BRIEFING PAPER

Number and Prioritisation of Central Bank Objectives

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Executive Summary

The paper outlines several theoretical approaches to monetary policy targets. After the Keynesian approach had been discredited, monetarist and neoclassical approaches prevailed during the seventies. The latter put a strong if not exclusive emphasis on nominal targets i.e. on inflation only. More recent approaches allow for a permanent impact on output growth as long as inflation is below a certain threshold. This result is corroborated by empirical analysis. Hence the conclusion is drawn that a dual target should be chosen: a nominal target as first priority and real one as second.

1. Introduction

There has been a long lasting debate on central bank targets. It always refers to the following questions: what can a central bank do? And what should it do? Today the pervailing view is that central banks should focus on price stability. There is still some debate on the strategy to achieve this target. Even among central bankers there is no homogeneous view whether inflation targeting or monetary targeting are more appropriate.

As far as the ECB is concerned an institutional setting has been chosen that reflects the majority view on a sensible monetary policy. There is a clear priority for the target of price stabilisation. The strategy debate, too, has been settled in a consensual way by applying a two pillar strategy that encompasses inflation targeting as well as monetary targeting. The former predominantly serves monetary policy in the short run while the later is used rather for the long term perspective. Thus it is fair to say that the ECB is following the present monetary policy mainstream.

In the following paper however some challenges to the mainstream view will be presented that raise doubts whether in the light of recent macroeconomic research a strict prioritisation of price stability is appropriate. The ECB´s view that by achieving price stability other stabilisation objectives are equally met will also be questioned. The arguments presented will draw on theoretical considerations as well as empirical results. In the second section after this introduction some theoretical considerations will be presented. They are based on models of more recent origin as well as well-established arguments. After the theoretical section some empirical results follow. In the final section some conclusions are drawn.

2. What Can a Central Bank Do and What Should a Central Bank Do? – Some Theoretical Approaches

2.1. Traditional Keynesianism

Central banks' target setting is based on the theoretical considerations concerning real versus nominal effects of monetary policy. The former effects are output changes the latter inflation changes. While the Keynesian approach, which dominated among academics until the sixties and among politicians until the seventies, sees mainly real effects, subsequent approaches like monetarism or neoclassical models put the emphasis much more or even exclusively on nominal effects. The Keynesian approach requires a growth or real stabilisation target for the central bank. In this setting interest rates predominantly affect investment and consumption, i.e. the real economy, hence central bank activities show a strong focus on growth and employment. Inflation is merely a goods and – labour market phenomenon resulting from excessive price and wage pressure. The central bank can influence inflation only indirectly by affecting output and thus market power of firms and bargaining power of employees. Hence there is only a very indirect conflict between output and inflation. The bottom line of this reasoning is that central banks should focus on the real economy and not on inflation.

2.2. Monetarism

The predominance of these views has been shaken during the seventies when monetary policy was expansionary, but growth was very slow and inflation very high (stagflation). Such a situation was not compatible with the traditional Keynesian view in two respects. Firstly, with an expansionary monetary policy, output growth should have been high. Secondly, if output growth is low, so should inflation. At this point the political breakthrough of monetarism could occur. According to the monetarist approach in the longer run monetary policy can only influence inflation. Any attempt to speed up output growth will be successful only in the short run. In the longer run only higher inflation will result. In such a setting expansionary monetary policy, low output growth and high inflation as a consequence of excessive monetary expansion are possible. As a consequence more and more central banks with the Bundesbank in the lead changed to a monetarist approach. This implied focussing on inflation alone and setting targets for monetary aggregates. It still meant that central banks had an eye on output developments since according to the monetarist theory there is a short term conflict between inflation targets and output targets to be taken into account. But the bottom line is in the long run monetary targets are decisive and should be of primary interest to the central bank.

2.3. Neoclassical Approaches

This prioritisation of inflation targets was even enhanced by further developments in macroeconomic theory. While monetarist scholars still accept some short term output effects of monetary policy. More recent neoclassical approaches among them real business cycle approaches would even deny that to a large extent. The reason is that, when rational expectations are introduced into the models, any systematic short term real effect of monetary policy vanishes. People expect the correct outcome of monetary policy except for random influences and change their behaviour immediately and not after some time of adjustment. The result in a neoclassical setting is that monetary policy only influences inflation - even in the short run. Therefore it makes even more sense to confine monetary policy to inflation targets. Anything else would show adverse effects since it would distort an otherwise perfectly functioning market clearing process, since insecurity would be higher when a central bank always unsuccessfully tries to stabilise output fluctuations. There is another difference to the original monetarist approaches because there is a clear tendency for an inflation targeting strategy since e.g. in real business cycle models monetary aggregates do not have such a prominent role for economic developments. In any respect according to these approaches there is no conflict between nominal and real targets for monetary policy since only nominal targets make sense. Real targets would never be met because of a central banks fundamental lack of capacity to do so.

2.4. Neo–Keynesian Approaches

There was a Neo–Keynesian answer to this extreme monetary and neoclassical orientation. It consists in models that allow for price and wage rigidity in the short run. These assumptions are micro-economically justified by empirical as well as theoretical arguments on information and adjustment costs that prevent market participants to adjust their wages and prices immediately to a new market situation. As a consequence e.g. expansionary monetary policy does also not lead to an immediate increase of prices and hence to inflation. Therefore output will grow faster than without monetary stimulation. But this is only a short term impact. The trend of output growth is not influenced by monetary policy. Hence after some time output returns to its trend and the monetary stimulus fades away. At the same time the price level increases so that the long term impact of monetary policy consists in inflation only. Nevertheless, these approaches leave room for a short term output stabilisation. Therefore monetary policy in this setting could well have two targets a monetary target to keep inflation under control and a real target to stabilise output on its trend. The strategy implied by these models is mainly inflation targeting by interest rate policy as prescribed by a Taylor reaction function that considers inflation as well as the deviation of output from its trend. The weight of each argument is a matter of debate. Nevertheless, these considerations imply that a central bank should have an eye on output fluctuations, too.

2.5. New Keynesian Approaches

In recent years an important refinement of macroeconomic thinking has taken place. Inspired by the research of George Akerlof[1] some scholars have derived a long term real impact of monetary policy in an otherwise neoclassical setting. The basic assumption that underlying this result is information costs. Market participants do not have the time and the resources to check every slight movement of monetary authorities and its potential minor consequences for inflation. That means they do not assess the effect of any price change on their real income. As a consequence they do not adjust their price and wage demands in the presence of e.g. an expansionary monetary policy. Therefore a monetary stimulus will not lead to inflation but rather to output growth. Only if monetary policy gets "too" expansionary so that inflation exceeds a threshold the behaviour of market participants changes to the usual neoclassical outcome. From this point an expansionary monetary policy would cause only inflation and no real effect would occur. The threshold is defined as the inflation rate from which the costs of neglecting inflation in terms of real income losses are higher than the costs of collecting information on inflation. In contrast to the approaches mentioned above in this setting, real and nominal impacts of monetary policy are not a matter of the short or long term. They are a matter of the extent of inflation. Monetary policy then can produce permanent growth effects as long as

[1] Akerlof, G. A. (2002): Behavioral macroeconomics and macroeconomic behavior, *American Economic Review 92(3),* 411-433.

inflation stays below the threshold. In terms of monetary policy targets this has important implications. Monetary policy should as a first priority keep inflation below the threshold. However as long as this is the case, monetary policy can permanently stimulate output growth and can focus on this objective.

2.6. Credibility

The approaches mentioned above stress the importance of expectations of market participants for monetary policy. People will only react appropriately, if they believe that the central bank is determined to meet its targets. This raises the issue of credibility of monetary policy. Only if a central bank succeeds in establishing a credible record people will listen to warnings of the central bank. In a neoclassical approach this means they moderate their wage and price demands as soon as a central banker utters a warning on price stability. In an ideal world this would mean credible central banks could stabilise inflation without even raising interest rates. Therefore target setting is also important to establish credibility and thus reduces the costs of stabilisation. This issue is of general nature. Credibility matters – albeit in different ways – from Keynesian to neoclassical settings.

3. Some Empirical Results

Central banks have had a range of different targets and strategies. The most prominent examples were the Bundesbank with its explicit monetary policy targets and the Federal Reserve, which in contrast has a wide range of monetary as well as real targets. The ECB now has a target that is price stability with some highly debated leeway for real stabilisation. The question is, whether there is any evidence that one target works better than the other in terms of macroeconomic performance. Taking output growth and inflation as yardsticks Robert Barro[2] produced a very surprising analysis more than ten years ago. Based on data from 1960 to 1990 for around 100 countries he assessed the effects of inflation on economic performance. Hence he could distinguish between central banks that were not only rhetorically but also in practice very tight on inflation and those that were not. It turns out that keeping other things unchanged an increase in average inflation by 10 percentage

[2] See Robert Barro (1995): Inflation and Economic Growth, NBER Working Paper Series No.5326.

points reduces real output growth per capita by 0.2 to 0.3 %. This would confirm the ECB's view that higher inflation reduces growth and the implication of monetarists and neoclassical approaches. The interesting twist in his analysis is however that the result is only significant when high inflation experiences are included. This implies that with lower inflation rates this negative relationship and hence the trade-off does not exist. Given that inflation is low in the Euro area there should be no negative growth effects. This result corroborates the information costs theory of an inflation threshold of an Akerlof type. As long as the threshold is not exceeded a central bank can well stimulate growth.

4. Conclusion

Theoretical as well as empirical research, indicate that a central bank should primarily focus on inflation in order to ensure that inflation rates are kept at a low level. However, if this condition is fulfilled a central bank can stimulate growth. This speaks in favour of a dual target: a nominal target combined with a real one. There should be a priority in the sense that low inflation is a necessary condition for the central bank to stimulate growth. It seems advisable that the respective wording in the treaty is clarified in this sense.