

**New Trends in a new Economy?**

Speech given by

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At the Chartered Institute of Bankers Annual Prestige Lecture in Newcastle 15 March 2000

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***New trends in a New Economy?***

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Monetary Policy Committee, Bank of England

ANNUAL PRESTIGE LECTURE

**Chartered Institute of Bankers**

Newcastle – 15 March 2000

The most over-used word of the past decade must surely be ‘new’. Self-proclaimed ‘new and improved’ products compete for our attention in the shops, new fashion lines are launched as regularly as the seasons and new car models will now appear twice a year, at least in the UK, rather than once. Three years ago the country elected a New Labour government and the opposition sometimes refers to itself as neo- conservatives. Economist fall into similarly designated camps: we accuse each other of being either new Keynsians or neoclassicals. And just over two months ago all of us crossed that grand threshold of time into the New Millennium.

So, you can imagine my excitement when I was invited to present this Annual Prestige Lecture in New-castle, surely the trendiest city of the decade with a name like that! In an attempt to live up to the occasion, I selected a title for this Lecture with not one, but two news in it: New Trends in a New Economy.

But honesty compelled me to add a question mark to that title. Newness, like beauty, is in the eye of the beholder. Is Britain on the verge of a New Economy? To what extent is today’s competitive environment new, as opposed to the current twist on a well-worn path? If we are indeed moving onto new ground, how might it look?

What will it mean for British business? Those are the questions I plan to explore tonight.

I should perhaps warn you at the outset that I will not reach firm conclusions. The future is too uncertain for that. But we all have to plan for that uncertain future. And in order to do that we have to have working hypotheses about how the future may develop. The easiest, and most defensible hypothesis, of course, is that it will be

much like the past. But that is also the most dangerous basis for planning during periods of structural change. One might call it the dinosaur default. Dinosaurs are popular creatures, especially since Jurassic Park, but they are also undeniably extinct. Not many of us aspire to that.

And I think we can do better than a dogmatic devotion to the rule of mean reversion in devising planning assumptions for an inherently uncertain future. I propose a simple 3-step approach.

First, I’d like to consider the major long-term trends that are already well-established in this economy, but that still have a distance to run. These are slow, but reasonably sure, movements that are unlikely to be reversed, at least in the next decade or so.

Second, I will highlight 3 new trends, or recent reversals, that I expect will continue and grow in the future.

Finally, I will draw together the interactions and possible implications of these established and new trends that will shape the British economy of the next decade.

1. Established Trends

So, let me begin with the established trends, which are quite far-reaching in themselves. I would like to focus on 3 of them:

1st - The shift from manufacturing towards services, in both output and employment

2nd - The upskilling and gender balancing of the labour force, and 3rd - The shift from domestic towards international competition.

These trends are both widespread and scalable. None is unique to Britain; all are happening here in the North-East as well as the country as a whole.

Let’s look first at the shift to services.

##### Service sector output1

80

% of GDP

US

UK

Germany

75

70

65

60

55

50

45

40

1975 1978 1981 1984 1987 1990 1993 1996 1999

* 1. Includes Government services

Source: OECD

Since at least the mid-70s, the share of output accounted for by services, as opposed to goods, has steadily grown. Services, as defined by our statisticians, is a bit of a ragbag. It includes everything from rubbish collection to brain surgery. It includes nearly all of the public sector – health, education, defense, tax collection, even the Bank of England. (But I can assure you that the latter is NOT responsible for the growth you see on this graph.) I’ll show you in a moment what the major categories of services are, but probably the most useful overall definition I’ve heard is that a service is something you can’t drop on your foot. That excludes manufacturing, construction, mining and agriculture. So the implication of this chart showing the growing share of services in the economy is that the share of output produced in manufacturing firms, by construction companies, in mines and on farms has shrunk.

Although many learned papers and books have been produced bemoaning this trend and blaming it on the misguided policies of one political party or another, the fact is that this broad trend is common across all of the major industrial countries. In the US it has gone even further than in the UK. \*\*\*

And in Germany, where the share of manufacturing has traditionally been higher than here, a catch-up process seems to be underway. \*\*\*

There is not time tonight to debate the costs and benefits of this long-term shift. My own view is that it is part of a natural, but gradual, economic process of production shifting to where comparative advantage lies. In the case of most commodotised, tradable goods, that is in the developing countries where labour is relatively abundant. I do not expect that manufacturing will disappear in this or other advanced economies, nor that the higher value-added aspects such as design and specialised production will move offshore, but I do think manufacturing as a sector will be an even smaller part

of our economy 10 years from now than it is today.

And that is even more true in the job market.

## Job growth 1990-99

25

21%

%

5%

4%

1%

-19%

20

15

10

5

0

-5

-10

-15

-20

Transport and communication

Manufacturing + Fin and

business services

Trade, Tourism and leisure

Government services

Source: ONS

Over the past decade, while overall job creation has been strong and unemployment as a whole has fallen, that overall picture conceals a major job shift within it.

Employment in manufacturing has fallen by 19% while jobs in each of the 4 big categories of services have grown. The biggest growth has been in Financial & Business Services – up 21% over the decade. This also happens to be the sector with the highest average pay and productivity levels. It is a sector where Britain runs a

large balance of trade surplus with the rest of the world and where international prices have been rising rather than falling. In short, it’s a good business to be good at.

The other large categories of services – Trade, Tourism and Leisure, Government Services and Transport & Communications – have shown smaller but positive job growth over the decade.

#### Employment shares

%

52%

Transport and communications 6%

Trade, tourism and leisure 28%

25%

23%

Manufacturing 15%

Financial and business services

18%

60

50

40

30

20

10

Goods

0

Market Services Government Services

Source: ONS (1999)

The upshot is that by now just one half of the jobs in the economy are in private sector services while a quarter are in government services and the remaining quarter are in goods producing sectors.

This shift of output and jobs towards services has had some important effects on the composition of the labour market in this country. That is the second long-term trend I would like to highlight.

##### Female participation rate

73

% of women aged 16 to 59

72

71

70

69

68

67

66

65

1984 1986 1988 1990 1992 1994 1996 1998

Source: Labour Force Survey

This chart shows the rise in the participation of women in the labour force over the past 15 years, from around 66% in 1984 to over 72% now. The strong upward trend of the late 80s was interrupted by the recession of the early 1990s, but over the latter half of the 90s the trend was resumed and I expect it to keep on rising during this economic upswing. There are many factors behind this – social and political ones, as well as economic. But one of the key economic drivers is linked to our first trend: the growth of service sector jobs.

## Jobs by gender

**Transport & Communications**

**% Women**

**26**

**Manufacturing + 30**

**Financial &**

**Business Services 53**

**Trade, Tourism**

**& Leisure 56**

**Government**

**Services 70**

Source:ONS

0 20 40 60 80 100

**Men/Women**

The gender split of jobs in different sectors of the economy is quite striking. It ranges from around 70% men in Transport & Communications and Manufacturing to 70% women in Government Services. But those are not the sectors where most new jobs have been created. The bulk of the job creation of the 1990s has been in the more egalitarian sectors shown in the middle of this chart: Financial & Business Services where the split is 47/53% (in favour of women) and Trade, Tourism & Leisure where it is 44/56% (again slightly in favour of women).

Not only has employment creation been strongest in sectors where many women are employed, but job losses during the 90s were concentrated in a sector heavily dominated by men; namely, manufacturing. That is largely why the recession of the early 1990s hit men especially hard.

##### Unemployment rates by gender

14

12



%

Male

Female

10

8

6

4

2

0

1984 1986 1988 1990 1992 1994 1996 1998

Source: Labour Force Survey

Before the recession began, in 1990, there was hardly any difference between the male and female unemployment rates. Both were around 7%. Three years later male unemployment had risen above 12% while female unemployment had only risen only marginally to 8%. More women kept their jobs through the recession – partly because the jobs themselves were in more resilient or more sheltered sectors -- and that increased their share of the labour market.

A related labour market trend has been the shift towards workers with higher skills and qualifications. This too shows up in differential unemployment rates. The most recent figures show that unemployment among graduates is down to 3% while for school leavers it is 12%. This is despite a notable increase in the supply of graduates following the educational reforms of the 1980s. Taken together, these trends suggest a continuing upskilling and gender balancing of the workforce.

The third major and long-running trend is the shift from domestic towards international competition – which sometimes goes by the portmanteau term ‘globalisation.’ At its simplest level, this is illustrated by the rising share of imports in GDP – from less than 20% in 1975 to over 35% today.

Trade shares

40

% of GDP

Imports

35

30

25

20

15

1975 1978 1981 1984 1987 1990 1993 1996 1999

Source: ONS

But before you conclude this is a sign that British industry is becoming less competitive, note that the share of exports in GDP has also risen.

#### Trade shares

40

% of GDP

Imports

Exports

35

30

25

20

15

1975 1978 1981 1984 1987 1990 1993 1996 1999

Source: ONS

And the same is true in nearly all other advanced economies. There is a growing specialisation of production, even within industries, that results in increased efficiency, lower prices, higher economic growth and greater integration across borders.

# World GDP, trade and FDI

1990=100



FDI

Trade

GDP

380

330

280

230

180

130

80

1990 1992 1994 1996 1998

Source: Datastream, IMF Balance of Payments statistics

At the global level, this results in trade growing faster than world GDP. Since 1990, for example, while world output expanded by 30%, world trade grew by 65%. And global flows of foreign direct investment (cross-border mergers and acquisitions as well as green-field investments) nearly tripled.

Britain has been a leading player in the FDI boom. It is the second largest international investor after the United States and also the second largest recipient of inward investment flows. This is also important to the balance of payments. Last year we generated more income from our FDI than we earned from our goods and services exports combined. We also earned more from our overseas FDI than overseas investors earned from theirs here – a positive balance of FDI related income.

I have mentioned the benefits of globalisation, in terms of growth and efficiency. The evidence is that these benefits are substantial -- for consumers who have a greater range of choice, for producers who can more easily reach world markets, and for workers who can fill the new jobs that are created. But, notwithstanding the overall net benefits, as with any major economic change, there will be winners and losers in each category. In the final section of this speech, I will speculate on who they might be.

1. New Trends

But first I would like to turn from these established trends to three new trends that will help to shape our New Economy, if that is indeed where we are headed:

1st - the decline of inflation,

2nd - the strengthening of sterling, and

3rd - the rise of information & communication technology (ICT). The UK is no longer a high inflation country.

UK Inflation (RPIX)

30

% annual change

25

20

15

10

5

0

1975 1978 1981 1984 1987 1990 1993 1996 1999

Source: ONS

After two decades of high and variable inflation, during the 1990s Britain finally joined the ranks of most other European countries, along with the United States and Canada, Australia and New Zealand, in turning over the task of inflation control to an independent central bank. Monetary policy was removed from the direct control of the politicians, and a clear remit for price stability was enacted in new legislation in 1998.

A Monetary Policy Committee was created – of which I am privileged to be a part – and we were given a specific objective.

“… to deliver price stability (as defined by the Government’s inflation target) and, subject to this objective, to support the Government’s economic policy, including its objectives for growth and employment.”

MPC Objective

*“…to deliver price stability*

*(as defined by the Government’s inflation target) and, subject to this objective,*

*to support the Government’s economic policy, including its objectives for*

*growth and employment”*

Bank of England Act 1998

The Chancellor has set us an inflation target of 2.5% on the RPIX measure. It is a symmetric target: we must act as firmly to prevent inflation falling below 2.5% as to keep it from rising above. While economics is too imprecise a science, and the future is too uncertain a place to expect us to hit the target exactly, month by month, I am happy to report that we have been within ½% of our target for nearly all of the past three years. Inflation is currently running at 2.1%.

Keeping inflation low and stable is the contribution that monetary policy can make to promoting sustainable growth and employment.

### The Economic Cycle

**GDP**

**Inflation pressures**

**GDP**

**Growth trend**

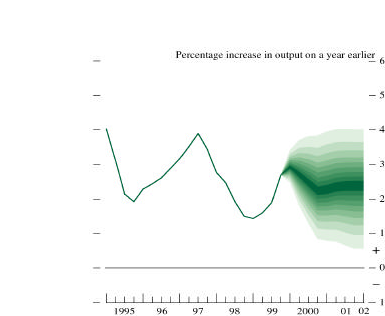
**Unemployment worries**

**Time**

Every economy has some sustainable, or trend, rate of growth determined by the size and education level of its labour force, its rate of investment and capital accumulation, the pace of technological change, the burden or efficiency of its tax and regulatory structures and other fundamental factors. Monetary policy can do little to influence these. Over the course of the economic cycle events, or shocks, will cause the actual output in the economy to grow faster or slower than trend. During periods of more rapid growth, inflationary pressures develop as labour and other resources become fully utilised and able to bid up their wages and prices. The opposite happens during periods of lower than trend growth, when unemployment becomes the key worry.

The job of monetary policy is to slow or stimulate demand, by raising or lowering interest rates, whenever demand growth appears likely to become significantly faster or slower than trend growth. By smoothing the cycle, inflation will remain close to target. That is why the objectives of price stability, on the one hand, and growth and employment, on the other, are mutually supportive.

How does the current economic cycle look?

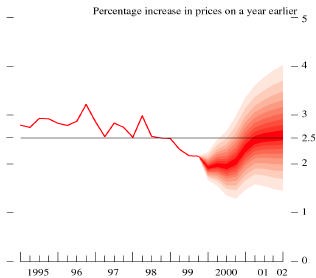


GDP Projection

This chart comes from our latest *Inflation Report*, published last month. It is based on the simplifying assumption that interest rates stay at their current level of 6% during the next 2 years. On that assumption, output growth is expected to slow gradually over the course of this year, due in part to the interest rate rises of the last 6 months.

By next year GDP will be growing close to trend.

# Inflation Projection



The corresponding projection for inflation is shown in this chart. It is currently 2.1%, somewhat below our target, which is the horizontal line at 2.5%. With inflation below our symmetric target, some of you may be wondering why we have been raising interest rates. The answer is that monetary policy operates with a lag. It takes 6-12 months before it has its maximum effect on output and another 6-12 months for its maximum effect on inflation. So we need to be looking at where inflation is likely to be 1-2 years hence in deciding whether a change in rates now is warranted.

The forecasting models we use to help us look into the future are far from perfect, and in any case there are bound to be unforeseen events between now and then. But we have a clear target for low and stable inflation and we mean to achieve it. Britain will remain a low inflation country. The old pattern of high and variable inflation has been broken.

The second ‘new trend’ is strong sterling.

#### Sterling ERI

140



1990=100

130

120

110

100

90

80

1975 1978 1981 1984 1987 1990 1993 1996 1999

Source: Bank of England

Far be it from me to predict the future course of exchange rates. But breaking the pattern of high inflation in Britain removes the root cause of sterling’s decades of decline. Now that our inflation rate is down to the low level of our trading partners, one should expect a rough stability of exchange rate relationships over the long term.

This chart shows the 15 year period of falling sterling against a weighted average of exchange rates of other countries. From the oil-related peak in 1981, until its trough in 1995, sterling lost nearly half its relative value. That probably overstated its fall because exchange rates tend to overshoot. So part of the rise since then should be seen as a correction. It is impossible to know what the equilibrium value of sterling is, or how it might change over time. My own view is that at its current level it has probably overshot, due to the weakness of the euro vis-à-vis the US dollar.

But the important point about the sterling movements of the past 3 years is that they represent a reversal of the previous 15-year trend of a falling pound. Locking in low inflation is also likely to lock in strong sterling for the foreseeable future.

The third new development I would like to highlight is the rapid rise of information and communication technologies (ICT). This digital revolution actually began some 30 years ago with the development and subsequent miniaturisation of chips, which made possible the personal computer. Networked PCs replaced mainframe machines in large companies, and made computerisation practical for many small businesses for the first time. Software for word processing and easy to use spreadsheets vastly increased the range of computer users in business. But home computer use was still a rarity. Then came games, educational use and, now, the Internet. Investors quickly grasped the potential of wholly new business models it could spawn – as well as the destruction it could wreck on established ways of doing business. The market capitalisation of new Internet-based companies soared while funds were drained from established firms.

This process is unlikely to go on forever. There must be a certain degree of overshooting in the stock market valuations of many ICT companies. Yet the pace of technical change in ICT is very impressive and possibly unprecedented. Predicting the future value of companies in an industry where technology is advancing so rapidly is impossible. The price/performance ratio in ICT has been doubling every 18 months for the past 30 years. An analogy that is sometimes cited is with the auto industry. If it had achieved a similar rate of technological change, then the price of an average family car today would have fallen to $5 and you could drive 200,000 miles on a gallon of petrol!

What moves much more slowly, of course, is the pace of adoption of new technology. Even in the United States, where investment in ICT has been strong since the 1980s, productivity growth has only been rising since 1995. And Internet purchases account for less than 3% of household consumption. But what we are clearly seeing is a technology that has reached the take-off stage of market penetration.

Market penetration stages

**%**

Strong Growth

Mature Market

**Take-off**

Trial Period

**market**

**0**

**Time**

This is when the number of users begins growing at a very rapid rate and the technology spreads from the early adopters and most obvious market niches into mainstream usage. Critical mass is gained during this stage and network benefits begin to multiply. For example, a large company with many suppliers decides to require that the ICT for ordering and purchasing be standardised and done directly on- line. This forces its suppliers to adopt the new technology or lose their existing business with that company. Once the suppliers have made the investment in the new technology, they can then use it to improve their delivery times to other customers.

The network of users grows and the benefits spread. With this critical mass, the

industry as a whole reaps exceptional productivity gains.

Adoption of the Internet for commercial uses such as purchasing and procurement is well underway.

# Years to achieve 50 million users

40

35

Number of years

30

25

20

15

10

5

0

Broadcast radio

Broadcast TV

Personal computers

Commercial internet

Source: US Commerce Dept

This chart shows that it took 36 years to achieve 50 million users for radio, 13 years for TV and 16 for PCs, but it has taken less than 5 years for the Internet.

If we are now in the take-off stage for ICT – as I believe we are -- what are the effects of that likely to be?

### Effects of ICT

旦 Greater competition

旦 Lower prices 旦 Lower margins 旦 Cost savings

1st - *Greater competition*. Comparing prices on-screen is much easier than on-foot or on the telephone. The Internet also provides a low-cost way for new producers to reach potential customers. It lowers the barriers to market entry, and that means greater competition.

2nd - It also means *lower prices*. With more competition to chose from, purchasers who are price sensitive can seek out the best deals. And even if the purchase itself is made on the high street or from the usual supplier, price comparisons from the Internet can be used to negotiate a better deal.

3rd - The downward pressure on prices will *compress margins* in many sectors. We are already seeing evidence of this in the UK in household goods, in electrical goods, in clothing and footwear and, most recently, in autos.

4th - But, lower margins are not the end of the story. Producers will react to the pressures on margins by seeking to *reduce costs*. This is the main value of business- to-business e-commerce. It not only produces one-off savings in procurement costs, but it also makes possible continuing cost savings through reduction of inventories and distribution costs.

An example, perhaps familiar to many in this audience, comes from retail banking.

Cost savings: Retail banking

|  |  |
| --- | --- |
|  | Cost per transaction |
| Branch | £1.07 |
| Phone | £0.40 |
| ATM | £0.20 |
| PC | £0.12 |
| Internet | £0.07 |

Source: Datamonitor

According to figures from Datamonitor, the average cost per transaction conducted by a customer through a traditional bank branch on the high street is just over £1.

Shifting that customer to the telephone cuts the cost by more than half, to 40 pence. Using an ATM cuts that cost in half again. And if the transaction can be done via the Internet, its cost goes down to just 7 pence – clearly a huge savings compared to the traditional distribution channel of the high street branch. The catch, of course, is that in order to reap the full cost savings, the high street branch network for that bank would need to be eliminated. The complex implications of that for the bank’s traditional relationship with its customers mean that such a decision would not be taken lightly. That is why the most advanced offerings for Internet banking are likely to come from new entrants, not established players, in the banking industry.

Effects of ICT

###### 旦 Greater competition

旦 Lower prices 旦 Lower margins 旦 Cost savings

旦 Productivity gains

5th - And, finally, over the medium term, the above effects are likely to result in *productivity gains* for the economy as a whole. This is where the real pay-off lies. The widespread application of ICT by firms and their employees across many sectors of the economy, creating new ways of working and of shopping, will speed up transactions of all kinds and eliminate pockets of inefficiency throughout the economic system. The sustainable growth rate of the economy will then rise, at least for a time.

That is what the vision of the New Economy is all about.

1. A New Economy?

It’s time to recap, and draw the implications of all these developments. We have identified 3 fundamental and continuing trends:

* the shift of output and employment toward services,
* the upskilling and gender balancing of the workforce, and
* the growing importance of international markets and international competition in our home market.

We then looked at the recent reversals and new trends. I have highlighted:

* first, the decline of inflation, partly in line with international developments, but importantly reinforced and anchored by the changes to the monetary policy process in this country over the last 3 years,
* second, and related to the fall of inflation, has been the strengthening of sterling. With British inflation now at, or below, inflation in our main trading partners, we should no longer expect the long-term decline in the external value of sterling to continue. We will have to get used to living in a strong currency country.
* And finally, on the technological front, we seem to be in the take-off stage of a multi-decade digital revolution that will gradually transform most of our industries, our jobs and our lifestyles in ways perhaps as profound as the internal combustion engine or the advent of electricity.

How will these trends interact, and is that interaction likely to lead to the New Economy nirvana that some, especially American, commentators expect?

The only honest answer is that ‘time will tell’. But we all have to take decisions in the meantime – on monetary policy, in my case; on business investment, firm strategy, human resources policy and financial planning, in yours.

So, in the spirit of planning under uncertainty, rather than predicting, I’d like to conclude with 7 propositions about the evolution towards a New Economy in Britain over the next 10 years.

A decade hence, in 2010, we will be in a New Economy. The phrase is not just hype. The continuing trends and recent reversals that I have been discussing are powerful forces with profound, if long-term, effects. The UK economy of 2010 will look something like the economy of today, but not as much as today’s economy looks like that of 1990. The one thing we can be reasonably sure of is - and this is my first proposition – is that we are entering:

The New UK Economy: 2000-2010

* 1. **A decade of exceptionally rapid change**
  2. **There will be big winners and sudden, large losers**
  3. **Consumers will gain, traditional distributors will lose**
  4. **Workers with flexibility, qualifications will gain; jobs for life will disappear**
  5. **Keys to business success: efficiency, speed, quality, differentiation**

1. A decade of exceptionally rapid change

The combined forces of globalisation and ICT mean that competitive pressures will force rapid change on many companies in order to survive in a world of new competitors with new business models.

1. There will be big winners and sudden, large losers

The stock market provides a ready harbinger of this. So-called new economy firms, particularly internet-based start-ups, can attract investment at a very low cost of capital, while old economy firms are having to pay high dividends on their much larger income streams to keep their investors. The main additions to the latest revision of the FTSE 100 index were companies in telecoms, internet, IT, media and biotech sectors. The losers were in food, drink,

energy, building materials and tobacco.

The rise in mergers and acquisitions is another channel and indicator of the rapid economic restructuring that is underway inside industrial sectors. Over the past few months there have been major domestic bank consolidations in the UK and Germany. In other sectors, such as telecoms, cross-border acquisitions are in full swing. The rise in global FDI flows, referred to earlier, is largely a reflection of these. Such ‘creative destruction’ both within and across industries is what enables the productivity gains that fuel the new economy to materialise. But who will the winners and losers be?

1. Consumers will gain, traditional distributors will lose

My guess is that consumers will be the big winners. The combination of lower inflation, strong sterling, the new price transparency made possible with internet shopping and greater international competition all work in favour of the ultimate purchaser. She gains through greater choice and lower prices.

Those producers who grasp the opportunities made possible by ICT and strong sterling to lower their cost of supply and expand their market will also benefit. But many traditional companies, especially those whose main value-added is in distribution, could be badly squeezed. Travel agents are a case in point.

The percentage of airline tickets bought directly on-line from the airlines is growing rapidly, while new Internet companies offering discount ticket auctions and reverse auctions are further eroding the share of the traditional agent.

1. Workers with flexibility, qualifications will gain; jobs for life will disappear

The growth of jobs in services, many of which are produced in small companies, coupled with rapid industrial change, means that people will increasingly expect to change companies as their career progresses, rather than changing jobs within the same company. Dual income households also increase worker mobility. When one partner moves for career reasons, the other often needs to job-hunt. In these circumstances formal qualifications will be increasingly valued because they are intrinsically portable.

1. Keys to business success: efficiency, speed, quality, differentiation

In order to succeed in this rapidly changing and competitive world, businesses will need to make the investments or take the decisions to achieve the step- changes in efficiency made possible by the new technologies. They will need to offer customers faster, high quality service to retain their loyalty in the face of new competitors. There is likely to be a continued decline in the manufacturing of standardised products or components. Producers will have to differentiate their product, or the service associated with it, in order to survive.

The need for efficiency, speed and quality also applies to public sector organisations – at all levels. Local businesses cannot thrive unless local government authorities move with speed and efficiency in carrying out their regulatory responsibilities, and provide high quality local education, healthcare and recreational facilities to attract new recruits and inward investment.

But here I am straying a long way from my new economy theme. Let me close with the macroeconomic effects.

The New UK Economy: Macro effects

1. **Higher economic growth and rising household wealth**
2. **Inflation will remain low, while interest rates will vary**
   * **around a *lower* average level**
   * **but possibly *higher* in short-run if ICT investment spurt or wealth-induced consumption boost is large**
3. **Higher economic growth and rising household wealth** is likely to result from the combination of productivity gains driven by ICT and the continuing trend towards 2-income households. A recent study by the investment bank, Goldman Sachs,1 has attempted to calibrate the gain in growth in the UK and several other countries from the application of ICT to those sectors of the economy currently thought most likely to benefit. Conservatively applying the gains just to those sectors, and assuming that it takes a further ten years for the cost savings currently possible to permeate those industries, they arrive at an estimate of ¼% per year increase in sustainable economic growth for the UK. While that may not sound like a lot, it would compound over a decade into a substantial increase in household wealth.

And, of course, that estimate is based on deliberately conservative assumptions. A new study on the US economy2 has estimated that ICT production and use added nearly ¾% per year to GDP growth – through

1 Martin Brookes & Zaki Wahhaj, *The Shocking Economic Effect of B2B*, Global Economics Paper No: 37, Goldman Sachs, 3 February 2000

2 Dan Sichel and Stephen Oliner, *The Resurgence of Growth in the Late 1990s: Is Information*

*Technology the Story?*, Federal Reserve Board, February 2000

increases in both labour productivity and ‘pure’ or multi-factor productivity -- in the second half of the 1990s.

1. **Inflation will remain low, while interest rates will vary** over the economic cycle.

But on average, during the period of higher sustainable economic growth, interest rates will be lower than they otherwise would need to be in order to keep inflation on target. Those lower interest rates are partly what sustains the rise in investment that enables the productivity gains to be made. The virtuous circle is completed when the greater investment expands potential output at a sufficiently rapid pace that inflationary pressures are held in check.

The calibration used in the Goldman Sachs study produced a 4% fall in the price level associated with the quarter percent rise in GDP growth quoted above. If this too were spread over 10 years, it would imply something less than 0.4% off inflation in a single year if monetary policy were held fixed. Instead of hitting our target of 2.5% inflation, for example, inflation would turn out to be 2.1%. But of course, monetary policy is not fixed. We would need to adjust rates downwards to return inflation to target. \*\*\*

Unfortunately, the world is not quite that simple. The study also found that in the short-run, before the new investment had paid off in higher potential output, it was possible that interest rates might need to be higher. An outbreak of New Economy euphoria could cause such a stock market overshoot that an investment boom or, more dangerously, a consumption binge could unbalance the economy in an inflationary direction. There is clearly more evidence of such a risk in the US than in this country.

However that study does illustrate that few things are straightforward in the New Economy world. Not even monetary policy. My successors on the MPC of 2010 (or in the European Central Bank, if Britain by then has joined the single currency) will have to monitor the inflationary and deflationary pressures in their New Economy and

decide, month by month, what to do about interest rates. And they will probably be as unclear about their future direction as I have been tonight.

Thank you – and best of luck in the New Economy.