## "One-Size-Fits-All" Monetary Policy<sup>1</sup>

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A monetary union with a common central bank must pursue a "one-size-fits-all" monetary policy. This will in general imply a divergence in inflation rates among member states. In recent EMU experience this divergence has been quantitatively significant – up to three or four percent per year over a period of several years. I argue, however, that it is not clear that there will be more divergence in inflation rates than if there were independent central banks and flexible exchange rates. I also argue that the divergence in inflation rates due to a single monetary policy can be expected to decline over time.

If a central bank has a stabilisation role, the common monetary policy does not permit the offsetting of asymmetric shocks. I argue that this may become less of a problem in a monetary union with a single central bank than it would be with independent national central banks and floating exchange rates.

Country-specific fiscal policies may appear to be an obvious alternative to country-specific monetary policy. I argue, however, that the role for discretionary fiscal policy in addressing asymmetric shocks is limited.

A common currency for the euro area implies a "one-size-fits-all" monetary policy, and consequently, divergent inflation rates.

I illustrate the above point with a simple example of a monetary union that is made up of two countries, country F and country G. Residents of the union consume two goods, wine and beer. Imagine that inflation (measured by a consumer price index) is the same in both countries.<sup>2</sup> Now suppose that a fundamental shock occurs that causes the international price of wine to rise relative to the price of beer.<sup>3</sup> This shock might be a bad grape harvest that lowers the world supply of wine, relative to the supply of beer, or a change in preferences that causes the world demand for wine to rise relative to the demand for beer. With a common currency, the relative price change implies that the price of wine in the common currency must rise relative to the price of beer in the common currency. Thus, the consumer price index of the country that consumes a higher ratio of wine to beer must rise proportionally more than the consumer price index of the country that consumes a lower

<sup>&</sup>lt;sup>1</sup>Briefing paper for the Committee on Economic and Monetary Affairs (ECON) of the European Parliament for the quarterly dialogue with the President of the European Central Bank.

<sup>&</sup>lt;sup>2</sup>The ECB measures inflation using the Harmonised Index of Consumer Prices (HICP). It is a separate issue whether or not a consumer price index is the best measure of inflation.

<sup>&</sup>lt;sup>3</sup>At this point I am not assuming any nominal rigidities. The change in the relative price is assumed to be warranted by the fundamentals.

ratio of wine to beer. Unless the two countries consume beer and wine in exactly the same proportion, one country will experience more inflation than the other. A common central bank, with its "one-size-fits-all" monetary policy will not be able to achieve a common inflation rate in the two countries after the shock.

As seen in the above example, divergent inflation rates are the result of different countries consuming different baskets of goods. If the price of a particular good goes up relative to the price of other goods, then the price of the consumption basket of a country that consumes more of that good, relative to other goods, will go up more in percentage terms than the price of the consumption basket of a country that consumes proportionally less of that good. The relative price changes that cause divergent inflation rates are desirable because they facilitate the correct allocation of resources. However, a consequence of them is that if the monetary union achieves optimal inflation on average, inflation will be too high in one country and too low in the other.

How does this compare with country-specific monetary policies?

The above scenario of a common currency and a single monetary policy contrasts with the case of two countries, each with its own central bank and a flexible exchange rate.<sup>4</sup> With country-specific monetary policies, the two central banks can target the optimal inflation rate in each of the countries. The change in the relative price following the shock can be brought about by a change in the nominal exchange rate.<sup>5</sup>

It is often argued that, not only are divergent inflation rates avoided in this case, something that might be desirable even in the absence of nominal price rigidities, but that rigidities in nominal prices may make adjustment of international relative prices through changes in nominal prices at a constant nominal exchange rate slower or more costly or difficult than changes in relative prices brought about by changes in the nominal exchange rate.

Exchange rates are set in financial markets and can change much more rapidly than the prices of goods, services and factors of production, which are subject to a host of rigidities. However, the interaction of the exchange rate with sticky prices can produce undesirable outcomes such as the overshooting of real and nominal exchange rates. The adjustment of relative prices via the exchange rate may not be better than adjustment through sticky nominal prices.

In addition, economists have been successful in explaining only a small portion of the

<sup>&</sup>lt;sup>4</sup>Independent monetary policies and fixed exchange rates is not a feasible regime, even in the short run, with highly internationally mobile financial capital.

<sup>&</sup>lt;sup>5</sup>Let  $\pi^i$  be the country i, i = G,F, inflation rate (as measured by a consumer price index) in terms of the currency of country i; let  $\pi_b$  and  $\pi_w$  be the proportional rates of change of the price of beer and the price of wine in terms of the currency of country G, respectively; let  $\delta$  be the rate of depreciation of the currency of country G against the currency of country F; let  $\alpha_i$  be the share of beer in country i's consumption basket. Then,  $\pi^G - \pi^F = (\alpha_G - \alpha_F)(\pi_b - \pi_w) + \delta$ . If the two countries have a common currency, then  $\delta = 0$  and different shares of beer in the consumption basket and relative price changes will imply divergent inflation rates. If the countries have different currencies and independent monetary policies, then  $\delta$  can adjust to permit  $\pi^G = \pi^F$ .

movements in exchange rates in terms of fundamental shocks or policy changes.<sup>6</sup> The rest may be influenced by imperfect rationality, such as myopia or herding.<sup>7</sup> These imperfections in foreign exchange markets may cause "non-fundamental" movements in exchange rates to be an independent source of volatility. This suggests that monetary policy making might be more difficult with flexible exchange rates, making it harder to achieve desired inflation. Thus, it is not clear that there must be more divergence in inflation across members of a monetary union than there would be across the members of the union if they had floating exchange rates and each pursued its own monetary policy.

Are matters likely to improve?

European Union is nearing the completion of the process of ending internal trade restrictions and it has abolished legal and administrative barriers to international labour mobility within the union. Both of these factors ought to make consumption baskets more similar over time. This means that inflation divergence across countries due to a single monetary policy ought to decline over time.

What if the central bank cares about output and employment stabilisation as well as low inflation?

Consider again the example of the two-country monetary union and suppose that country G primarily produces beer and country F primarily produces wine. Imagine that workers and firms in the two industries have signed contracts stating the nominal wages that the workers are to receive over some specified period. After the wage contracts are signed, the wine industry is hit by a negative demand or supply shock. At the current money wage, the vineyards will lay off workers. Both workers and vineyard owners in country F are better off if the common central bank follows an expansionary monetary policy, increasing inflation and decreasing real wages in both countries. The resulting employment gain is worth the cost of the extra inflation. Unfortunately, workers and brewery owners in country G would be made worse off by this policy as they suffer from the inflation. With only one monetary policy, the central bank cannot stabilise supply or demand shocks that are specific to one country or affect one country more than the other without harming inhabitants of the other country.

Rose (2000) argues that increases in trade and the adoption of a single monetary policy will synchronise the business cycle across countries; demand shocks will become more correlated over time. This is certainly likely if independent national monetary policies are a significant contributor to divergent national business cycles.

In an early study, Bayoumi and Eichengreen (1992) concluded that in the core countries of the EC, the asymmetry of supply shocks was approximately similar to the asymmetry across regions of the United States.<sup>8</sup> However for the EC as a whole, supply shocks were considerably more

<sup>&</sup>lt;sup>6</sup>See, for example Faust and Rogers (1999).

<sup>&</sup>lt;sup>7</sup>For a discussion of this, see Buiter and Grafe (2003) and Shiller (2000).

<sup>&</sup>lt;sup>8</sup>Core countries are France, Germany, Luxembourg, the Netherlands, Belgium and Denmark. Supply shocks are defined as anything (including a fiscal shock) that has a permanent real effect.

idiosyncratic. It is not clear how the correlation of the supply shocks should be expected to change over time. If most trade is inter-industry, the end to trade restrictions associated with the creation of the European Union should encourage specialisation and increase asymmetry; if most trade is intraindustry, the opposite may occur. Using six more years of data, Bayoumi and Eichengreen (1999) find little evidence of a movement in either direction.

Although asymmetric shocks may persist, the euro area may need less stabilisation than an area with common currencies. This is because the nominal rigidities that cause stabilisation to be desirable are not invariant to the monetary policy regime. If a common central bank engages in less stabilisation than country-specific central banks, then it is likely that the nominal rigidities that provide a stabilisation role for a central bank will decline over time. In the two-country example, if workers and firms in the country-F wine industry realise that the common central bank will be reluctant to stabilise a shock that is specific to them, they are likely to enter into more flexible wage contracts.

Finally, is monetary policy that good at stabilising the economy, beyond what would be achieved as a by-product of inflation targeting? There are two arguments to support the view that monetary policy should attach only limited weight to the stabilisation of the real economy. The first is that an *inflation bias* is likely to result when the monetary policy maker actively pursues the stabilisation of output or employment. Once weight is attached to the stabilisation of the real economy, the policy maker's inability to credibly commit to non-inflationary policy will result in an inflation bias. The second argument applies even if the policy maker is capable of credible commitment. It is based on the view that the magnitude and timing of the impact of monetary policy on the real economy is highly stochastic; Milton Friedman's "long and variable lags" are uncertain as well. The proper response to this uncertainty is caution, that is a muted response of monetary policy. In policy.

*Is there really no alternative to a "one-size-fits-all" monetary policy?* 

The obvious candidate for an alternative to the single monetary policy is country-specific fiscal policy. I argue that its use for managing demand is limited.

In a standard textbook model where households have infinite lives and taxes are lump sum, bond-financed tax cuts have no impact on aggregate demand. For a given level of government spending, a cut in current taxes is expected to be matched by higher taxes in the future. Thus, a current tax change has no effect on the present discounted value of households' incomes, and thus, no impact on demand. However, if postponing taxes redistributes wealth to households with higher

<sup>&</sup>lt;sup>9</sup>Sibert and Sutherland (2000) show that different monetary regimes lead to different labour market practices.

<sup>&</sup>lt;sup>10</sup>See Barro and Gordon (1983).

<sup>&</sup>lt;sup>11</sup>These arguments apply to normal cyclical variations. If the economy is hit by a major shock, such as one similar to the Great Depression of the 1930s, the appropriate monetary policy response is clear.

marginal propensities to spend (the old, say), or if some households are credit constrained and these households are the primary beneficiaries of the tax reduction, then the cut may stimulate demand. Empirically, the effect on aggregate demand of a tax cut is believed to be small, but positive.<sup>12</sup>

Even if fiscal policy is effective as an instrument for responding to asymmetric shocks, it is difficult and costly to implement. The political decision making process means that there are long and variable lags between the occurrence of a shock and changes in taxes and spending, other than what occurs through automatic stabilisers. And, once the change is implemented there are long and variable lags before an economic response occurs. Cyclical changes in marginal tax rates are distortionary; the uncertain prospect of tax changes makes planning difficult for households and firms; changes in taxes require changes in software and accounting practices. There are also political economy concerns that reversing a tax change when circumstances change may be more difficult than enacting a tax change. In addition, fiscal policy has other purposes. It is used to redistribute income, to allocate resources efficiently and to improve the election chances of incumbent politicians. These roles may be perceived by legislators as more important than stabilisation. In the European Union, the restrictions on deficits imposed by the Stability and Growth Pact may further constrain its usefulness.<sup>13</sup>

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<sup>&</sup>lt;sup>12</sup>See for example, Blanchard and Perotti (1999).

<sup>&</sup>lt;sup>13</sup>See Fatas, et. al. (2003) for a discussion of these issues.

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