## Willem F Duisenberg: New economy, financial markets and monetary policy

Speech by Dr Willem F Duisenberg, President of the European Central Bank, at the meeting of the Zürcher Volkswirtschaftliche Gesellschaft, Zurich, 19 May 2003.

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### Introduction

Ladies and Gentlemen,

I am delighted to be here to address you this evening, and I should like to start by thanking the Zürcher Volkswirtschaftliche Gesellschaft for inviting me to do so.

Being trained economists, you all know that in the course of the past century, monetary theory has faced significant challenges from various angles - the Keynesian revolution, the neo-classical synthesis, the monetarist counter-revolution, the emergence of new classical economics with the introduction of the concept of rational expectations, and real business cycle theories.

Similar to the experience of monetary theory, monetary policy has had to cope with major challenges as well. We all know that the economic and financial environment in which monetary policy has to operate is continuously changing. During the past few years - as has been rather obvious - these changes have included the discussion about a "new economy" and, driven by the interrelated processes of financial liberalisation and financial globalisation, the growing importance of financial markets. You may wonder why someone should raise the topic of the "new economy" again, as it has been discussed so extensively by many, including myself, on many an occasion before. Is this not a topic which has actually become rather "old" by now; another chapter in the history books of economic science?

I do understand these concerns. Let me assure you now that I will not bore you with a recollection of past events. I intend my exposé today to be forward-looking, as should the exposé of any central banker. I want to discuss what lessons for the future we can draw from over-optimistic expectations related to so-called regime shifts, such as the supply-side shock of a perceived "new economy", and the subsequent financial boom and bust cycle in asset prices. How should monetary policy-makers deal with the resulting financial imbalances and reconcile monetary stability with financial stability?

In my presentation today, I shall first briefly discuss the challenges that have been presented by the new environment for monetary policy-makers, in particular by the "new economy" and the growing importance of capital markets. Then, I shall look at what I call the excesses of this new environment, which for me are the speculative boom in asset markets and evidence of a corporate culture infatuated by short-term considerations. Finally, I shall look at the financial stability concerns and conclude by presenting some lessons for the future.

### The paradigm of the "new economy"

Without a doubt, the world has experienced overwhelming progress in technology and productivity over the previous century, resulting in enormous growth in economic activity and individual wealth. It has been calculated that the industrialised countries were about 20 times better off at the end of the 20th century than they were a hundred years earlier.[1]

Developments in the technological infrastructure have increasingly been at the forefront of economic discussions in the second half of the 1990s. One of the most striking economic events of the last years has been the pace and depth of change in information and communications technologies (ICT), and the discussion about a so-called "new economy" in the euro area. There has been no undisputed definition of what should be understood by the term "new economy", but generally it included the following characteristics. A "new economy" seemed to manifest itself mainly in a permanently higher rate of potential output growth, with gains in productivity driven by technological innovation being the main force behind the upsurge.

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[1] D. Coyle, "*The Weightless World: Strategies for Managing the Digital Economy*", MIT Press, 1998, p.VII.

The problem with the “new economy”, however, was that the evidence available for the existence of it was fairly mixed, both for the United States and - even more so - for the euro area. On the one hand, some studies, undertaken at the aggregate level, tended to conclude that the data did not warrant an affirmation of a “new economy”. On the other hand, several microeconomic studies found evidence of significant effects of information technology on firm-level productivity.

From the beginning, there was, however, only limited, if any, evidence of a “new economy” in the euro area. It was clear that advances in information and telecommunication technology had a major impact on the financial services industry, generating various financial innovations and new business methods, such as internet banking, electronic money, on-line broking services and electronic trading systems. For the real economy, however, the impact was much harder to assess, not least due to a lack of reliable statistics and interpretation difficulties regarding “new economy”-related developments in productivity. As Nobel Prize Laureate Robert Solow said in 1987: “You can see the computer age everywhere but in the productivity statistics”.[2] The difficulty in interpreting these developments therefore suggested caution on the part of policy-makers.

**The interaction of the “new economy” with developments in financial markets**

Let me now turn to the interaction of the “new economy” with financial markets. It has been long debated what role the development of financial markets played in fostering belief in the “new economy”. In most industrialised nations, on the waves of financial liberalisation and globalisation, capital markets have been growing tremendously over the past two decades, both in terms of volume and value of transactions and in the development of new types of securities. For the euro area, the preparations for and the actual introduction of the euro have undoubtedly been an important catalyst, improving the efficiency of the euro area capital markets and, to some extent, reducing existing information asymmetries, for both the equity and debt markets in the euro area. This has certainly been a very positive development which I wholeheartedly support.

Coinciding with the stock market boom in the late 1990s and 2000, corporations in the euro area raised significant amounts of equity capital. New companies, often in the high-tech field, obtained listings at specialised “new markets” stock exchanges for high-growth companies. The amount of new capital raised on euro area stock markets increased from €130 billion in 1998 to €320 billion in 2000, when stock prices were at their peak. The growth of the euro area stock markets, in terms of the ratio between market capitalisation and nominal gross domestic product, has been staggering. Over a period of ten years, from 1990 to 2000 - when prices were at their highest level - this ratio increased about fourfold.

With the benefit of hindsight, the belief in enormous potential profits stemming from investments in “new economy” corporations resulted in a stock market rally, which broke all previous records. Valuations of internet-related companies reached levels that were extraordinary by basically all standards. In March 2000, the monthly average price-earnings ratio of stocks in the technology, media and telecommunications sectors peaked at 70, compared with an average of around 13 over the previous 25 years. It seemed that the sky had finally become the limit indeed and that a new era had arrived. In parallel with the rise in stock prices, stock market volatility jumped: the historical volatility of the Nasdaq Composite Index almost doubled from 1999 to 2000.

The excesses, which were particularly evident in the stock markets, are the most notable expression of the interaction of the belief in the “new economy” with developments in financial markets. However, the growth in debt markets also played its role. The introduction of the euro and the start of the single monetary policy seem to have had a strong, positive impact on the possibilities for corporate issuers - both financial and non-financial - to resort to corporate bond issuance as a financing source. In addition, this process was fuelled by the surge in mergers and acquisitions, as more and more companies prepared to grasp the opportunities of the new dynamic environment. Furthermore, issuance activity by certain sectors linked to the “new economy”, such as the telecommunications and high-tech sectors, promoted the development of certain segments of the bond markets, for example the market for high-yield bonds.

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[2] B. van Ark, “*Measuring Productivity in the “New Economy”: Towards a European Perspective*”, De Economist 148, No.1, 2000, pp.87-105.

We all know where all this optimism about the “new economy” led to. Since March 2000, we have seen both a substantial decline in stock prices and rising financial imbalances. I shall now discuss the aftermath of the boom and burst period that we experienced in financial markets.

**The aftermath**

If the famous philosopher Erasmus of Rotterdam were to have lived in our times, he would certainly have added an additional chapter to his satirical masterpiece “The Praise of Folly”, with its pointed attacks on human weaknesses and excesses, to describe some of the practices in financial markets and corporate behaviour that have been so blatantly evident in recent years.[3] Some, as we know, have used the expressions “irrational exuberance” and “infectious greed” to describe these developments.[4] I have nothing to add to these statements.

Unfortunately, when stock prices came down sharply, the costs of the excesses became evidently clear. Since their peak in March 2000, stock prices in the euro area - as measured by the broad Dow Jones Euro Stoxx index - have fallen by roughly 57% as at the end of April 2003. It has been calculated that buying a thousand Deutsche Marks' worth of beer would have been a better investment than investing the same amount of money in Frankfurt's Neuer Markt at the height of the bubble - at least with the beer you could have made some return by selling the empty cans. The fall in the value of financial assets since 2000, associated with the fall in equity prices, has led to an increase in leverage ratios of non-financial corporations. The decline in the value of collateral has led to an increase in risk premia when taking up loans or issuing debt securities. This was shown clearly in the spreads of retail bank lending rates over corresponding market rates and in the increasing risk premia on corporate bond interest rates.

The ratio of debt of non-financial corporations to GDP, which increased substantially in the second half of the nineties, only started to stabilise last year. The relatively high debt levels of non-financial corporations, combined with the decline in the value of financial assets, has had adverse consequences on firms' financing conditions via balance sheet effects and therefore on private investment in particular over the past few years. Furthermore, corporations have become increasingly reluctant or have found it more difficult to issue equity capital on public stock exchanges. In 2002, total gross issuance of equity only accounted for around 45% of the annual average for the period 1999-2002. In fact, in the second half of 2002, the value of quoted shares issued in the euro area was at its lowest level since the mid-nineties. The slowdown in equity issuance activity in 2001 and 2002 was accompanied by a similar decline in debt securities issuance by non-financial corporations. These declines in securities financing partly point to lower capital demand following the economic slowdown, but the worsening of capital market sentiment in recent years may also have induced companies to increasingly rely on other sources of finance.

Furthermore, stock market participation of households in the euro area steadily increased in the 1990s. When share prices collapsed, households experienced substantial losses in their financial wealth, bringing the ratio of financial wealth to disposable income back to levels similar to those witnessed at the end of 1997.

The costs of the developments in financial markets over the past few years, which were often linked to the “new economy”, can also be measured by a critical erosion of trust. Examples of accounting malpractice, corporate greed and imprudent stock market valuations have started to appear in increasing numbers, undermining the basic trust and confidence of investors in financial markets. There has been a lot of discussion about whether this unfortunate behaviour has been promoted by

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[3] D. Erasmus, “*The Praise of Folly*”, (translated by J. Wilson), Great Mind Series, Prometheus Books, 1994.

[4] See for “irrational exuberance”: A. Greenspan, “*The Challenge of Central Banking in a Democratic Society*”, 5 December 1996, speech at the Annual Dinner and Francis Boyer Lecture of The American Enterprise Institute for Public Policy Research, Washington, D.C.: “How do we know when irrational exuberance has unduly escalated asset values, which then become subject to unexpected and prolonged contractions as they have in Japan over the past decade? And how do we factor that assessment into monetary policy?”; R.J. Schiller, “*Irrational Exuberance*”, Princeton University Press, 2000; See for “infectious greed”: A. Greenspan in his Testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, 16 July 2002: “Why did corporate governance check and balances that served us reasonably well in the past break down? At root was the rapid enlargement of stock market capitalisations in the latter part of the 1990s that arguably engendered an outsized increase in opportunities for avarice. An infectious greed seemed to grip much of our business community.”

the widespread use of certain reward mechanisms such as stock option schemes.[5] As Alan Greenspan aptly put it: “The highly desirable spread of shareholding and options among business managers perversely created incentives to artificially inflated reported earnings in order to keep stock prices high and rising”.[6]

Trust, as has been demonstrated for example by Francis Fukuyama in his best-seller *Trust: The Social Virtues and the Creation of Prosperity*, may be invaluable for economic processes, as it facilitates economic interactions and lowers transaction costs.[7] Recent economic research is increasingly emphasising that social capital represented by trust may be as important as physical capital for economic growth and prosperity.[8]

Policy-makers and regulators can help to restore trust in financial markets and auditing processes by enhancing corporate governance mechanisms. I fully support measures which promote adequate governance of corporate behaviour and thereby contribute to the restoration of trust in financial statements and capital markets. However, at the end of the day the crucial contribution to restoring trust has to come from the corporate sector itself. The sector has to recognise that easy profits are like killing the goose that lays the golden eggs. Executives in private business have a collective interest in promoting high standards of ethical behaviour.

**Monetary policy and financial stability**

The recent worldwide episodes of substantial asset price swings, with their strong links to the emergence of the “new economy”, have intensified the debate among policy-makers regarding the relationship between financial stability and monetary policy. The question arises as to how monetary policy needs to deal with asset price bubbles, which have often been linked to financial stability concerns.

As is generally accepted, bubbles are situations in which the prices of various types of assets differ from their fundamental market values. Asset price bubbles originate in the existence of imperfect information in financial markets, leading to the mispricing of assets and, in turn, to the distortion of investment and consumption decisions. Often, asset price bubbles occur in an environment of regime shifts, prompted by major technological innovations, which gave rise to the belief among a broad spectrum of economic agents that a new era had started. In this respect, the impact of the “new economy” on stock prices that we have experienced in recent years has not been that exceptional.

However, the importance of asset price bubbles and their potentially distorting impact on economic and financial processes does not mean that central banks should make asset prices an explicit goal for their monetary policies. This idea has been refuted by many, and rightfully so. Asset prices are predominantly driven by real factors such as technological and demographic developments and preferences, which cannot be controlled by monetary policy.

Furthermore, economic agents should not be given any cause to act on the basis of expectations that central banks would insure financial markets against considerable losses. Otherwise, there would be serious moral hazard problems and the public would hold the central banks accountable for specific developments in financial markets such as the performance of the stock market. This might seriously impair the central banks' goal of pursuing price stability, and thus their credibility.

Central banks also face considerable problems in terms of identifying financial bubbles. After all, a bubble can only be confidently identified as such once it has burst.

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5 J.E. Core, W.R. Guay and D.F. Larcker, “*Executive Equity Compensation and Incentives: A Survey*”, Federal Reserve Bank of New York, Economic Policy Review, April 2003, pp.27-45.

6 A. Greenspan in his Testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, 16 July 2002; see also A. Greenspan, “*Stock Options and Related Matters*”, remarks at the 2002 Financial Markets Conference of the Federal Reserve Bank of Atlanta, 3 May 2002.

7 P. Maidment, “*In Nothing We Trust*”, Forbes Magazine, 7 January 2001; F. Fukuyama, “*Trust: The Social Virtues and the Creation of Prosperity*”, Free Press, 1995.

8 F. Fukuyama, “*Social Capital and Civil Society*”, 1 October 1999, paper presented at the IMF Conference on Second Generation Reforms; J. Sobel, “*Can We Trust Social Capital?*”, Journal of Economic Literature, Vol. XL, March 2002, pp.139-154.

However, this does not mean that developments in financial markets, and especially asset price bubbles, are not important for central bank behaviour. On the contrary, we clearly need to monitor movements in asset prices, as they reflect expectations about future economic developments and are important for the monetary policy transmission mechanism. Furthermore, central banks should always be aware of strong movements in asset prices because of their possible repercussions for financial stability. In this sense, asset price developments play a role in our monetary policy decisions to the extent that they reveal relevant information for the state of the economy and the outlook for price stability. In this respect, our monetary policy strategy, which gives money and credit a very prominent indicator role, is a great aid. Economic history has shown that in many instances strong money and credit growth has accompanied financial bubbles, whose subsequent bursting then endangered financial stability.

To summarise, the best contribution a central bank can make to prevent financial bubbles from forming and bursting is to continue pursuing a monetary policy aimed at maintaining price stability, thereby contributing to a stable macro-economic environment.

**Conclusions**

I would now like to conclude. The famous English economist and essayist Walter Bagehot once said that "No real English gentleman, in his secret soul, was ever sorry for the death of a political economist".[9] This statement makes us wonder not only about the state of economic science in the 19th century but about the way of thinking of English gentlemen as well.

Something I do not wonder about is how the increasing importance of new technologies and financial markets clearly presents new challenges for monetary policy. Underestimating these challenges can be costly. However, there are no easy solutions available for monetary policy to deal with asset price bubbles.

With the benefit of hindsight, I can say that the ECB was right to have reacted relatively cautiously when the world discussed the "new economy". I remember well the criticism we faced in late 1999 when we did not want to revise our assumptions for trend potential GDP growth for the euro area. Now these critics have become quiet. Some of them have even gone to the other extreme and, in my view, have now become excessively pessimistic about the prospects for the euro area.

Recent years have shown that the economic cost of adjusting to a phase of over-optimism is high. We have now seen two years of rather sluggish economic growth. Many of the new businesses set up in the late 1990s no longer exist. But costs have also had to be reduced in other, more traditional sectors and structural adjustments needed to be made to correct the imbalances which arose in the "boom" period.

With these structural adjustments or, as Schumpeter put it, "the process of creative destruction", the chances of the phase of low economic growth gradually coming to an end have now increased. Indeed, although there are still some downside risks to this scenario, and ongoing balance sheet adjustments make a steep and swift rise in economic activity unlikely, the ECB expects a gradual recovery to occur in the course of this and next year, as imbalances that have built up are gradually unwinding. The ECB will continue to monitor these developments in view of its primary objective, i.e. to maintain price stability in the euro area.

Thank you.

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[9] In W. Bagehot, "*Estimates of some Englishmen and Scotsmen*", 1858.