaction by central banks in 2007–08. But we should not forget that monetary policies in the run-up to 2007 contributed to the crisis and to its long-term consequences as we see them unfold today. And the remedy itself (liquidity creation and zero rates) is not without risks, as we shall demonstrate.
II. Inflation in the eurozone and the rationale for extreme monetary accommodation

REASONS BEHIND LOW INFLATION IN THE EUROZONE

As table 1 indicates, in 2013, the CPI (at 1.4 percent) had started to deviate from the 2 percent target. Since 2014–15, the Eurozone CPI has been hovering at around zero. The question we should have asked in the run-up to the crisis is, “What are the factors that explain the behavior of the CPI?” Two factors seem essential in this regard.

The first factor that explains the behavior of the CPI is lower oil prices. Two years ago oil was US$100 per barrel; currently it is around US$50 per barrel. For a region like the eurozone, which is heavily dependent on imported oil, this massive fall entails a considerable—and beneficial—reduction in consumption and production costs. The direct impact of lower oil prices has reduced the CPI by close to 1 percent. In other words, without the oil factor, the eurozone core inflation would be around 1 percent (instead of zero percent headline CPI). Of course, we should distinguish the level of prices from the future evolution of inflation. After a while, the impact of the oil shock will tend to fade, and the underlying inflation will reappear.

But to the extent that the fall in oil prices does not seem to be a temporary phenomenon, its “structural” and lasting impact on the CPI

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6 In February 2016, inflation was negative (-0.2 percent); it regained zero in March and -0.2 percent in April.
must be taken into account by monetary authorities in order to correctly interpret the true meaning of price evolutions. Although this point is sometimes contested, the most recent studies show that the “second round” effects of the fall in oil prices on core inflation are significant and take different channels: oil price impact on transportation and production costs of enterprises (including the effects on nondurable consumer goods which, a priori, do not seem directly influenced by oil prices); and changes in inflationary expectations and, in particular, wage negotiations.

Thus, it has been estimated that in the last quarter of 2015, the eurozone core inflation (including second-round effects) would have reached 1.41 percent (instead of the 0.93 percent observed). For an economy growing at a rate of 1.50 percent with a significant amount of unused capacity, such a core inflation rate is, in fact, very close to the ECB target. Nothing in this analysis would seem to have justified the need for an urgent stimulatory reaction by the ECB in the face of the CPI evolution in the early months of 2016. Things would be otherwise if the fall in oil prices were considered as a merely temporary perhaps speculative phenomenon.

What to think about this?

In the long term, the price of oil tends to follow “super-cycles” that last 10 to 15 years. These cycles are the result of different reactions of economic agents (producers and consumers) to initial shocks in the price of a barrel. Normally, lower oil prices tend to increase consumption and therefore to trigger a rise in prices. But longer term, the traditional expected trends toward higher and higher oil prices (notably because of limited reserves) seem to get blurred or delayed due to the following factors: Saudi Arabia appears less able to exert its leadership in curtail- ing supply in order to boost prices; the fundamental trends (in part demographic) behind a long-term decline in growth rates inevitably tend to limit energy consumption; and the environmental aspects of oil consumption are already leading to research in alternative energy options (to limit CO₂ emissions).

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7 The second-round effect is “produced when agents alter their inflation expectations due to the slump in oil prices and, in turn, these expectations affect the trend in current prices” (Caixa Bank Research 2016, 21).

8 See Caixa Bank Research, based on Eurostat data (March 2016).
According to estimates, if oil prices were to rebound in the future—and they probably will—a ceiling could appear in the medium term at around US$60 per barrel (in terms of purchasing power parity). Such a level would not significantly change the above analysis on the structural or, at least, durable, character of the oil price impact from a monetary point of view.

The second factor that explains the behavior of the CPI is the long-term structural factors influencing inflation. Aside from the secular factors, the eurozone is still characterized by significant unused capacity (in particular, high unemployment) and by weak potential growth. The result is that the prospects for wage increases are low and that core inflation (not taking into account the direct effect of oil prices) is around 1 percent. But this does not amount to deflation.

To what extent do the above structural factors need to be corrected by monetary policy? That is a central question. The oil shock is globally beneficial for the eurozone\(^9\) and cannot be considered a negative. In that respect, the incremental disinflationary effect that it triggers should not be a cause for worry. It is a positive factor that increases the purchasing power of consumers, and not the manifestation of a lack of domestic demand or of an insidious deflationary process. A fall in the level of imported prices is fostering wage income and should not be seen as the beginning of a deflationary spiral. Therefore, a monetary correction does not seem justified, even if the underlying post-oil-shock price evolution should be the object of vigilance.

It appears difficult to argue from the standpoint of monetary stability, however, that a durable fall in the CPI following a major oil shock should have no influence whatsoever on the way the inflation target is determined. A somewhat lower target than the one envisaged before this shock does not seem unreasonable. Targets should be adapted to reality and not be inflexible.

There remains the issue of the lackluster European economy. It is on this issue that the debate should focus so as to avoid any misinterpretation of the current inflation rate and its monetary consequences. One line of thinking could be to argue that, because of the constraints that limit fiscal margins of maneuver, monetary policy is the only tool

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\(^9\) It has been estimated that a lasting fall of 10 percent in the price of oil would generate a 0.2 percent estimated higher GDP (without taking into account the effects of such a move on the imports of oil-producing countries). The International Monetary Fund has calculated that a fall of US$20 per barrel would increase the world GDP by 0.5 percent (that is, 1 percent given the actual fall).
left for reaching a better policy mix. This seems to be the position of most commentators and analysts. As soon as markets observe bad news concerning the CPI (that is, a fall), investors insist on the need for the central bank to support the economy. And monetary authorities often give the impression that they are in line with such a view.

If the (relative) weakness of growth in the eurozone were the consequence of low demand and of deflationary expectations, and of the lack of credit availability at a reasonable cost, one could understand such a position. But if, as facts seem to indicate, it was more a structural sluggishness due to supply constraints, things would be different. In that case, the answer should not be to lower already very low interest rates, but to address the real causes of the problem. Why is investment low in the eurozone? Is it because interest rates are too high? Surveys run by the ECB with nonfinancial enterprises do not point in that direction. Investment is low because growth and profitability prospects are seen as dim, not because loans are seen as too expensive.

If low investment (in some countries like France) has to do with low returns, high taxes, and too rigid labor and goods and services markets, it is not obvious that monetary expansion is the right recipe. Some argue that monetary policy should provide more time to policy makers so that they can take the appropriate structural measures. But what if they don’t take such measures? And what if incentives to reform were weakened by too easy money?

**ECB monetary policy**

The ECB has engaged in a bold and expansionary monetary policy, particularly since the beginning of 2015. That year it made a decision to buy 60 billion euros of public and private securities monthly over a period of 18 months. This already unprecedented amount was raised to 80 billion euros in May 2016, and represents nearly two-thirds of the total issuance of eurozone sovereign debt (see figure 2).
FIGURE 2. SOVEREIGN DEBT (INCLUDING PUBLIC AGENCIES), IN BILLIONS GROSS ISSUANCE AND PURCHASES BY THE ECB, 2015–16

The purchases have risen to 63% of total issuances in 2015. For some countries (like Germany) where new deficits have been eliminated, the ECB is obliged to buy part of the maturity debt.

Sources: ECB, BNP Paribas.

Such purchases (including long-term refinancing operations and quantitative easing [QE]) have contributed to bringing long-term sovereign interest rates to a low level (less than 2 percent, lower than in the United States), and to have accelerated their convergence, as shown on figure 3. Of course, fiscal reforms engaged notably in peripheral countries have played an important role in this process. But the ECB has decisively contributed to a lower and more homogeneous interest rate pattern in the eurozone.
It is also remarkable that the ECB has helped reduce so significantly interest rates on loans to nonfinancial corporations (see figure 4 on the cost of loans to small and medium enterprises).

Note: ECB = European Central Bank; OMT = outright monetary transactions; QE = quantitative easing. 
Source: Bloomberg.
This should, in theory, help foster more productive investment. But if the above analysis on the structural causes of low growth is valid, then the reduction of interest rates may well have a limited influence. Thus, it seems that some aspects of the ECB strategy could be reexamined. The fact that it is geared to CPI developments and to a swift return of inflation to the 2 percent target could be somewhat nuanced, given the complexity of the interpretation of current inflation.\footnote{One of the usual methods to estimate inflation expectations is based on the difference between the nominal yield on a sovereign fixed-rate bond and the real yield on a similar inflation-linked investment. This difference (the breakeven inflation rate) is currently 1.5 percent in the United States for 10-year instruments and close to 1 percent in the eurozone. Five-year forward breakeven inflation (that is, long-term expectations) is 1.7 percent in the United States and 1.4 percent in the eurozone. These expectations are consistent with the current economic background and are not a sign of a deflationary spiral.}

If the current strategy were unchanged and applied in a rigid fashion, it would mean that as long as inflation had not reached the 2 percent target (which does not seem realistic for the time being), the ECB would continue to create more liquidity. This would be, in a way, the mirror
situation of the 2000 run-up to the crisis, when monetary policy was relaxed as long as consumer prices were below the target, which, as we know too well, has been the cause of great damage.

The problem with such a “free race” policy is that it is starting to produce negative effects on the economy and on the stability of the financial system.
III. The drawbacks of too accommodative a monetary policy for too long

Three major problems can result—and worsen—from the pursuit of quantitative easing.

1. The balance between savings and consumption

Yields—very close to zero or even less—on riskless investments should normally dissuade investors and actors from saving and should induce them into more consumption, which would support growth. But contrary to the hopes of many, financial repression\(^{11}\) does not always result in an increase in consumption, especially in Europe. Household savings in countries like France, Germany, and Italy are structurally high (15 percent, 17 percent, and 11 percent of incomes, respectively), and stable. They ensure more than 80 percent of the financing of their economies.

The financial part of those savings is of a precautionary nature (for example, to face life’s uncertainties, unemployment, and old age) and is also constituted for transmission purposes. The majority of such funds are placed in savings accounts and in insurance and pension funds, which are themselves invested in “safe” assets. When the yields fall, or sometimes even disappear, because of monetary policy, it would be

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\(^{11}\) Financial repression “occurs when governments implement policies to channel to themselves funds that in a deregulated market environment would go elsewhere. Policies include directed lending to the government by captive domestic audiences,... explicit or implicit caps on interest rates” (http://www.imf.org/external/pubs/ft/fandd/2011/06/Reinhart.htm).
logical to see savings switch to equity instruments that can provide, over the longer term, more satisfactory returns, all the more so if investors believe in an upturn of the economy.

In fact, it is that process that took place in the United States as a consequence of QE. With lower long-term rates, equity markets rebounded exactly in line with the creation of liquidity by the Fed, as shown in figure 5. That upturn in equity markets triggered a wealth effect, which contributed to more consumption.

**FIGURE 5. QE AND EQUITY MARKETS IN THE UNITED STATES, 2008–14**

Sources: BofA Merrill Lynch Global Research, Bloomberg.

*Denotes index is equal weighted.

In the eurozone, however, this process does not seem to work; that is, there has been no significant shift to equities, no wealth effect. Indeed, European savers are not the same as savers in the United States. European savers are basically risk-averse and not inclined to buy shares (which anyway would most often be penalized by the tax system). More worryingly, the shift of repressed financial savings to consumption does not seem to work either. Indeed, a significant number of savers are trying to offset lower returns by more savings.

12 Since the ECB launched its bond purchase program in 2015, the Morgan Stanley Capital International-European Economic and Monetary Union (MSCI-EMU) Index, which measures the performance of stocks based in the EMU, has actually fallen by 7 percent (including dividends), in contrast with the US experience. The reasons behind this bearish performance of eurozone equities are not related to monetary policy, but to the weakness of expectations of nonfinancial corporations for economic growth and profitability.
2. Negative interest rates

Pushed to its logical conclusion, QE—whose efficiency seems to be limited by the zero bound—could, among a variety of technically possible alternatives, enter into negative interest rate territory (excess reserves held by banks at the ECB are already affected by negative rates at -0.4 percent). The underlying idea seems to encourage debt through the abolition of its cost so as to reduce past debt overhang and to incentivize investors and actors into borrowing at zero rates in order to invest or consume.

But things are not that simple. In a region like the eurozone, where banks ensure three-fourths of the financing of the economy (in contrast to the United States, where financial markets play the dominant role), it is imperative to preserve the ability of banks to lend if credit is to be developed.

Banks are sensitive to the spread between their funding costs (deposits and borrowings) and the return on their assets. If central banks were to enter into negative interest rates, it would be difficult, if not impossible, for European banks—given current competitive conditions—to raise the cost of loans charged to clients in order to keep a sufficient margin between funding and lending rates. By the same token, it would be almost impossible (or, in some cases, unlawful) to charge depositors negative rates on their accounts, lest encouraging leaks into cash or foreign accounts.

Simulations have been made on the dilemma of lower rates or profitable banks. Several peripheral banks in Europe would be particularly hit if interest rates were to fall further. A banking crisis would probably be inevitable in a number of countries. Trying to reduce interest rates by a few basis points further while striving to get inflation up could threaten the stability of the financial system. It would be a high-risk bet. Hopefully, the ECB has not decided to go that route.

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13 Of which “helicopter money,” a concept from Milton Friedman’s *The Optimum Quantity of Money*, in its extreme form would “force” consumption by directly (and freely!) crediting household bank accounts with central bank money.
3. Whether a hyperactive monetary policy is compatible with a further tightening of banking regulation

If ECB policy is to quick-start credit available to nonfinancial enterprises (outstanding loans to such enterprises have declined by 2.5 percent per year since 2012 and are only slowly starting to pick up, as shown on figure 6), banks must have an unhindered capacity to lend.

**FIGURE 6. EVOLUTION OF OUTSTANDING BANK LOANS TO NONFINANCIAL ENTERPRISES IN THE EUROZONE (IN ANNUAL %), 2011–1Q16**

![Figure 6](image)

*Source: European Central Bank.*

The recent increase in outstanding loans shown in figure 6 is calculated as a European average and could be misleading. Countries like Italy and Spain are still affected by a decrease in their lending (Spain: -1.5 percent, Italy: -1.6 percent), as shown in figure 7.
But the envisaged increase in bank capital requirements as a result of stricter implementation of the Basel rules (especially as regards risk-weighting methods), as shown in table 4, will no doubt further increase the cost of banking while reducing its profitability. This envisaged tightening will come in addition to higher constraints, due to liquidity requirements, leverage ratios, and the finalization of total loss-absorbency capacity\textsuperscript{14} (which inevitably will increase the cost of funding for banks).

\textsuperscript{14} Total loss-absorbency capacity (TLAC) states that “there must be sufficient loss-absorbing and recapitalization capacity available in resolution to implement an orderly resolution that minimizes any impact on financial stability, ensures that continuity of critical functions, and avoids exposing taxpayers (that is, public funds) to loss with a high degree of confidence” (www.fsb.org/wp-content/uploads/TLAC-Principles-and-Term-Sheet-for-publication-final.pdf).
Table 4 shows that the amounts of risk eligible to capital ratios could increase by 20 percent or more at the end of 2016 if all present proposals were implemented.

The above-mentioned measures have already (since March 2015) led a growing number of European banks to reduce the denominator of their ratios and thus to curtail the size of their balance sheets (see figure 8).
We should correct a frequent mistake here. With the lowering to zero of refinancing rates by the central bank, some think that just by on-lending to clients such “free” money, banks will build more comfortable margins and, therefore, will be in a better position to further increase their loans. In fact, this—traditional—process can only work if the general level of interest rates remains high enough to ensure banks an adequate spread.

But, as shown in figure 9, the spread (defined here as the difference between the rates they are charged by the central bank and the rates they charge their best clients—the so-called “prime”) of eurozone banks is substantially lower than the spread of similar American banks. Currently, the eurozone spread is only 55 percent of the American spread.

**FIGURE 9. SPREADS BETWEEN REFINANCING RATES AT THE CENTRAL BANK AND RATES CHARGED TO CLIENTS (PRIME RATE ON 10-YEAR LOANS)**

This considerable gap can be explained by several factors. First, the level of the US prime rate (paid by the best clients) is almost twice the rate observed in the eurozone (3.3 percent compared to 1.7 percent). But in both cases, the cost of accessing central bank refinancing is around zero.
Second, banking competition in the eurozone is particularly intense because of the existence of a strong “mutualist” system (mutualist institutions do not have the same requirements as commercial banks in terms of return on equity, because of the special character of their participating members). This phenomenon tends to reduce interest costs to clients, which does not seem to be the case in the United States.

Third, the existence in the United States of public entities (government-sponsored enterprises) that systematically buy mortgage loans from banks makes the Basel ratios easier to reach because a substantial part of the risk-weighted assets of American banks is no more in the scope of the Basel ratios.

The result of all this is that the profitability of eurozone banks (measured by the return on equity) is much lower than in the United States, as shown on figure 10 (4 percent compared to 9 percent in 2015).

In sum, we must understand that in Europe, banks are the indispensable transmission belt of monetary policy. If banks are not profitable, they will not lend more, and the whole operation of QE will falter.

Several factors are at work.

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15 In a mutualist system, the account or policy holders in a firm are also owners/shareholders of the firm.
16 In the United States, since the early 2000s, only 30 percent of mortgage loans remain on bank balance sheets; 70 percent were bought by public institutions like Fannie Mae and Freddie Mac.
The first factor is the magnitude and speed of the recapitalization process (equity has more than doubled since the crisis broke out, as shown in figure 11).

![Figure 11. Common Equity Tier 1 (as a sample of European banks), 2005–15](image)

Note: EU banks: SG, BNPP, BBVA, Santander, Deutsche Bank, Commerzbank, Intesa Sanpaolo, Unicredit, HSBC, Barclays, RBS, Lloyds, UBS, Credit Suisse

Source: Bloomberg.

The second factor is the increase in nonperforming loans in peripheral countries. Figure 12 shows the magnitude of the nonperforming loan phenomenon (the European average is 5.6 percent of total exposures) and its great geographic disparity (Cyprus 46 percent, other peripheral countries 16 to 20 percent, and core countries around 1 percent to 4 percent).
The third factor is the squeezing of European bank margins, as illustrated in figure 8.

If the measures envisaged by the Basel Committee, notably to tighten the risk-weighting process, were implemented by the end of 2016, European banks would, in fact, see their capital requirements jump from 12 percent to 15 percent, on average, or even 16 percent. The return on equity achieved in 2015 would fall from 4 percent to 3 percent. A large number of banks would thus not be allowed to cover their costs and thus to carry out their intermediation role.

It seems, therefore, indispensable that monetary authorities be vigilant on the profitability issue and see to it that the envisaged Basel measures are calibrated and phased in a manner that would allow the European banking system to participate in the credit revival called for by the ECB. In that respect, it is important to meticulously adjust monetary policy and regulation. The ECB should, no doubt, pursue its aim, but in its implementation it should also take into account monetary policy considerations.
Additional observations

We add to the above analysis a few observations concerning financial markets.

First, the balance of insurance companies and pension funds is a matter of concern. Such institutions must meet their long-term liabilities to their retiring clients, with assets (like sovereign bonds) that, nowadays, carry no return. How should this contradiction be settled?17

Second, financial markets are getting more and more volatile, with investors seeking return as well as safety.

Third, the liquidity of financial markets (that are supposed to partially substitute the banking sector in Europe) is reduced because of a number of regulations that are discouraging banks and insurance companies from investing in long-term instruments, from securitization, and from market making.

Fourth, the threat of a hike in interest rates would severely impact portfolios that are accounted for at market value. And what if such a fear, in an uncertain environment, obliged monetary authorities to continue QE for a very long time? That is, no doubt, one of the gravest dangers of such a policy: the difficulty changing it.

Fifth, the functioning of the sovereign debt instruments market is becoming a source of concern. The magnitude of the purchases of such instruments by the ECB (63 percent of total issuance, as shown in figure 2) at a moment when budgetary deficits are declining in some states (or have even disappeared, as in Germany) creates some imbalances between investors who wish—or are compelled by regulators—to hold such bonds, and the ECB, which is keen to deliver its program. In addition, a significant part of the securities purchased by the ECB come from nonresidents. This reduces the incentives for European investors to diversify their holdings into more risky but growth-oriented assets.

17 When the present value (actualization rate) becomes negative, the value of the commitments to retiring clients increases beyond the value expected at the moment of the subscription.
IV. Conclusion

The analysis above leads to a prudent answer to the question, “How well is QE suited to Europe?”

The conditions that explain the relative success of QE in the United States do not seem to be transferable to Europe. The financing of the continental economy remains completely dependent on bank intervention. The result is that the lowering of market interest rates all along the yield curve has less economic impact in Europe than in the United States. The result is also that bank profitability remains a crucial element for the revival of credit in Europe. But European banks see their margins reduced because of lower interest rates while, at the same time, they have to increase their equity in order to meet the regulatory requirements, while the cost of that incremental equity is higher than its return. In such circumstances, the transmission mechanism—through the banking sector—of the ECB’s monetary policy is significantly weakened.

The (mostly structural) causes that explain the subdued growth in Europe cannot be corrected by systematic liquidity creation. As an example, peripheral banks, which hold around 15 percent of non-performing loans in their portfolios, are not incentivized to lend more, even if they can access central bank liquidity at lower rates. From this point of view, QE policy has reached a point beyond which its policy returns are diminishing. More generally, productivity growth continues to decelerate in advanced countries, but it is precisely those countries
that are lagging the most in the following respect: structural reforms have been stalling over the last 10 to 15 years.

**As in all matters, we should always be careful to preserve fundamental beliefs and principles, because those are the elements that limit uncertainty and are the basis for trust.** But the determination to push to the extreme an accommodative monetary policy with the hope—probably unrealistic—of “forcing” inflation to quickly rebound to close to 2 percent, while the current core inflation rate in Europe (around 1 percent) does not seem out of line given the economic environment, and also the temptation shown by some to enter into negative interest rates, cannot but trigger a discussion on the long-term consequences of such policies on savings, asset quality, the sustainability of investment, and market stability.

Risks incurred could be huge not only for the economy but also for society. Even if it is obvious that the “natural” equilibrium interest rate tends to decline in an environment of weak growth and high savings, this does not mean it must become negative. The interest rate will always remain the price that the saver is entitled to expect for having accepted, for a given period of time, to postpone their immediate consumption. To say that such a price should become negative goes against common sense (time would be abolished!) and could bear grave consequences for the future.

How could one calculate, with negative rates, returns expected on an investment? What would be, in a market economy, the future of long-term investment projects that would involve high fixed costs and high risks? Who would finance them without adequate remuneration? Resource allocation tends to lose its efficiency when interest rates are very low. Indeed, the only projects that can be financed are the ones that are viable with very low rates. Less profitable and more risky investments (but perhaps socially more beneficial) would be eschewed. Furthermore, investment duration is bound to be reduced in an environment of low interest rates.

**The present market volatility is obviously related to QE policies.** The massive creation of liquidity has favored indebtedness and the search

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18 The more risky a project and the more uncertain its profitability, the higher must be the “actualization” rate (to determine its present value), if private markets are to finance it.
for higher yields. The result has been huge capital flows and dollar-denominated debt accumulation in emerging economies. With the economic slowdown in China, the fall in commodity prices, the higher dollar, and the signs of monetary policy normalization in the United States, this massive amount of debt is starting to crumble. Many borrowers in dollar instruments are trying to repay them and therefore have to sell assets. This explains, in part, the extreme volatility of financial markets (including exchange rate markets). In that respect, it would be futile to expect winning the “currency war” (or, more accurately, the “QE competition”) in order to gain some competitive advantage.

The truth is unfortunately simpler: It is not through liquidity creation or monetary policy devaluations that growth issues can be tackled. Too much debt always leads to bubbles, to higher risks, and, ultimately, to crises.

As noted in a recent report by Bruegel, a European think tank that specializes in economics, the current tensions between a common monetary policy and the challenges faced by the insurance and pension sectors that remain supervised at the country level would require “establishing European banking supervision within a proper framework of macro-prudential policy for the financial system as a whole. The current preoccupation with the inflation goal overlooks the explosion of credit in other areas of the financial sector. Negative nominal interest rates are hurting insurers and pension funds and are historically unprecedented. A similar process was at work in the run-up to the credit crisis” (de Vries and Schoenmaker 2016, 137).

* * *

The author of this paper knows too well how volatile markets are and how sensitive they are to anything that might resemble a radical change in policies. It is more a call for patience and moderation that is proposed. If one accepted that the underlying economic situation in Europe does not seem to be compatible with a swift return to 2 percent inflation, the ECB could face the monthly CPI news with greater serenity. The pressure exerted today on the ECB to react immediately to any episode of “weak” CPI inflation seems exaggerated.

To avoid interregional disruptions—notably on exchange rates—that could be created by the new mindset as suggested in this paper, it would be timely—and overdue—for the main economic powers to agree on a more moderate (that is, less systematically hyper-reactive) policy. Such
international coordination would help reduce the negative external shocks resulting from purely national policies.

The danger of the current policy setting is somewhat paradoxical. The more monetary policy is well intended and increases its ease, the less investors seem to be tempted to take advantage of it. If actualization rates, as they are set by private investors today, are high and conservative despite the low interest rate environment, it is perhaps because the extreme consequences of lasting monetary laxity are seen as additional factors increasing uncertainty, as well as undermining confidence in future growth. In such an environment, it is vital that central banks instill confidence and reinforce long-term stability signals.

**Post-scriptum**

Since the present article was written (June 2016), a, somewhat positive, development has appeared.

As described above, projected regulatory increases in Risk weighted assets (RWAs) were expected to amount to 23%, which would have resulted in raising Basel requirements by 2.7–3.4 percentage points (see table 4).

But the European Ecofin Council, having realized the dangers of such large increases, concluded on their 12 July 2016 meeting by stating that the reform of RWAs should not result in a “significant increase in the overall capital requirements for the banking sector” (Economic and Financial Affairs 2016, 9). The Basel Committee endorsed this recommendation in September 2016.

Recent ongoing discussions between regulators seem to have indeed sized down the projected increases in RWAs to around 9 to 10% (i.e. approximately one percentage point more in capital ratios).

While the above analysis of the very low profitability of the European banking system remains, unfortunately, entirely accurate, the additional threat on RWAs calculations seems to have, to some extent, diminished.
Bibliography


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Professor of Business Administration & Public Policy, University of Michigan  
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Group of Thirty Publications

SPECIAL REPORTS SINCE 1990

Fundamentals of Central Banking: Lessons from the Crisis
Central Banking Working Group. 2015

Banking Conduct and Culture: A Call for Sustained and Comprehensive Reform
Culture and Conduct Working Group. 2015

A New Paradigm: Financial Institution Boards and Supervisors
Banking Supervision Working Group. 2013

Long-term Finance and Economic Growth
Long-term Finance Working Group. 2013

Toward Effective Governance of Financial Institutions
Corporate Governance Working Group. 2012

Enhancing Financial Stability and Resilience: Macroprudential Policy, Tools, and Systems for the Future
Macroprudential Policy Working Group. 2010

The Reform of the International Monetary Fund
IMF Reform Working Group. 2009


The Structure of Financial Supervision: Approaches and Challenges in a Global Marketplace

Global Clearing and Settlement: Final Monitoring Report
Global Monitoring Committee. 2006

Reinsurance and International Financial Markets
Reinsurance Study Group. 2006

Enhancing Public Confidence in Financial Reporting
Steering & Working Committees on Accounting. 2004

Global Clearing and Settlement: A Plan of Action
Steering & Working Committees of Global Clearing & Settlements Study. 2003

Derivatives: Practices and Principles: Follow-up
Surveys of Industry Practice
Global Derivatives Study Group. 1994

Derivatives: Practices and Principles, Appendix III:
Survey of Industry Practice
Global Derivatives Study Group. 1994

Derivatives: Practices and Principles, Appendix II:
Legal Enforceability: Survey of Nine Jurisdictions
Global Derivatives Study Group. 1993
Global Derivatives Study Group. 1993

Derivatives: Practices and Principles
Global Derivatives Study Group. 1993

Clearance and Settlement Systems: Status Reports, Autumn 1992
Various Authors. 1992

Clearance and Settlement Systems: Status Reports, Year-End 1990
Various Authors. 1991

Conference on Clearance and Settlement Systems.
London, March 1990: Speeches
Various Authors. 1990

Clearance and Settlement Systems: Status Reports, Spring 1990
Various Authors. 1990

REPORTS SINCE 1990

Sharing the Gains from Trade: Reviving the Doha
Study Group Report. 2004

Key Issues in Sovereign Debt Restructuring
Study Group Report. 2002

Reducing the Risks of International Insolvency
A Compendium of Work in Progress. 2000

Collapse: The Venezuelan Banking Crisis of ‘94
Ruth de Krivoy. 2000

The Evolving Corporation: Global Imperatives and National Responses
Study Group Report. 1999

International Insolvencies in the Financial Sector
Study Group Report. 1998

Global Institutions, National Supervision and Systemic Risk
Study Group on Supervision and Regulation. 1997

Latin American Capital Flows: Living with Volatility
Latin American Capital Flows Study Group. 1994

Defining the Roles of Accountants, Bankers and Regulators in the United States
Study Group on Accountants, Bankers and Regulators. 1994

EMU after Maastricht
Peter B. Kenen. 1992

Sea Changes in Latin America
Pedro Aspe, Andres Bianchi, and Domingo Cavallo,
with discussion by S.T. Beza and William Rhodes. 1992

The Summit Process and Collective Security:
Future Responsibility Sharing
The Summit Reform Study Group. 1991
Financing Eastern Europe
Richard A. Debs, Harvey Shapiro, and Charles Taylor. 1991

The Risks Facing the World Economy
The Risks Facing the World Economy Study Group. 1991

THE WILLIAM TAYLOR MEMORIAL LECTURES

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