

Nout Wellink: No globalisation without innovation

Speech by Dr Nout Wellink, President of the Netherlands Bank and Chairman of the Basel Committee on Banking Supervision, at the 2007 Money and Banking Conference "Monetary Policy Under Uncertainty", hosted by the Central Bank of Argentina, Buenos Aires, 4 June 2007.

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Introduction

I grew up in a small Dutch village. Although it was not in a polder, to me the world seemed flat. It took several years before I saw mountains for the first time and realised that the world is not flat. The generation of my grandchildren misses this kind of experience. Flying long-distance at early age is no longer exceptional in the more prosperous parts of the world. The world has changed dramatically in the course of decades. Information technology has brought us many new opportunities, in particular mobility of people, goods and ideas. I'll discuss technological progress, and what it means for the macro economy in general, and for monetary policy in particular.

Globalisation is driven by technological change

There are at least four manifestations of technological change that have dramatically reshaped the world over the past decades:

- What we see in major cities are people from all over the world. What lies behind this is cheap and fast air traffic. Competition is a driving force. So is technology, which makes air transportation more efficient, and management skills that allow for splitting up the market in high yielding business-class tickets and low cost fares.
- What we see are cheap imports from China everywhere in the Western world. What lies behind this are low transportation costs thanks to the cargo container. The cargo container can move non-fragile goods for about 1% of retail value to anywhere in the world. In the pre-container era, shipping costs used to be between 10 and 20% of retail value.¹ Apart from low transportation costs, additional factors are needed to explain the surge in Asian products in Western markets. In particular the catch-up of Asian economies is creating new trading opportunities.
- What we see is offshoring of labour-intensive production to low-wage countries. What lies behind this is that new technologies allow the production process to be unbundled. Production sites are located far from target markets, both in manufacturing and in the service industry. The share of offshored inputs in GDP can reach up to 12%, as in Canada and the Netherlands.²
- What we see is low-skilled labour in the West feeling a cold wind of competition from cheap labour from Asia and Central and Eastern Europe. At the same time, wages for high-skilled labour are on the increase. What lies behind this is skill-biased technology. Automation lowers demand for low-skilled workers, since computers offer a substitute. But computers can also amplify natural advantages of high-skilled labour, as complements to labour. A talented professional can serve a much larger customer base due to new ICT opportunities. Financial engineering and management skills also tend to favour high-skilled labour.

These are just examples, illustrating that there would be no global economy without new technology. Technology has always been the driving force for change. This was the case when the invention of the printing press in the 15th century boosted the diffusion of ideas; and it is still the case in today's world, where ideas are spreading much faster than twenty years ago thanks to the internet.

¹ J. Bradford DeLong (2006) The box that changed the world, Project Syndicate.

² IMF (Spring 2007) World Economic Outlook.

Macro-economic consequences

Technological change has brought the world prosperity. In recent years, output growth has been at levels not seen since the early 70s. Not just Western economies are growing fast. China and India are integrating in the world economy at full speed. China's average productivity growth over the last ten years was close to 10%. Average productivity growth in emerging and developing countries has also increased, to 5% last year.³ Despite a recent pick-up, productivity growth in Latin America is lagging that in other emerging markets.

Although technology is a source of welfare, it can also have negative side-effects. For instance, the unprecedented speed at which ideas are passed between people is a key achievement of the ICT revolution. But it also allows bad ideas to travel fast, such as religious fundamentalism. I feel some sympathy for those who fear rapid technological change. But whether we like it or not, we can't stop technological progress. Like toothpaste, once it's out of the tube, it is hard to get it back in again. The challenge is to make sure that new technologies bring change for the better.

There are winners and losers from technological change, at least in relative terms. The developing world at large is benefiting from recent developments. However, some areas are losing out. On the losing end are areas that lack connections to the container-handling network and the internet. This applies to areas that lack crucial infrastructure, be it reliable electricity and roads, or the rule of law.

In the Western world, job security has diminished, not just for blue-collar workers. These days, services in ICT and other high-tech sectors are offshored to low-income countries. But the number of offshored jobs is still very modest compared to the total number of jobs lost and created. In the Netherlands, roughly 9.000 jobs are offshored each year, whereas the annual number of job destruction and creation is above 800.000.⁴ Since the ICT revolution is skill-biased, it favours high-over low-skilled labour. Fortunately, higher income inequality between high- and low-skilled workers does not necessarily imply that low-skilled workers are worse off. The IMF has shown that recent trends have increased the size of the pie. Cheaper inputs have lifted output and overall labour compensation by about 6% in real terms in advanced economies over the last 25 years.⁵ And all consumers benefit from lower prices.

To keep labour market effects in check, employability is a key policy issue. Flexible employees can adapt to new circumstances that technology brings about. Governments can offer a helping hand by improving education, and by providing a social security system that encourages people to move from one job to another. In some countries, social security schemes may be so generous that they deter efforts to seek new employment. But the slogan "the lower, the better" goes much too far. In Latin America, for instance, social security schemes alleviate income inequality. If the benefits of economic growth are widely shared, support for economic reform can be expected to be broader than otherwise.

Monetary policy

The challenge for monetary policy is to adapt to the new environment. Fortunately, central banks have much more room for manoeuvre now than they had when Arthur Burns was appointed as Fed Chairman by President Richard Nixon back in 1970 with the words: [quote] "I respect his independence; however, I hope that independently he will conclude that my views are the ones that should be followed" [unquote]. Also downward pressure on inflation by cheap imports from low-income countries has made central bankers' life in the Western world a bit easier than in the past. Prices for clothes and big ticket items such as cars and personal computers have declined. Computers became a lot cheaper if one takes into account quality improvements. The overall downward pressure on inflation has allowed for lower monetary policy interest rates, at least in the short term.

In the longer term, the real equilibrium interest rate might rise. This would be the case if the world would have moved to a permanently higher trend rate of productivity growth. The jury is still out on

³ Productivity is measured as real GDP divided by working age population. Source: IMF (Spring 2007) World Economic Outlook.

⁴ Numbers are averages over 2001-2005. Source: Dutch Ministry of Economic Affairs (2005) Visie op verplaatsing.

⁵ IMF (Spring 2007) World Economic Outlook.

whether this is true. Other things equal, a higher real equilibrium interest rate implies that monetary policy interest rates also have to move to a higher level, consistent with the new equilibrium.

So, a major issue is to determine the trend rate of productivity growth. From a monetary policy point of view the question can be rephrased as: What is the level of growth at which the economy can operate without generating higher inflation? It is always difficult to determine the speed limits of an economy, but in times of change this is even more challenging. One development makes it particularly hard. That is the move from an industrial to a post-industrial society. In the 1950s, 30% of the US labour force was employed in manufacturing. Now the number is 10%. We have moved to a service oriented society. In the service industry, capacity utilisation cannot be measured by counting idle capacity in factories. Besides, productivity growth can only be estimated in an imprecise way. Usually, total factor productivity is used as the key measure. It is determined as a residual: productivity growth is the increase in value added that cannot be explained by the volume of inputs used. This measure is very rough. All in all, potential output and its growth rate is more difficult to determine than it was in an industrial economy.

Uncertainty about potential output translates into uncertainty about the output gap between potential and actual output. It has always been tricky to base monetary policy on output gaps. Research by Orphanides suggests that the Great Inflation was to a large extent due to mismeasurement of potential output and the output gap.⁶ It appears virtually impossible to determine output gaps in real time. They can only be measured in a reliable way ex post, with the benefit of hindsight. "Life can only be understood backwards, but it must be lived forwards" as the Danish philosopher Kierkegaard said. This is certainly true for monetary policy, with its medium term objectives. How to cope with this? I've learnt a couple of things since I thought the world was flat. One is that the objectives of monetary policy should be modest. Fine-tuning economic growth has always been a too ambitious goal in a world with long and variable lags in monetary transmission. A clear focus on low and stable inflation can safeguard central banks against the temptation of activism. Given current uncertainties, monetary authorities must be particularly cautious in interpreting the output gap. They have to remain firm in reaction to actual inflation and other relatively reliable indicators of inflation risks, such as excessive wage growth.

As a side remark, I add that, in theory, capital account liberalisation and trade openness warrant a sharper focus of monetary policy on price stability rather than output stabilisation.⁷ International capital mobility, as well as broader access to financial markets, creates new opportunities for households to smooth consumption over the years. Free international trade allows for specialisation in domestic production. As a result, it might be possible to disentangle consumption and production to a higher extent than in the past. In other words, households can cushion changes in production without intervention by the central bank.

I would like to conclude with a warning. A focus on price stability is more complicated than it sounds. Low and stable consumer price inflation is no reason for complacency. In spite of consumer price stability, asset price inflation may signal underlying imbalances, such as an overoptimistic risk assessment by financial market participants that keeps long-term interest rates at unwarranted low levels. Monetary policymakers must be forward-looking, and assess possible divergences between real and nominal factors in the area of monetary aggregates, credit and asset markets. How this should be done in practice is a difficult question that deserves further elaboration. I won't answer it now. Time is running out. Sometimes it is better to stop before one has finished.

⁶ Athanasios Orphanides (2003) The quest for prosperity without inflation, *Journal of Monetary Economics*, Vol. 50, nr. 3.

⁷ Assaf Razin and Prakash Loungani (2006) Globalization and equilibrium inflation-output tradeoffs, NBER Working Paper nr. 11641.