Compare and contrast inflation targeting

Economics, Money

Compare and contrast " inflation targeting" with the experience of the US Federal Reserve Inflation targeting as the name suggests does not necessarily mean that the bank has only one agenda - correct rate of inflation to target. On the contrary, inflation targeting allows the central bank to have an explicit target for the rate of inflation which as a result helps the individuals, households and markets form inflation expectations for the future. Secondly, targeting inflation means that the central bank will place more weight on controlling inflation and keeping it within the boundary that they set.

This target is very small and in Britain it is 2% ± 1%. However, the ECB sets an asymmetric target of <2% which of course coincides with the attitude that Germany has with inflation. Further, the US Federal Reserve has set its long-term inflation target between 1. 7-2%. Finally, an explicit target allows the central bank to increase its transparency, be evermore independent in its actions. This forms a framework for price stability in the markets as well an opportunity to achieve short term goals for the economy.

Historically, the central banks or the government would control the growth rate of money supply but this in practise seems to be very inefficient and the result is higher inflation and output variability. Rudebusch and Svensson (2002) found that monetary targeting to be very inefficient for the Euro system. Their research was based on US data from the years 1986 to 1996. More importantly, they found that the federal funds rate moved very closely with the velocity of M2. However, after 1990 this relationship broke down the velocity of M2 increased significantly.

Some of the reasons for this could be due to the increase in liquidity for bonds and stocks. Further, they point out that the strict money growth targeting does in fact lead to an increase in the variance of inflation. Yamada and Osaka (2013) found that whilst reviewing emerging and developing countries that inflation targeting works well in a fixed regime to lower the inflation rate. They note however that in the recent years they struggle to find a relationship between inflation rate and inflation targeting.

Inflation targeting especially with the use of interest rates has a lag in which the full impact of a change would be noticed. This typically varies but usually is approximately 18-24 months when the impact has been felt on the economy. When there is no explicit inflation target then individuals would have to make an estimate forecast of the future. This is effectively backward looking and results down to the mean (or average) rate of inflation in the past. Capistran & Ramos-Francia (2010) found that the long run inflation expectations appear to be lower under regimes which undertake inflation targeting than the ones that do not.

More precisely, such regimes have an inflation band targeting (UK for instance) and this still has a smaller dispersion of inflation expectation variance than those that do not undertake inflation targeting. Gon? alves & Carvalho (2009) found that during a study of OECD economies the ones that did carry out inflation targeting suffered smaller output losses during disinflation than those that did not. Additionally, it is worth noting that with a high right of inflation the government debt level decreases in real values.

They also note in their paper that if a country has suffered from high inflation and lower debt levels then it increases the probability that they will

undertake inflation targeting. The evidence from probit results supports this view for the 30 OECD economies data that is used. They have 17 economies which are the " treated group" and 13 which are the " control group". However, Brito (2010) didn't support the view from Gon? alves and Carvalho (2009) and showed that their results were not robust enough.

He further went on to control only for the time-varying conditions and the Maastrict Treaty which resulted in showing that inflation targeting doesn't matter. Biefang-Frisancho Mariscal & Howells (2007) found that the inflation target that the Bank of England set in 1992 has led to a steady decline in the inflation over the 10 years that they view. They also state that the independence that the Bank of England gained in 1997 is not the only reason why the inflation has fallen. Indeed, by reviewing Figure 1 in the paper we do notice a sharp fall in inflation of 0. 75% in the first quarter of 1997.

Further, Capistran & Ramos-Francia (2010) echo the same empirical findings of Biefang-Frisancho Mariscal & Howells (2007) in that the dispersion of inflation has fallen since they started inflation targeting. Relating back the question of the essay, the presence of an independent central backer allows inflation targeting to not only be effective but also enables the target to be achieved. A notable example of this is the Volcker administration which reduced inflation that peaked at 13. 5% during his tenure to 3. 2% by 1983.

The tool which was utilised by Volcker was the Federal Funds Rate (central bank base rate) which again peaked to 19% during 1981. Goodfriend & King (2005) advocate the view of credibility being used to lower the inflation that started peaking in the 1970's. In their paper they investigated transcripts from the Federal Open Market Committee (FOMC) and one of them

particularly stated that " only way we are really going to deal with this…is to convince people that we have a hold on inflation and have created a climate in which interest rates, particularly long-term rates, will tend to go down.".

This gives the impression of credibility which the Federal Reserve wishes to gain but also the lower long term interest rates will enable the expectations people have of inflation will fall. This method is indeed using behaviour of the general public and the expectations they set. Previously, the Federal Reserve was driven by the rational expectations macroeconomic work of Sargent and Wallace (1975) which used the short-term interest rate as its policy instrument.

The only difference between both the Loss function of the Government and Central Bank is the presence of ?. When ? > 0 then the Central Bank will put more weight on inflation stabilisation. If ?? then Central Bank only cares about inflation and unemployment will be an issue for the government to tackle with Fiscal Policy. Using these basic loss functions we will now review some of the literature in this area before turning to Taylor Rules which have come to prominence for setting the interest rate since 1993.

Hallett & Libich (2012) review the relationship between Explicit Inflation Targeting (EIT), Central Bank Independence (CBI), Accountability (AC) and Transparency (TR). They find that both CBI and EIT are prone to reduce the inflation rate and the expected inflation rate. A couple of reasons that they state are as follows – Improvement of the relationship with the financial sector since they (Central Bank) will be more transparent and more importantly, the Central Bank will be politically robust.

Kahn (2009) reviews Central Bankers targeting the price level next since inflation targeting is more of a medium term objective. He points out that the Federal Reserve Act defines the goals of monetary policy to bring " maximum employment, stable prices, and moderate long-term interest rates. " In Chart 1 of his paper he demonstrates that both inflation targeting and price level targeting will both achieve the same objective. However, in the instance of price level targeting there is more weight added to price level stabilisation since it is short term.

Thus, the central bank will significantly over react to have price level below its target as in the long run it will then converge to its target. He is suggesting the price level targeting since the Central Bankers who explicitly target inflation and have achieved credibility should look further to improve the economic objectives such as the Bank of Canada via short term interest rates. Indeed, this may be a more volatile method and there is further food for research before Central Banks adopt such a method which could drastically change their fundamental policy making.

They found using Generalised Method of Moments (GMM) that the reaction functions for both the Fed and ECB differed only by a small amount prior to the crisis. However, during the " subprime" period there was a completely different result by using the Taylor Rule. On one hand, we have the ECB which retains its stance on stabilising inflation regardless of the cost on output and on the other hand, the Fed puts more weight on output. In the USA, due to their underlying economic structure they are willing to let inflation rise above target since they can control it.

As a result, the Fed is more focussed on output as that is far more important for the US economy. Indeed, we can deduce that some cultural characteristics present here because the ECB is very inflation averse so this does seem to fit in with the results. However, we must note that these findings were only published in 2010 so there is room for further analysis. In the table below I display the weight and the interest rate smoothing that comes from the Taylor Rule.