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Fraternal Twins

Why the Fed and the ECB are More Similar than Often Suggested

Henrik Enderlein

Introduction

Since the creation of the European Central Bank (henceforth 'ECB') in 1998 it has become quite topical amongst observers of monetary policy to compare the ECB to its counterpart in the United States, the Federal Reserve System (henceforth 'Fed'). Much of the literature that has emerged in that context keeps insisting on differences between both central banks, implicitly suggesting that divergences largely outweigh similarities.

The most frequently evoked areas in which differences between the ECB and the Fed have been quoted include:

- the legal mandates (arguments to align the mandate of the ECB with the one of the Fed have been voiced by politicians,[1] practitioners[2] and academics[3]);
- provisions on accountability and transparency (see mainly the analyses by Buiter, 1999, and Eijffinger and Geerats, 2002);
- economic output (e.g. inflation, growth, employment);[4]
- the monetary policy strategies.[5]

The purpose of this chapter is to review such arguments and to investigate whether the two central banks are indeed as different as often suggested. The chapter finds that it is rather striking how similarly both central banks behave and that differences between the Fed and the ECB are thus generally overestimated.

Before conducting a more detailed comparison of some of the issue areas outlined above, a few general considerations on how approaches to the comparison of central banks can differ, seem warranted. Indeed, the above-mentioned issue areas are generally analysed on the basis of specific

methodologies that imply some important assumptions.

- Analyses focused on legal differences (i.e. comparisons of central bank mandates) tend to imply that central banks behave differently because the mandates or legal requirements under which they operate are different. Such analyses thus necessarily imply that central bankers actually stick to their mandates and follow the legal texts very closely; they completely exclude the possibility that central bank behaviour deviates from the legal requirements. Ideal-typical statements of legal analyses are of the type: 'The mandate of Central Bank A includes growth whereas the mandate of Central Bank B does not, so one can assume that Central Bank A pays more attention to growth than Central Bank B.'
- Comparisons based on the interpretation of public statements, speeches and publications stand in contrast to comparisons based on legal texts. Interpretative analyses focus their attention on the way central bankers communicate their action. They thus tend to imply that central bankers say what they do and do what they say. Ideal-typical statements of interpretative analyses are of the type: 'Central Bank A announced that it would take into account growth when deciding on monetary policy whereas Central Bank B did not, so one can assume that Central Bank A pays more attention to growth than Central Bank B.'
- Rule-based analyses are grounded in the assumption that central bankers generally follow a rule that can be detected. Instead of following legal texts or interpreting public statements by central bankers, such analyses look for measurable evidence. They imply that central bank action can be simplified on the basis of rules (such as the Taylor Rules[6]). Ideal-typical statements of rule-based analyses are of the type: 'Empirical analyses have shown that Central Bank A puts 30 per cent more weight on growth than Central Bank B, so one can assume that Central Bank A will also in the future put 30 per cent more weight on growth than Central Bank B.'
- Output-focused analyses of monetary policy tend to imply that differences in economic fundamentals between two countries or monetary areas can largely be explained by different types of monetary policy. This assumes that central bankers can largely control output variations. Ideal-typical statements of output-focused analyses are of the type: 'Central Bank A does a better job than Central Bank B since inflation in region A is lower than inflation in region B.'
- Model-based analyses are a variant of output-focused analyses. They seek to model the relationship between the measurable actions of a central bank (i.e. the level of interest rates) and the resulting implications for the economy (i.e. inflation rates or growth rates). These analyses imply that economic relationships can actually be modelled in a way that allows for generalized conclusions. Ideal-typical statements of model-based analyses are of the type: 'Had Central Bank A in region A lowered interest rates by

> 50 basis points (as did Central Bank B in region B), inflation would have increased by 1 per cent.'

Each of these methods has certain advantages and drawbacks. It is important however to keep the implicit assumptions in mind when assessing comparisons between central banks.

This chapter follows both an interpretative and a rule-based approach. First, it presents an interpretative analysis of the ECB's and the Fed's mandates, arguing that the two different mandates are interpreted in an identical manner. Second, it presents an interpretative analysis of the ECB's and the Fed's strategies, again arguing that the similarities are striking. Third, it presents a rule-based assessment, providing some evidence that the measurable behaviour of the Fed and the ECB is much closer than often suggested. The final section concludes.

The mandates: why it is useful to distinguish between the letter and the spirit

The focus on differences in mandates between the Fed and the ECB is undoubtedly founded on formal grounds. As is well known, the mandate of the Fed as mainly specified by the Humphrey-Hawkins Act in 1978 is much wider than the one of the ECB. Section 2A of the Federal Reserve Act reads as follows:

> The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.

Article 105(1) of the Treaty establishing the European Community (henceforth 'TEC'), as amended by the Maastricht Treaty, gives the ECB a rather different mandate:

> The primary objective of the ESCB shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2.

Article 2 of the TEC reads as follows:[7]

> The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common

> policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

The formal difference in the mandates is indeed striking. It would, however, not be correct to derive direct implications for monetary policy-making from this difference. Indeed, as an interpretative analysis of the two mandates indicates, the Fed and the ECB define their mandate and its components in a strikingly similar manner.

Both mandates include a reference to price stability. The ECB has given a very clear numerical definition of price stability by indicating that 'Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2 percent.'[8] The ECB Governing Council has also clarified that, in the pursuit of price stability, it aims to maintain inflation rates below, but close to, 2 per cent over the medium term.[9]

The Fed has only provided a qualitative definition of price stability, stating that: 'We will be at price stability when households and businesses need not factor expectations of changes in the average price level into their decisions.'[10] If one were to take this definition very seriously, this would imply nothing different than that the Fed aims at zero inflation. It is well known, however, that no serious central bank would ever aim at zero inflation. There are two main reasons for this. First, inflation measurement is subject to errors. It follows that a central bank that wants to avoid deflationary risks will allow for a margin of error in its definition of price stability. This margin is generally estimated at around 1 per cent.[11]Second, most central banks would not like to give up the possibility of generating negative real interest rates, which can serve as a crucial tool in a serious economic downturn. The necessary room to manoeuvre is generally estimated at around 1 per cent. It follows that the Fed has adopted a definition of price stability that is very close to the one of the ECB at around 2 per cent. Expectations of professional forecasters confirm that assessment: ten-year inflation expectations for the US have been quite stable at around 2–2.5 per cent over the past decade. In short, it seems that the definitions of price stability of both central banks are rather close.

Concerning the main difference in the two mandates, namely the legal obligation of the Fed to promote effectively the goal of 'maximum employment', the definition that the Fed has given to that concept reveals its

secondary importance in the conduct of US monetary policy. The Fed has repeatedly clarified that it understands the concept of 'maximum employment' as 'maximum sustainable employment' – i.e. as non-inflationary employment.

> The Fed's dual mandate – full employment and price stability – is really quite unique. Actually, the specific language of the mandate is that the Fed should promote price stability and maximum employment. We presume that the Congress did not intend to give us contradictory objectives, so we interpret the objectives as price stability and maximum sustainable employment. Maximum sustainable employment is also sometimes referred to as full employment, the maximum level of employment sustainable without upward pressure on inflation.
>
> (Federal Reserve Governor Laurence H. Meyer, October 2001)

It is interesting to note that the way the definition is presented suggests that the Humphrey-Hawkins Act had used the wrong terminology when spelling out the Fed's mandate. It might also be noted that the press statements issued by the Fed after interest rate decisions usually refer to employment developments in terms of their upward or downward pressure on price stability – and not in terms of their absolute levels.

In short, the ECB and the Fed both pursue similar numerical goals in terms of price stability, and the Fed's definition of full employment as maximum sustainable employment clearly indicates that full employment is a secondary objective.

The common strategy: 'expectations-smoothing inflation targeting' and hierarchical objectives

Monetary policy strategies have differed greatly in their historical and international dimensions. This section argues that the ECB and the Fed both very narrowly follow an almost identical approach, namely an implicit form of inflation targeting allowing for short-term adjustments based on short-term cycles and the related expectations in the economy. Some label this approach 'flexible inflation targeting' (e.g. Svensson, 2003) others 'constrained discretion' (Fed Governor Bernanke, see below).

Indeed, it seems that the reason that neither one of the two central banks has adopted an explicit inflation target, can be explained by the over-rigid framework of that strategy – especially as concerns expectations. As is now widely recognized, monetary policy operates as a key element influencing consumer and investment choices, not only through its direct transmission mechanism but also through its impact on expectations of the short-term economic cycle.

The ECB has repeatedly stated that it focuses on inflation expectations rather than on actual inflation and has confirmed that view in its recent review of the two-pillar strategy. The main outcome of that review was a narrowing of the inflation definition from 'below 2%' to 'below but close to 2'. This implicit upward bias of the review (or at least the exclusion of any downward bias in inflation rates) emphasizes an even stronger wish of the ECB to reduce disinflationary efforts to the strict minimum and to keep inflation expectations within a rather narrow margin. Note the following statement by ECB Executive Board Member Ottmar Issing:

> This 'close to 2%' is not a change, it is a clarification of what we have done so far, what we have achieved – namely inflation expectations remaining in a narrow range of between roughly 1.7% and 1.9% – and what we intend to do in our forward-looking monetary policy.
>
> (ECB Press Conference, 8 May 2003)

ECB Vice-President Lucas Papademos has even more explicitly referred to the concept of constrained discretion when reporting on the ECB's strategy: 'The combination of commitment and flexibility that characterizes the ECB's strategy allows for some "constrained discretion" in dealing with cyclical output fluctuations in a way consistent with the preservation of price stability' (speech on 12 June 2003). As concerns the Fed, which has itself significantly contributed to the emergence of the concept of 'constrained discretion', the following statement by Fed Governor Ben Bernanke gives a clear description of the strategy and shows great similarity to the two previous quotes.

> The approach to monetary policy that I call constrained discretion can be defined by two simple and parsimonious principles. First, through its words and (especially) its actions, *the central bank must establish a strong commitment to keeping inflation low and stable.* Second, *subject to the condition that inflation be kept low and stable,* and to the extent possible given our uncertainties about the structure of the economy and the effects of policy, *monetary policy should strive to limit cyclical swings in resource utilization.*
>
> (Governor Ben Bernanke, 3 February 2003 – italics in the original)

These quotes clearly indicate that from a perspective of interpretation of public statements, both central banks show a strikingly similar understanding of their own strategies. They both put primary emphasis on the objective of price stability and at the same time insist that they are not adopting a rule of strict inflation targeting but rather following an approach that allows for the reduction of excessive output volatility. Following Svensson (2003), this approach can be represented graphically as the intermediate point between full inflation targeting and full output targeting. The theoretical model underlying this representation is based on a trade-off between the minimization

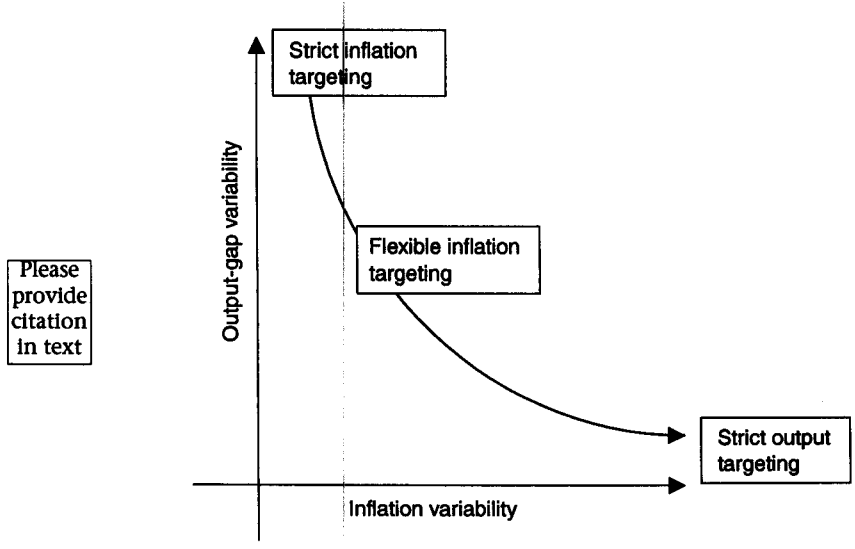

Figure 7.1 The trade-off between inflation variability and output-gap variability
Source: Svensson (2002)

of inflation volatility (achieved by strict inflation targeting) and the minimization of output volatility (achieved by strict output targeting).

Svensson (2002) and many other observers and practitioners of monetary policy recommend the intermediate solution of constrained discretion, based on the primary objective of achieving price stability (see, for example, the most recent proceedings of the annual gathering on monetary policy in Jackson Hole, as published by the Federal Reserve Bank of Kansas – in particular the editions of 1996, 1999 and 2002).

Some additional considerations derived from a rule-based comparison

While the previous sections have largely used interpretative methods to gain deeper understanding of the similarities between the Fed and the ECB, there are also more objective elements confirming this approach. Estimations of Taylor Rules for the ECB and the Fed might well result in rather significantly different numbers, yet the simulation of European monetary policy based on the 'Greenspan Rule' shows very little divergences between the ECB's actual monetary policy and the estimated Fed approach.

Indeed, using a simple Taylor Rule of the standard format:

1. $i_t = r^* + \pi_t + \gamma_\pi(\pi - \pi^*) + \gamma_x x_t$

with i being the nominal three months' interest rate at time t (e.g. the Federal Funds Rate), r^* the long-term average of the real interest rate, π_t the average inflation rate of the three previous quarters, π^* the central bank's inflation target and x_t the output gap at time t, and simplifying to

2. $$i_t = \gamma_\pi \pi_t + \gamma_x x_t + C$$

a simple rule for Fed during the era Greenspan (1987:3–2003:4) can be estimated.[12] The resulting Greenspan Rule of

3. $$i_t = \boxed{1.4470}\pi_t + \boxed{0.9257}x_t + \boxed{4.4467}$$

can then be applied to euro area data to simulate Fed-like behaviour in EMU. The result is striking. Although the isolated estimation of the ECB's rule for its period of existence (1998:4–2003:4) yields rather different numbers for the Taylor Rule of

Please check numbers

4. $$i_t = \boxed{0.3596}\pi_t + \boxed{0.6782}x_t + \boxed{4.0121}$$

which is not very surprising given the very short period of estimation (21 observations), the Greenspan simulations show a convincing fit.

Except for the very early quarters of the ECB's existence, the results of the simulation indicate how similarly monetary policy in the euro area would have been conducted under a Greenspan Rule. It is not the purpose of a

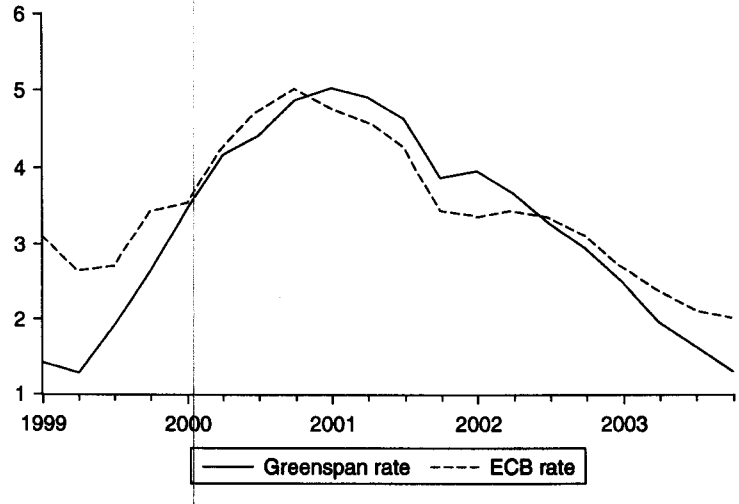

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Figure 7.2 Extrapolated 'Greenspan' rate for the euro area and actual ECB rate

Sources: Own calculations based on data from the OECD and the US Congressional Budget Office

policy-oriented chapter to deepen this simple (and even simplistic) analysis of Taylor-type estimation of the ECB's and the Fed's monetary policy, yet the results are quite robust and clearly show that what the ECB implemented under Wim Duisenberg was rather close to the traditional Fed approach. The ECB might not always have followed the Greenspan Rule in a very narrow manner but had it done so, its policy would not have changed much.

Conclusion

As this short overview assessment has argued, the differences between the approaches of the Fed and the ECB are largely overestimated. The two central banks have an identical understanding of what monetary policy can achieve and of how to design an appropriate policy. Actual policy behaviour is closer than is generally suggested in public opinion and policy circles.

While this argument appears quite solid from the perspective of this chapter, it should not be over-stretched either. There are still some crucial differences between the Fed and the ECB. These differences, however, do not seem to stem from different mandates or diverging views of central banking, but rather relate to different practices or understandings of how monetary policy should be communicated.

Indeed, although the Fed and the ECB follow the same monetary policy strategy, their communication strategies clearly differ. The Fed does not quantify its definition of price stability (while the ECB does). The Fed does not have a fully fledged monetary policy strategy (while the ECB does). The ECB does not publish the minutes of the Governing Council meetings (while the Fed does). All three elements, however, seem to have little impact on the actual policy conduct and most of them can largely be explained by institutional factors, mainly by the relative youth of the ECB. Concerning the first two elements (definition of price stability and monetary policy strategy), one might argue that in order to create some predictability, the ECB felt obliged to specify its definition of price stability and to report extensively on the way it was planning to conduct monetary policy. Looking at the facts, however, one can easily argue that, in practice, both elements are much more flexible than suggested. The ECB largely failed to meet the 'below 2%' in the first five years of its existence. And the ECB's 'strategy' is, to a large extent, not a strategy in the narrow definition of the term but rather a basically exhaustive collection of possible explanatory elements for the resulting monetary policy. Concerning the third main difference (publication of minutes), it should be noted that the ECB does provide extensive real-time information after its interest rate decisions and that the decision not to publish voting records should be seen in the light of potential public pressures that could arise with regard to single Governing Council Members from their 'home countries'. It is again quite likely that this protective measure by the ECB is a result of its relative youth and not the symptom of

a completely different understanding of monetary policy-making in comparison with the Fed.

In sum, almost six years after the start of EMU, the ECB and the Fed appear as largely similar central banks. The fact that they do not share all characteristics is just natural and should not be interpreted as a sign that the two fraternal twins belong to two different families.

Notes

1. For example, French Finance Minister Nicolas Sarkozy on 9 June 2004; see the comments in the *Financial Times* of 11 June 2004.
2. For example, Silvia Pepino, Vice President, Economic and Policy Research, J P Morgan; see her contribution to a report of the House of Lords: http://www.publications.parliament.uk/pa/ld200203/ldselect/ldeucom/170/170we06.htm
3. For example, Fitoussi and Creel (2003).
4. Excellent non-technical overviews of arguments on the impact of the ECB's monetary policy on economic output, as well as comparisons with the Fed, can be found in on the website of the European Parliament's Economic and Monetary Affairs Committee: http://www.europarl.eu.int/comparl/econ/emu/5th_leg_en.htm
5. For example, Svensson (2003); Gerlach (2003). A detailed overview and assessment of criticisms related to the ECB's monetary policy strategy is contained in Issing, 2003.
6. See Taylor (1993).
7. Note that the draft Treaty establishing a Constitution for Europe, which is in the state of being ratified by the EU Member States modifies Article 2. The relevant part of the new article I-3 to which the second part of the ECB's objective is related reads as follows: 'The Union shall work for the sustainable development of Europe based on balanced economic growth, a social market economy, highly competitive and aiming at full employment and social progress, and with a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance.'
8. ECB press release of 13 October 1998: available on the ECB's website: http://www.ecb.int/press/pr/date/1998/html/pr981013_1.en.html
9. http://www.ecb.int/mopo/strategy/pricestab/html/index.en.html
10. Statement by Alan Greenspan before the Subcommittee on Economic Growth and Credit Formulation of the Committee on Banking, Finance and Urban Affairs, US House of Representatives, 22 February 1994.
11. US Senate, Advisory Commission to Study the Consumer Price Index, 1996. 'Toward a More Accurate Measure of the Cost of Living', Final Report to the Senate Finance Committee, December, Washington DC.
12. The estimation was done with quarterly data from OECD Economic Outlook. For the US, output-gap estimations of the Congressional Budget Office were used.

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Comment

Giuseppe Fontana

I appreciate this opportunity to discuss the stimulating study by Henrik Enderlein. He does an excellent job in presenting under five headings the often-quoted differences between the Fed and the ECB, namely (1) central banks mandates analyses, (2) interpretative analyses, (3) rule-based analyses, (4) output-focused analyses, and (5) model-based analyses. For apparently no obvious reasons, he then decides to focus only on (2) and (3) arguing that differences between the Fed and the ECB are largely overestimated. For editorial constraints on the space allocated to comments on papers, I am not going to discuss Enderlein's review of (3) (however, see Fontana and Palacio-Vera, 2002, 2004). I will thus limit my brief comments to (2), with a little on (1), starting with a quote by James K. Galbraith, who has recently reminded us that almost 25 years ago he helped to design the Humphrey-Hawkins monetary oversight process.[1]

> We did so *precisely* so that the Congress would have a record of official thinking – or otherwise – at a moment such as now. Our design worked extremely well. The evidence is plainly on view. ... Why didn't the Federal Reserve foresee, diagnose, and act prudently against the technology bubble in 1998 and 1999? Why did it raise interest rates in 1999–2000 to fight an inflation that was never in prospect? Why didn't it foresee the recession? Why did it continue to forecast recovery even as the recession deepened? Why did Chairman Greenspan support a counter-productive tax policy in the Spring of 2001, squandering fiscal resources now urgently needed?
>
> (Galbraith, 2002: 12; italics in the original)

The main thrust of Galbraith's argument is that the Fed is a creature of the Congress. The Fed is a politically independent policy-making body that is, however, subject to US laws, including those setting the goals for economic policy. By passing laws or resolutions the Congress retains the ultimate power to instruct the Fed. The same cannot be said of the ECB. The European Parliament has no influence on the objectives of monetary policy.

Those objectives can only be changed by the unanimous decision of the Council of Ministers.

Furthermore, in February and July each year the Chairman of the Federal Open Market Committee, who is also the Chairman of the Board of the Governors of the Fed, presents a report to the Congress providing a comprehensive review of the economic and financial situation in US. The Chairman is then subject to questions by the committees of the Congress. The questioning can be very meticulous and tough and it creates an ideal bridge between the Fed and US citizens. The ECB has apparently similar arrangements. The President of the ECB appears, quarterly, before the European Parliament's Committee on Economic Affairs and answers questions. However, there is nothing in accountability compared to the case of the Fed.

Enderlein accepts that the differences between the Humphrey-Hawkins Act and the relevant articles of the Treaty establishing the European Community are, in his words, striking. At the same time, he provides evidence suggesting that the Fed and the ECB are *currently* interpreting their own legal mandates in a similar way. From this, Enderlein would like us to conclude that the Fed and the ECB are largely similar central banks, two fraternal twins. Following Galbraith, I would argue against this conclusion. In my view, the issue is not if the Fed and the ECB are *currently* interpreting different mandates in similar ways. They may do it now but there is no reason to expect they would do in future. Why? The simple answer is that formal differences in the legal mandates of the Fed and the ECB do matter.

First, the Fed's mandate is much wider in terms of economic objectives of the ECB's mandate. This means that the Fed has margins of interpretation much broader than the ECB, even in the current historical circumstances, where the consensus view is that price stability is the overriding policy objective of central banks. As evidence supporting this argument I refer readers to the experience of the early 1990s, when Chairman Greenspan was willing to test how low the unemployment rate would go without sparking inflation. Would President Trichet or any future president of the ECB be able to do the same? I do not think so (see, for example, Arestis *et al.*, 2001). Second, the Fed's mandate is clearly stated and known. The same cannot be said for the ECB's mandate (Svensson, 2000). This means, amongst other things, that, via the Congress, the Fed is accountable to US citizens in a way that the ECB is not to EU citizens. The conclusion of my brief comment is, thus, that the formal differences in their legal mandates go a long way to explain why the Fed is not a fraternal twin of the ECB.

Note

1. The original legislation, the Full Employment and Balanced Growth Act of 1978, was named for its sponsors, Senator Hubert Humphrey and Representative Augustus Hawkins. In mid-2000 the legislation expired. However, while Congress debates new legislation, the practice continues, with reports in February and July.

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