Mr. Wellink gives a central banker’s view of price stability and monetary policy

Speech by the President of the Netherlands Bank, Dr. A.H.E.M. Wellink, on the Alumni Day of the Tinbergen Instituut in Rotterdam on 23/10/98.

Introduction

It was only recently that some predicted that central bankers would soon be finding themselves in never-never land. They alleged that the considerable technological advance made since the Second World War would make for structurally higher growth and low inflation. The world economy had supposedly landed in an age of no inflation. But here the question arises whether this really is a new era, and if it is, how it was brought about. Before we go into these questions, however, we need to look at the definition of price stability, as well as at the concept of prices as such.

Price stability in central bank terms

It goes without saying that European monetary policy is concerned above all with price stability within the euro area. That is after all the mandate given by the EC Treaty to the European Central Bank. The euro’s exchange rate against, let us say the US dollar or the Japanese yen, is not targeted. The euro zone is a comparatively closed economy where, contrary to what we have been used to in our open European economies, the exchange rate plays a relatively minor role in price determination. The emphasis laid on the internal value of the euro is the greatest contribution which the European System of Central Banks (ESCB) can make to the stability of the international monetary system.

In their quest for internal price stability, the monetary authorities base their policies notably on movements in the consumer price index (CPI). They do so for several reasons. To begin with, there are various technical advantages to the CPI, such as its high publication frequency, timely availability and transparency. The latter is reflected in its well-founded weighting scheme, which covers a considerable proportion of final spending, viz. household consumption. This makes the CPI a more attractive gauge than the broadest measure of inflation available, viz. the GDP deflator. The GDP deflator is, however, no match for the CPI when it comes to monetary policy-making, because its figures become available with a considerable lag and not as frequently. Moreover, price movements over time lose some of their comparability because of shifts in the package of total spending. But the CPI is useful for another, more basic reason as well. At the end of the day, central banks are most interested in the ultimate net result of the gamut of price rises within the economy, i.e. the increases in the prices paid by households for goods and services. In this context, the prices of raw materials are, for instance, of a lesser importance. It must be kept in mind that price rises in an earlier stage of the production process need not necessarily bring about tensions within the economy, because they can be compensated for by other factors (such as increasing productivity or competition).

However, this does not mean that central banks should not look at other price indices as well. On the contrary. Movements in import prices may be barely relevant to the euro area, but they are of importance to small, open economies. Because import prices in a small and open economy are determined largely by exchange rate developments, the latter may have a considerable influence on the general price level. That even goes for the euro zone, for example, when the exchange rate of the US dollar - in which the prices of numerous commodities are expressed - is subject to heavy fluctuations. Likewise, movements in the prices of non-final goods and services, such as commodities and energy, can be relevant for central bankers because they may be an indication of inflationary tensions.

It is becoming harder for central bankers to do their work because doubts have arisen about the traditional gauges of inflation. What is going on? The measurement of inflation has drawn the attention of the academic world, as well as that of the central banks. Take, for instance, the Boskin Report published in the United States, and a comparable report published under the auspices of the Deutsche Bundesbank. These studies indicate that the CPI has been systematically overstated, in the United States by about 1 percentage point, and in Germany by three-quarters of a percentage point. It is worthwhile taking a closer look at this matter, because, from the point of view of monetary policy, the importance of any distortions of the CPI increases in a world where inflation has dropped to low levels. After all, the lower the rate of inflation, the greater the relative significance of any statistical distortion. With inflation in the euro zone coming out at 1.2% over the last twelve months, measurement errors of the magnitude which I mentioned earlier suggest that Europe is currently wavering between inflation and deflation.

The errors made in measuring inflation are due, first of all, to the (fortunately) progressing increase in product quality. This is known in academic circles as the quality bias. It is not easy to distinguish between the price rises and quality improvements of sophisticated products such as computers and telecommunications equipment. For marketing reasons, technological innovations may be very highly priced, for one thing because the development costs need to be recovered. Later generations of IT tools, by then mass-produced, are invariably much cheaper than their predecessors. Falling prices and an impressive expansion of investment and profitability then go hand in hand, which is a fairly unusual phenomenon macroeconomically. The variety of products and their ever-shorter life cycle add to the risk that distortions in price indices increase over time.

The second cause of statistical distortions in inflation is the growing importance of services; this is known as the services bias. In 1997, more than 65% of the nominal value added within the Dutch economy was accounted for by the services sector. In 1950, it had still been less than 50%. The shares of the agricultural sector and manufacturing industry have shrunk accordingly. Within the services sector, the greatest expansions are accounted for by business services, banking and telecommunications. The problem is that it is not easy to determine the output volume of services, which can usually only be calculated in a roundabout way. Because the growth of output is underestimated, price movements in the services sector are systematically overestimated because of these measurement problems. This (unduly) low estimation of output growth is corroborated by studies made by the Netherlands Bureau for Economic Policy Analysis. According to them, the total productivity of business services in the Netherlands between 1991 and 1995 came out at minus 1.5%. Compared to the increase in productivity in manufacturing industry in the same period, of 1.75%, this figure is implausibly low. The problems inherent in measuring the CPI are compounded further by the fact that services have come to make up an increasingly large share of the national product.

The third factor causing measurement problems with regard to inflation may be termed the substitution bias. In practice, the composition of the package of goods and services purchased by consumers changes fairly rapidly. That is especially true in this day and age, with new and improved products being marketed all the time. The package composition underlying the CPI is adjusted for such changes only once every five years. The basket of goods and services used to calculate the CPI has recently been harmonised within the European Union. This harmonised CPI will be used by the ESCB as a measure of inflation in their monetary policy-making. This means that the differences between the national definitions used by statistical agencies have declined. However, the process of harmonisation has not yet been completed. The harmonised CPI in fact covers too narrow an area in terms of goods and services. Several components which are relevant to the general price level are not included. Take, for example, rent increases.

Consequences for monetary policy

In view of the problems attending the measurement of inflation, people are right to question whether central bankers still have sufficient insight into inflationary developments. And subsequently, whether central bankers are still capable of conducting adequate monetary policies. Such concerns are valid notably in times of low inflation, when the statistical distortions that we are speaking about carry extra weight.

In a market economy, any difficulties encountered in the calculation of the index of the general price level need not necessarily give rise to problems right away. An entrepreneur who has decided to purchase new computer hardware will not be swayed by possible statistical distortions in the CPI. Neither will you or I, when we visit the supermarket on Saturdays to stock up our larders. The essential thing is that entrepreneurs, consumers and other economic agents have proper insight into the value of individual goods.

But there is a catch. An inflation gauge which is closely monitored by a central bank may influence the behaviour of economic agents. Contracts and labour agreements often refer explicitly to an officially published inflation figure. Via this route, distortions in measured inflation can thus affect functioning of the economy. In other words, it is of the utmost importance, not just for the monetary authorities, that price rises be gauged as accurately as possible.

In spite of the uncertainties inherent in measuring inflation, the monetary authorities, in formulating their policies, make use of a gauge that seeks to encompass the general price level. How otherwise can one ascertain whether price stability has been achieved. Moreover, monetary policy should in principle take effect at the macroeconomic level. However, in order to allow for possible measurement errors, price stability - as indicated by the inflation measure used - is defined more broadly by the central bank. The Governing Council of the European Central Bank has recently defined price stability as a rise in the (harmonised) consumer price level of less than 2%. On the one hand, this definition, which is in line with that used in most countries of the euro area, implies that measurement errors occur while, on the other, it stresses that it is one of the tasks of the European System of Central Banks to prevent deflation. Some caution is in order when it comes to using the word “deflation”. In purely technical terms, deflation may be defined as a fall in prices, but it conjures up much more than that, viz. the depression of the 1930s. A slight decrease of the general price level need not of course be attended by an overall collapse of demand. In 1987, for instance, consumer prices in the Netherlands dropped by around 0.5%, a development which had a positive impact on the economy because disposable income in real terms grew more than expected.

Returning to our measurement problem, we cannot conclude, on the basis of the information now available, that the distortions in the official price indices have increased substantially over time. That would have landed the monetary authorities with real problems. If, for example, inflation had been increasingly overstated, monetary policy would have been unduly tightened, with negative effects for economic growth and the employment situation. However, we cannot but admit that it has become more difficult over the past few decades to measure output and price developments in the services sector in particular.

A brave new world?

Now let us take a look at actual inflation. We can see from the various inflation rates in Europe, and even throughout the world, that there are few factors which could make for rising inflation. In the European Union and the United States, inflation has been structurally reduced since the early 1980s, thanks to budgetary consolidation in both these areas, the deregulation of labour and product markets, and a further liberalisation of international trade and capital markets, boosting international competition. In those - large - parts of the world which have been affected by the financial and economic crisis, deflation is in evidence.

This brings me back to the question which I posed at the beginning of this address: what indications are there that we now find ourselves in a new era of permanently higher growth and lower inflation, or to cite Alan Greenspan, in a new economy. This question is prompted notably by the developments in the United States where - so far - high growth has been attended by low inflation.

But one swallow does not make a summer, as the saying goes. And that is true of the United States, too. Those who feel that high growth and low inflation have come to form a permanent fixture may be suffering under some delusion. After all, viewed over the longer term, neither the duration of the upswing in the United States, nor the increase in productivity nor the rate of inflation are unique. In fact, if the signs are not misleading, the American economy would seem to be over the hill. Since the early 1950s, the expansion phases of the American business cycles have on average lasted five years, two of them lasting longer than the current phase. Though accelerating, the rise in labour productivity over the past few years (of 1-1.5%) still compares unfavourably with the 3% average recorded during the first two decades following the Second World War. And, where inflation is concerned, it may be noted that it was low until the mid-1960s, averaging 1.3%. The current developments in the United States, which are now beginning to tarnish somewhat, therefore have much more in common with the situation in the first half of the post-war period (though there are also quite a few differences), and can hence hardly be called exceptional. It is all the more imperative to exercise caution when averring that inflation has been banned forever, because the current low rate of inflation in the United States and Europe is accounted for largely by a fall in commodity prices, which is temporary in nature. Obviously a role is also played by the collapsing demand in South-East Asia in particular and its repercussions elsewhere. That is why there is no telling what the underlying inflation rate would be if there were greater economic equilibrium worldwide. For example, suppose oil prices in 1998 and 1999 continued to be at their 1997 level ($19.2 per barrel UK Brent). That is 30% more than the current price. Inflation in the European Union would then come out at 1.8% this year, instead of the current estimate of 1.5%. In 1999, inflation would then rise to 2.4% (according to the Netherlands Bank's EUROMON model).

Conclusion

Let me conclude. Central bankers will never be at a loss for something to do. Just look at the current financial and economic crisis. And although the inflation genie will not emerge from the bottle for the time being, central banks will need to keep an eye on price movements all the time. Monetary policy is not asymmetrical, as some might feel, in the sense that a central bank only takes action when prices soar. Falling prices, too, may be detrimental to the economy, and call for some reaction from the central bank.

It is under these very conditions - low inflation worldwide and even deflation in some areas - that measurement problems with regard to price movements, though not insurmountable, may prove a nuisance. Although the central banks still have at their disposal sufficient monetary and economic beacons by which to steer their course, there is work to do for the statistical agencies, the ESCB and the academic world. If problems with measuring inflation mean that inflationary tensions may be hard to assess reliably, we must do all we can to ensure that the quality of the price indices published is at least maintained and, where possible, improved.