A H E M Wellink: The impact of new technologies on the implementation of monetary policy

Speech by Dr A H E M Wellink, President of the Nederlandsche Bank, at a symposium of the Banque de France on "New Technologies and Monetary Policy", Paris, 30 November 2001.

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When thinking about new technologies, Information and Communications Technology (ICT) is probably the first thing that comes up in most people's mind. And, there are those who see an acceleration in the diffusion of ICT as being equivalent to the concept of the 'New Economy'. For the purposes of this conference, I would prefer to take a wider perspective, in which the new economy is seen as the interaction of several mutually reinforcing factors. These include advances in ICT, financial innovation and liberalisation, the globalisation of trade, improved functioning of markets and enhanced macroeconomic management. The interplay of these factors has the potential to raise the speed limits of the economy. That is, the new economy can operate at higher growth rates than in the past without generating additional inflation. Therefore, both the initial hype surrounding the new economy with some pronouncing the demise of the business cycle, as well as the elimination of the new economy all together in response to current economic circumstances, seem to be misguided.

The jury is still out on the question whether we can detect a new economy in Europe. Without wanting to prejudge the outcome, I would argue that there is no intrinsic economic reason to expect the new economy not to materialise. So, assuming that it will take root, indeed what does this new economy imply for the monetary policymaker? I have a couple of general observations to make.

First, the new economy influences the transmission of monetary impulses through the economy. It can be argued that in the new economy it will take less time for a monetary policy impulse to have an impact on inflation and output, while the impact of a given impulse will be smaller. Since there is a separate panel discussion devoted to this topic, I will leave it at that and move on to the second observation.

That is, policy makers do not bring about the new economy. It is the result of private sector behaviour, driven by innovative entrepeneurship or, more fashionably, 'creative destruction'. Policy in general can only be conducive to the new economy. In a market-based economy, private sector decisions are guided by the allocative role played by the price mechanism, which performs best in an environment of price stability. Hence, the monetary policy objective of price stability, which served us well in the old economy, will help foster a new economic environment. It is no coincidence, therefore, that the champion of the new economy, the United States, achieved its greatest advances in an era of low inflation.

A third issue, crucial for monetary policymakers, is the question of how to react to the new economy. Let me simplify matters by conceptualising the new economy as a shock to productivity. The economic consequences of this shock will be felt in the long run as well as in the adjustment towards the new steady state of the economy. Let me start with the long run.The new equilibrium is characterised by structurally higher growth rates of productivity, implying higher profitability of investments. In order to attract the capital needed to finance these investments, and achieve macro-economic equilibrium, a higher interest rate is needed. The central bank must take this upward movement of interest rates into account when formulating monetary policy. Before this new equilibrium is achieved, the economy goes through a complex adjustment process. Analytically, this adjustment not only involves an outward shift of the aggregate supply curve, which by itself implies lower inflation and higher growth. It could also elicit a stimulus to aggregate demand, for example due to wealth effects. The latter would imply higher inflation and higher growth. So, it depends on the circumstances and on the stage of transition from the old steady state to the new one, how monetary policy should react.

It is important to note that the monetary strategy of the Eurosystem was devised in order to conduct monetary policy in a particularly uncertain economic environment. The monetary strategy is well-suited, therefore, to cope with uncertainties, including the uncertainty surrounding the effects of the new economy. As such, the definition of price stability does not need to be altered and the two-pillar structure will continue to serve us well. There could, however, be a need to re-assess the information content of individual variables within each pillar. Let me try to illustrate this.

Advances in and the spread of ICT can lead to new forms of money, i.e. electronic means of payment. Anticipating this, electronic money balances held by euro area residents have already been included in the definition of euro area monetary aggregates. However, the new economy could change the information content of the monetary aggregates. For example, electronic money could increase the velocity of money, because people will be able to economise on their money holdings, only accessing money when they need to spend it. Also, structurally higher productivity growth will eventually lead to higher trend growth in the euro area. In due time, both effects could independently elicit an adjustment of the reference value for M3. This issue is covered by the yearly review of the reference value for M3 by the ECB Governing Council. Under the first pillar, valuable information is also distilled from the counterparts of broad money, such as credit variables. The development of new financial instruments could change the information content of these variables. For example, securitisation places bank assets outside bank balance sheets, which could complicate the observation by the central bank of credit flows.

In the second pillar, the new economy could widen the range of useful indicators, i.e. because wealth effects gain in importance. The information content of other indicators must be re-evaluated in order to take into account a possible increase in the speed limits of the economy. The new economy could, for example, lead to a downward adjustment of the NAIRU – the non-accelerating inflation rate of unemployment. At the same time, variables that measure the current economic situation could become more important, as these will be the first to reveal that the new economy has landed in Europe.

Let me conclude with three key points. First, the new economy could have, and in my view will have, important implications for monetary transmission. Second, the implications of the new economy for the conduct of monetary policy are not clear-cut. Especially not in the transitional period to the new economy. What is clear, however, is that price stability will remain at the heart of central banking. Third, the ECB monetary policy strategy is well-suited to take the uncertainties surrounding the new economy into account in policy-making. There is no reason to amend the two-pillar structure on account of the new economy. Within and between both pillars, the assessment of all incoming information is and will continue to be evaluated. This exemplifies the art of monetary policymaking, both in the ‘old’ and in the ‘new’ economy.