

## Axel A Weber: Globalisation, monetary policy and the euro

Speech by Professor Axel A Weber, President of the Deutsche Bundesbank, at the Norges Bank (Central Bank of Norway) Conference on Monetary Policy “Jarle Berge Colloquium: Globalisation and Monetary Policy”, Oslo, 7 March 2008.

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### 1 Introduction

Speaking on globalisation and monetary policy at the current juncture I feel tempted to refer to the famous song by Bob Dylan “The times they are a-changin’”. One verse has several great lines of advice for economists:

*Come writers and critics  
Who prophesize with your pen  
.....  
And don't speak too soon  
For the wheel's still in spin  
.....  
The loser now  
Will be later to win  
For the times they are a-changin'.*

It was only some months ago when a lot of “writers and critics have prophesized” that in an era of globalisation inflation is and should be no reason for concern for monetary policy makers. With the benefit of hindsight they should have followed Bob Dylan’s advice: “But don’t speak too soon, for the wheel is still in spin”.

Today inflation has reappeared on a global scale and – in the face of the global financial turbulences of the past months – the debate in the media has switched from being in a “goldilocks environment” to the inherent risks of entering a period of stagflation.

Considering that, as Bob Dylan put it, “the times they are a-changin’” a medium- to longer-term perspective is of the essence. Taking such a medium-term view, I have always belonged to the sceptics with regard to the “globalisation = low inflation”-paradigm.

In my following remarks I want to concentrate on some of the implications globalisation has for monetary policy. There are at least two issues at play here: The influence of global factors on domestic price developments as well as the implications of globalisation for the transmission of monetary policy. Moreover, I want to briefly discuss the current stance of monetary policy in the euro area in the face of global inflationary pressures and global financial tensions.

I will argue that with regard to the first two more general aspects the globalisation process does not fundamentally call into question the ability of an independent central bank to guarantee price stability over the medium-term. Thus, globalisation by no means reduces the need for a stability-oriented domestic monetary policy. This principle applies all the more to the current environment of elevated inflationary pressures and heightened financial market tensions. Of course, I do not intend to invoke the impression that the globalisation of goods and financial markets has not altered price dynamics and transmission forces. To the contrary!

But the bottom line of my arguments is, that globalisation ultimately raises the degree of uncertainty with which monetary policy decisions are taken.

Uncertainty, however, is something we are confronted with as policy makers on a almost daily basis. It asks for a robust monetary policy strategy. Robustness in that context implies a

broad analysis of monetary and economic indicators. But it also means a clear and well-known strategic framework that puts price stability to the forefront.

To put it in Dylan's words: globalisation certainly "holds the wheel in spin". But it does not change the fundamental direction of a stability-oriented monetary policy, nor the need to take a medium-term view, because "the times, they are a-changin".

## **2 Globalisation: basic remarks and characteristics**

Let me start with some basic observations regarding globalisation.

Globalisation is a term referred to pretty often in the media, and by politicians and economists. However, there is no single definition of what globalisation actually means nor is there a single key figure for measuring its scale and evolution over time. To me, a useful starting-point is, quite fundamentally, the notion that globalisation describes the ongoing process of the international division of labour. In the wake of this process, the domestic markets for goods and services, as well as labour markets, are becoming more and more interlinked and interdependent internationally.

In the absence of a single yardstick to gauge the extent to which globalisation is evolving, it is useful to look at various developments that, in combination, capture this process. Let me just pick out two distinctive developments.

First: The steadily rising volume of global trade, whose growth rate has been exceeding that of global GDP for a long time now. On average, global trade has grown 50% faster than world GDP over the past 35 years.

During the 1990s, global trade even grew twice as fast as global GDP. Among the factors explaining this development are a number of developments which have particular relevance: more and more goods and services are becoming tradable. In addition, more companies and economies have become involved in foreign trade. Let us briefly look at some figures:

- a) as a result, the degree of real economic openness of many countries has increased significantly (as measured by total exports and imports of goods and services as a ratio of GDP). For example, in the German case, the relevant figure amounts to roughly 75% at the current juncture, compared with just over 60% in 1990.
- b) global trade is also boosted by the ongoing internalisation of production structures. These are most visible by looking at the growing stock of FDI.

According to UNCTAD figures, worldwide FDI stocks amounted to over 26% of world gdp in 2006. In 1990 the corresponding number was less than 9%. In Germany the relevant numbers increased from 8.9% to nearly 35%. The German development roughly corresponds to the Norwegian numbers (9.4 %/36 %).

Second: The increasing openness of many economies in financial terms, measured by the ratio of the sum of external assets and liabilities to domestic GDP. For Germany, this figure currently amounts to roughly 375%, which is more than three times as high as in 1990. Compared with other developed countries, Germany is among those group of larger economies that have the highest degree of financial openness. In addition, the increasing financial openness of many economies has also been reflected by strongly rising international capital flows, for example, in terms of cross-border securities transactions.

The process of globalisation has been evolving among developed countries for many decades now. Therefore, in contrast to what some observers might think, the current process of globalisation per se is neither new nor of special recent relevance. However, the pace of this process has been increasing rapidly for more than a decade now. In particular, declining costs of telecommunication and transportation have been the main drivers of this development. In addition, skill levels in many regions of the world have improved

considerably as has the quality of goods and services produced in formerly rather underdeveloped countries.

What has changed the face of globalisation is the fact that globalisation nowadays extends to a larger group of countries than in the past. More and more countries with formerly rather closed economies have opened themselves to the world market. Thus, new players have entered on to the global stage and are becoming increasingly relevant economic powers and, as a result, competitors to established developed countries.

As a consequence, the process of globalisation is leading to a shift in weights within the global economy. This shift is nothing exceptional. It is quite a natural development which simply reflects the continuously evolving global economic landscape. While these developments have implications for many areas of economic policy, we should not forget that in the end globalisation is one of the most powerful forces to increase living standards. Thus, we should resist protectionist measures wherever they arise in order to reap the mutual beneficial gains of a more global economy.

## **2.1 Globalisation and the euro**

Another example for significant shifts in the international financial system in recent years are the developments after the introduction of the euro in 1999. Replacing the former currencies of the member states of European Monetary Union the euro has gradually grown in importance with regard to its international role. By now, it is the second most important international currency next to the US-Dollar.

The euro position clearly exceeds those of the former D-Mark before entering EMU, not least because of the deeper and more liquid financial market backing the euro.

At the end of 1998, the D-Mark made up for 13% of forex reserves, 10½ of outstanding international bonds and 13 % of credit institutions' cross-border forex transactions. In comparison, at the end of 2006 the euro share in international debt portfolios amounted to more than 30%. And the share of euro in international forex reserve holdings rose to over 25 %. Here, however, we should take into account the limited data coverage with an undisclosed share of reserves of more than one third at the end of 2006. The euro's attractive role as a reserve currency clearly has to do with its role as an anchor currency for over 40 countries.

Especially, many countries in geographical proximity to the euro area use the euro in one way or the other as an anchor in their specific exchange rate regimes.

I could give you additional figures on the use and the relative importance of the euro in various segments of financial markets and international trade. These would underline the general impression that the euro has emerged as the second world currency. What seems more interesting in my view, is to reflect on some of the possible policy implications of the international role of the euro.

It is true, that having an currency that is ranking high among international investors means that in principle external influences might gain in importance for monetary policy makers.

But there should be no principal conflict of interests between external and domestic conditions when monetary policy is operating under a flexible exchange rate and a clear-cut price stability mandate. The growing international role of its own currency then will primarily reflect the stability-oriented domestic policy.

This said, let me come back to my general topic and let me continue by looking more closely at the relationship between globalisation and monetary policy, which is certainly of special interest to a central banker.

For central banks, it is important to understand the forces and transmission channels of globalisation in order to calibrate the appropriate monetary policy stance.

### 3 Globalisation and inflation

The primary objective of many central banks throughout the world nowadays is price stability. This also holds for the Eurosystem. Only when this goal is achieved is there room for monetary policy to support the general economic policies in the euro area. This hierarchical ordering reflects the sound economic principle that there is no principal conflict between price stability and economic stabilisation. Neither in the long-run, nor – for most cases – in the short-run. Rather: Only by credibility that is achieved in following a price stability course, monetary policy is able to support sustainable economic growth and job creation. Price stability is thus both a means and an end for monetary policy.

Given our focus on price stability, it is clear that a thorough understanding of the inflation-generating process and inflation dynamics is of the utmost importance for the Governing Council in deciding on short-term interest rates.

The ongoing increase in real globalisation has been coinciding with a decline in inflation rates worldwide over the past decades. It is not surprising that these parallel developments have been given a causal interpretation along the lines that increased real globalisation has been driving down inflation rates. And, indeed, over the past years, the price of manufacturing imports in the euro area has been rather stable, thus dampening, other things being equal, the increase in the overall consumer price index. The same developments could be observed in other mature economies as well. For example, in the euro area the share of low-cost countries in euro area imports has increased from one third to over one half since 2000 (ECB (2008)). This is assumed to have dampened euro area import price inflation by 2.1 percentage points on average per annum.

For Germany our own research also found that relative producer prices in manufacturing sectors are negatively correlated to the import share of these sectors (Bundesbank (2007)).

This prima facie evidence seems to support the view that globalisation has been a main factor in lowering inflation rates. However, I have always been quite sceptical about whether the story of globalisation adequately captures the aspects that are most important for explaining the decline in inflation rates, at least for the euro area. It is monetary policy that, over the medium to long term, pins down trend inflation. Globalisation through increased trade with labour-abundant economies will affect only relative prices. It is a well-known fact that, for the aggregate price level and its rate of change, relative price effects have no ultimate influence.

Of course, globalisation might have contributed to the observable decline in cross-country trend inflation as positive price shocks have created an environment in which some central banks could use “the opportunistic approach to disinflation”. But this does not seem a convincing explanation for the bulk of industrial countries.

Moreover, the increase in trade volumes relative to GDP is a process that was already under way in the 1970s and 1980s. At the same time inflation rates during this period were substantially higher than today.

Finally, even the immediate relative price effects of trade with emerging economies are not as benign for inflation in industrial countries as is commonly assumed. The rapid industrialisation of economies like China and India has led to sharply rising commodity demand from these countries. This demand has contributed markedly to the increases in oil, food and raw material prices over the past couple of years.

It is difficult to estimate the net effect of these different terms-of-trade shocks on the overall price level in industrial countries. But, in my view, there are no reasons to assume that the overall outcome has been one of a more benign inflation outlook.

While this more sceptical view was often disputed still some months ago, the current inflationary pressures in industrial countries arising from energy and food prices have

certainly raised the awareness that the price effects of globalisation have been anything than a one-sided blessing.

Taken all together, there are growing reasons for exercising caution with regard to the popular globalisation story of inflation. In other words, in my view, the real effects of globalisation on the inflation process are an issue that should be of some interest for monetary policymakers. But, at the end of the day, the importance commonly attached to globalisation forces is less clear than popular views often assume.

The decline in trend inflation worldwide is better explained by monetary policy in many countries being geared towards price stability, which is enhanced by the increasing independence of central banks in achieving their goals.

This point – and the immediate implications for monetary policy – can also be illustrated with an eye on macroeconomic theory. Here, in modern macroeconomic models inflation dynamics are captured by (more or less forward-looking) Phillips curves.

For example, by now in academia and in central banks, the New Keynesian dynamic stochastic general equilibrium framework, which includes an expectations-augmented Phillips curve, provides one of the workhorse models for monetary policy analysis. The policy advice offered by this framework stresses the importance of the management of private sector expectations even more than the traditional time inconsistency literature. According to Woodford (2003), “not only do expectations about policy matter, but ... very little else matters.” Even if one does not completely share this view, well-anchored inflation expectations are a prerequisite for achieving the primary objective of many central banks nowadays: price stability in the medium-term and also undoubtedly are a crucial measure of a central bank’s performance and credibility.

Inflation expectations therefore closely link the success of monetary policy to its credibility; and the latter is supported if the central bank follows a systematic decision-making process, that is a rule-based policy strategy, and the general public has as clear an understanding of it as possible: in other words, monetary policy is transparent and communicated effectively.

These advances in monetary policy, especially the anchoring of inflation expectations, in my view have been the main driving forces for globally declining inflation rates over the past few decades.

But what is important to understand at the current juncture: The successful anchoring of inflation expectations and the more effective monetary policy response to inflationary shocks will both show up in a flatter Phillips curve when it is estimated in reduced form. This is, in fact, an application of Goodhart’s Law: For example: Once monetary policy is responding more effectively to inflationary pressures due to changes in capacity utilisation, the output gap will empirically lose the information content that has qualified it to play the role of a leading indicator. The empirical evidence of a flatter Phillips curve is an empirical phenomenon that has been documented for several economies, including the United States and the euro area (see, for instance, BIS (2006)). One common explanation for this phenomenon has been that globalisation of goods markets changed both trend inflation as well as the cyclical dynamics of the inflation process.

But as also stated by Rick Mishkin (2007), the main reason for this is as I believe monetary policy having been more successful in stabilising both inflation and output.

The question of who deserves the credit is by no means a theoretical exercise. It has important policy implications. To be more specific: estimated Phillips curves may give misguided policy advice when the monetary policy reaction and its effects are not properly taken into account. First, the empirical result that inflation is less responsive to economic shocks and that inflation persistence is lowered could lead monetary policy to be too complacent when it comes to the appropriate response to economic shocks. Second, the empirical result of a flatter Phillips curve implies a seemingly higher sacrifice ratio.

Accordingly, the impression that a given reduction in inflation is more costly in terms of output may lead policymakers to be more reluctant to respond to inflationary pressures.

The important point to take into account is that if the dominant structural factors for a flatter Phillips curve has been a more stability-oriented monetary policy in the past, these policy implications may mistakenly induce too lax a monetary policy today. This opens up the possibility of inflation expectations becoming less well anchored and, if this scenario were to materialise the task of monetary policy would become even more difficult.

Let me mention one other more general aspect of the linkages between globalisation and monetary policy.

#### **4 Financial globalisation and monetary policy**

Another aspect of globalisation with potential crucial implications has to do with the impressive growth in cross-border financial flows. As domestic asset prices are increasingly determined by global factors, the transmission channels of monetary policy measures might change as well. This is especially relevant for long-term interest rates as they constitute one of the main variables through which monetary policy influences economic outcomes and inflation. For example, there is empirical evidence that the co-movement between German and US long-term nominal government bond yields have significantly increased since 1990, i.e. during the period of dynamic financial market globalisation (Bundesbank (2007)). Moreover, the behaviour of long-term rates in the US in the period between mid 2004 and mid 2005 – famously phrased as a “conundrum” by the then chairman of the Federal Reserve – has raised fears that monetary policy might have lost influence over domestic long-term rates in the face of closely integrated financial markets.

At first sight, this view appears to be supported by simple correlation analyses for the euro area and selected OECD countries. But: does globalisation mean that monetary policy is losing its leverage over domestic long-term interest rates? And if so, does this mean monetary policy is becoming ineffective?

I do not want to go too much into the details. Let me just make three points: First, simple eyeball-regressions indicating a weaker linkage between short-term and long-term rates are insufficient to establish the result that monetary policy has become less effective in influencing long-term rates. It could just reflect more stable inflation expectations against the background of increased monetary policy credibility. Thus, what would be more important is an analysis of the effects of unexpected moves in the short-term rate. Empirical studies that focus on these measures do not find evidence that either the monetary policy of the Federal Reserve or the Eurosystem suffers from a diminished leverage over long-term rates (Ehrmann (2005), Brand (2006)).

Second, even if it would be true that long-term interest rates are increasingly determined on the global capital market, this by no means renders monetary policy ineffective. One of the workhorses of international macroeconomic theory, the Mundell-Fleming model, dealt with precisely this issue some 40 years ago. And you are familiar with the result that, as long as you operate a flexible exchange rate, monetary policy becomes the more effective the higher the degree of capital mobility is. The exchange rate channel then more than compensates for the decline in the ability to influence long-term rates.

Finally, one might debate whether influence over long-term rates is the most important way in which central banks achieve their goals. Issues such as the transparency, independence and credibility of monetary policy are, in my view, far more important in stabilising inflation expectations and thus safeguarding price stability.

Apart from its likely influence on the transmission of monetary policy, financial globalisation is increasingly affecting financial stability aspects as well. The term “financial stability” broadly describes the financial system’s ability to perform its key functions efficiently, including in

stress situations and periods of profound structural change. This embraces the efficient allocation of financial resources, the settlement of payments and securities transactions, and the spreading and pricing of risk. The importance which many central banks attach to the stability of the financial systems has increased substantially over the past few years. Regarding financial globalisation, the main reason for this development is that the internationalisation of financial flows has increased the degree of integration of the national financial systems and has therefore also heightened the risks of contagion in the event of turbulence.

Thus, financial stability issues are, at least implicitly, also a task for central banks. What is the basic rationale behind this conclusion? The central banks' primary objective of safeguarding monetary stability, and by this means facilitating sustainable growth and development, requires a stable financial system. In fact, monetary and financial system stability are intertwined phenomena: Monetary stability can be maintained only if the financial system is sufficiently stable to transmit monetary policy signals, for example. In turn, a stable financial system is unthinkable without monetary stability, which is a necessary, albeit not sufficient prerequisite for financial stability.

All these more general aspects of the relationship between globalisation and monetary policy I have mentioned are important factors for the appropriate calibration of the monetary policy stance at the current juncture. Therefore, I want to spend my final remarks on the current monetary policy challenges in the euro area.

## **5 Some remarks on current monetary policy challenges in the euro area**

In assessing the current economic environment and the appropriate monetary policy stance nearly all the above mentioned distinct features of globalisation come into play.

Like many other countries, the euro area is confronted with global price pressures from commodities and food. In addition, the transmission of the financial market tensions originating in the US mortgage market to other countries has been fast. Moreover, spill-overs to other asset classes and intermediaries have played a prominent role. These developments have clearly been propagated by financial globalisation.

Central banks are affected in many ways by the current financial turbulence. Being in charge of banking supervision in many countries, central banks are concerned with the liquidity and solvency dimensions of individual financial institutions. Being a "liquidity provider of last resort", central banks are concerned with tensions on the money markets. Being important macroeconomic actors in their capacity as setters of key interest rates, central banks have to weigh the potential impact of financial market turbulence on the real economy, on growth figures and on inflation rates.

As you will probably know the Governing Council in its meeting yesterday has decided to keep the policy rate unchanged at 4 %. But we have made clear that the current inflationary outlook and the medium-term upside risks are our major concern. Due to the steep increases in the prices of processed and unprocessed food since mid 2007, the unbroken trend increase in raw materials and another hike in energy price inflation in the second half of last year the HICP headline figures in the euro area have reached levels not seen since the beginning of EMU.

Annual HICP rates since November 2007 were above 3 % – well above the upper threshold of our definition of price stability. Moreover, core rates have crept up over the past months. Even leaving energy prices and/or unprocessed food prices out of the picture the corresponding inflation rate exceeds our medium-term comfort zone. Finally, even assuming a marked decline in food price inflation over the course of 2008, as embedded in the projections, does not result in annual HICP rates below 2 % in a single month in 2008. Due to increases in unit wage costs core inflation rates are projected to equally exceed the 2 %

margin over the course of 2008. And even taking into account a forecast horizon beyond 2008 gives no sign for relief.

Medium- to long-term inflation risks are also signalled by the unbroken dynamic growth of monetary aggregates.

Long-term inflation expectations derived by break-even rates have also picked up over the past weeks resuming their upward trend observable since last summer. This is more visible for long-term inflation expectations derived from financial market prices than from those derived from surveys.

On the other hand we took into account that the prospects for global growth have become somewhat clouded. This translates into a less optimistic outlook on foreign demand. Together with increased risk aversion on financial markets and slightly less favourable financing conditions the forecast range for real economic growth in the euro area and Germany was shifted down. The weakening in gdp rates that has already been observed in the fourth quarter 2007 will carry over into the first half of 2008. But then a gradual recovery towards potential rates should set in. Overall, this outlook is consistent with growth just below potential on average this year. Our latest projections take into account in the baseline scenario that some of the previously identified upside risks to inflation and some of the downside risks to growth have in part materialised over the past weeks.

And while it is true that the current environment for projections is characterised by an unusual amount of uncertainty, I would emphasise that this is true for growth as well as inflation.

Taken all together, the current policy stance in the euro area has to be judged as contributing to achieving our medium-term objective of price stability. Weaker growth prospects do not pose sufficient reason to expect a dampening of inflationary pressures in the foreseeable future.

Given our mandate of price stability and the identified upside risks especially in the medium-term we have today re-iterated and emphasised our commitment to maintaining price stability as our primary objective in accordance with our mandate.

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