BANK OF ENGLAND

Speech

Inflation and the Service Sector

Speech given by

Timothy Besley, External Member of the Bank of England Monetary Policy Committee

To the Cardiff Breakfast Club

18 January 2007

I am extremely grateful to Nicola Dufty, Lavan Mahadeva and Alex Muscatelli for invaluable help in preparing this speech. I am also grateful to Mark Allan, Kate Barker, Charlie Bean, David Blanchflower, Martin Brooke, Steve Drew, Rob Elder, Colin Ellis, John Gieve, Charlotta Groth, Andrew Holder, Mervyn King, Robin Lynch, Chris Peacock, Andrew Sentance and Sally Srinivasan for their thoughtful comments.

Introduction

Ladies and Gentlemen, it is a great pleasure to be here in Cardiff where, it seems, you have had your fair share of MPC speeches of late. But I am certain that this is a reflection of Welsh hospitality. It is also a measure of the importance that MPC members attach to making their presence felt outside London and I am here primarily to gain a better understanding of what is happening to the Welsh economy.

The MPC sets the Bank Rate for the whole of the United Kingdom. But we are only too aware that the economic picture varies by sector and region. Our job on the MPC is to aggregate a wide range of information when we form our judgement about the best course of action for the UK as a whole to achieve the inflation target of 2% CPI inflation set for us by the Chancellor of the Exchequer. The role of monetary policy is to achieve price stability by balancing aggregate demand and potential supply in the UK economy.

My speech today is about one specific aspect of the supply side of the UK economy and its implications for growth and inflation. It is a long-term pattern (of more than fifty years standing) and one that you I am sure are all too aware of here in Wales – the structural shift of the UK economy from manufacturing towards services. In Wales, you have seen the share of market services in gross valued added – that is services taking out government services – rise from 39% in 1996 to 48% in 2003.[2]

Below, I will discuss some implications of this for decisions about interest rates. However, along the way, I will take the opportunity to comment on

[2] The data from 2003 is provisional ONS data published in Regional Trends 39. Market services nominal GVA are calculated as the sum of GVA at current prices for wholesale and retail trades (including motor trades); hotels and restaurants; transport, storage and communication; financial intermediation; real estate, renting and business activities; and other services. The excluded sectors, for example education and health, have some market activity in them.

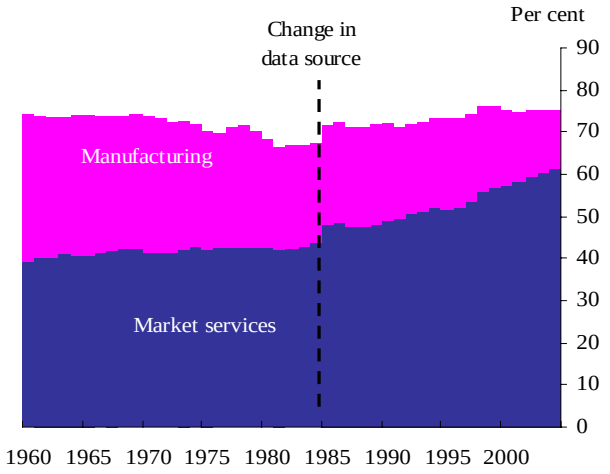
some broader issues that arise from this structural shift that has taken place over a lengthy period.

While I will take a longer-term perspective, the issue of the short-term relative strength of manufacturing and services is a subject of on-going debate. The recovery in the economies of the euro-zone since the beginning of 2006 helped to provide an export-led boost to UK manufacturing after a prolonged period of contraction especially evident in 2005 when, according to the official data, manufacturing failed to grow in all four quarters. However, data for the very end of last year, for example from the CIPS/RBS manufacturing and services surveys, suggested rather less evidence of a rebalancing of the economy between services and manufacturing with the service sector once again stealing the lime light.

Structural Change in the UK Economy

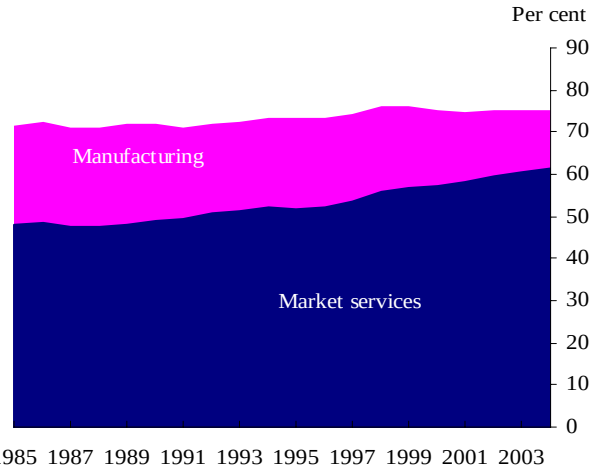
Chart 1.1 illustrates the familiar story. It shows the manufacturing and services share of UK gross value added at factor cost between 1960 and 2004. Chart 1.2 shows the same thing between 1985 and 2004 where the data is measured on a fully consistent basis. Both show an increase in market services, i.e. services excluding government. This increase is from a little less than 50% of gross value added in 1985 to more than 60% in 2004. Most of this is a relocation of economic activity from manufacturing to services. It is broadly reflected in the share of employment in the UK economy which is now about 11% in manufacturing.

Chart 1.1: Market services nominal share of total GVA at factor cost (1960-2004)



Source: Pre-1985 as in Malley, J, V Muscatelli, and U Woitek (2003), post-1985 ONS

Chart 1.2: Market services nominal share of total GVA at factor cost (1985-2004)



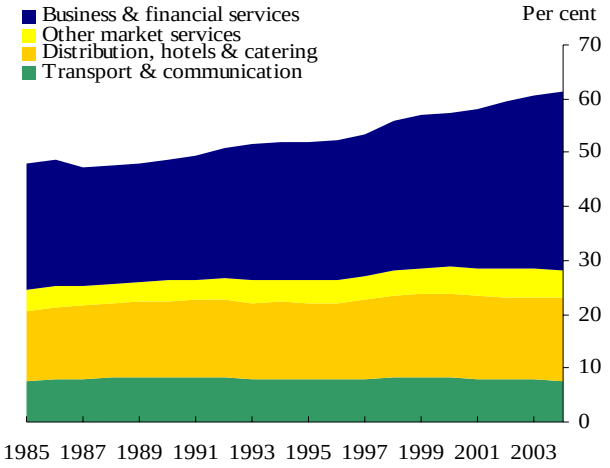
Source: ONS

But market services are a heterogeneous group of economic activities including goods produced and consumed as services (such as restaurants), those that facilitate the production and consumption of other goods (such as retailing) and those that are inputs into other kinds of production (like financial services). Chart 1.3 decomposes services output into four main sectors: distribution, hotels and catering; business and financial services; transport and communication and other market services. It is clear from this that the increase in business and financial services accounts for the lion's share of the growth. Chart 1.4 shows this more clearly still when we look at contributions to the growth of real value added across the UK economy. It shows how business and financial services have been important to growth in output in the United Kingdom from the 1990s onwards.[3] The growth of out-sourcing may be an important explanation of this trend, explaining why the combined share of gross value added from business services and

[3] This real income measure is nominal GDP value-added deflated by the consumption deflator. The total of contributions across sectors does not include the financial services adjustment (FSA). This would differ from aggregate real GDP even without the financial services adjustment whenever the GDP deflator diverges from the consumption deflator. But the two are different concepts. A real GDP value-added measure aims to capture the contribution to output growth of the value-added inputs in each sector only. The real income measure captures the contribution of each sector to the growth in UK real income generated. A broader measure of real income would include net income earned abroad. See Cassing (1996), Diewert (2005) and Duguay, P (2006) for an explanation of the real income measure. See Tily and Jenkinson (2006) for an explanation of the FSA.

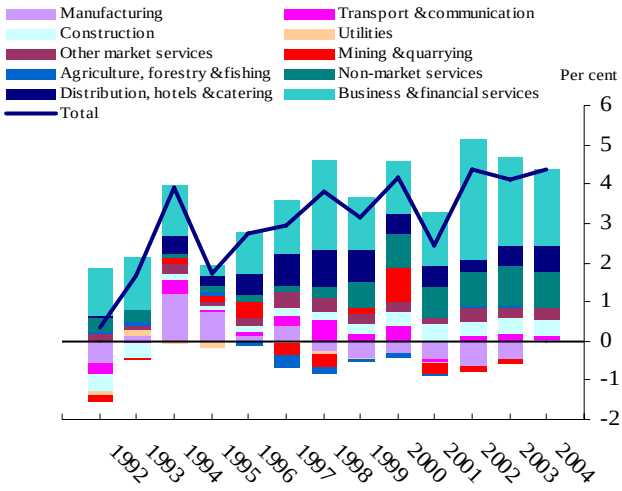
manufacturing together has been roughly constant in the United Kingdom since 1980.

Chart 1.3: Share of nominal GVA at factor cost (1985-2004)



Source: ONS

Chart 1.4: Real GVA income, contributions to annual growth



Source: ONS

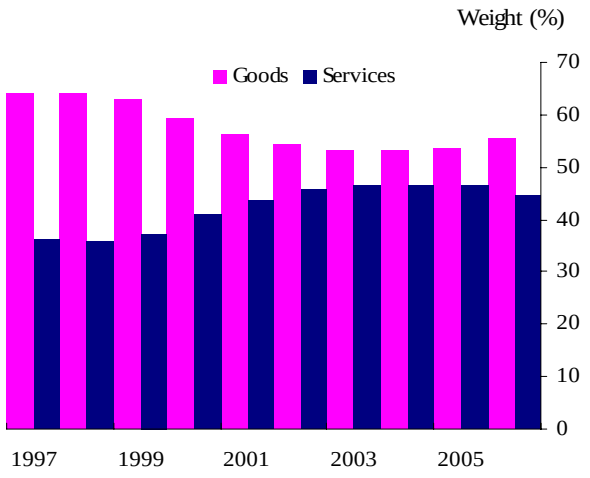
Note: See footnote 3.

These facts are important in thinking through how structural changes affect growth and inflation in the UK economy. Business and financial services are an important intermediate input into other economic activities in the United Kingdom and are not just consumed directly. The share of the sector's gross output which is an intermediate is about 60%. That said, this sector accounts for 20% of household final demand, although a single item – imputed and actual housing rents – accounts for 70% of this. Overall, services have become more important in consumption in the United Kingdom – though they are still a less important component in CPI than are goods (Chart 1.5)

It is useful to set this in an international context. Chart 1.6 shows that the trend in the United Kingdom, while similar to other advanced economies, is more pronounced. The increase in the share of market services in the United Kingdom has been greater than that in France, Germany, Italy and the United States and its share of market services is now larger than in all of these countries. Thus, although other advanced economies have also experienced

the trend towards services, this has been greater in the United Kingdom. Moreover, this is in the context of ten years or more of economic stability and growth for the UK economy.

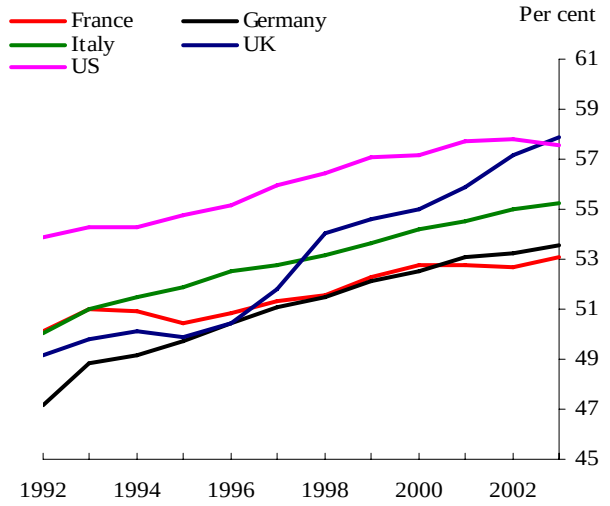
Chart 1.5: Weights of goods and services in the CPI basket



Source: ONS

Note: CPI excludes the imputed user cost of housing

Chart 1.6: Market services share of total nominal GVA (1992-2003)



Source: OECD

Note: The OECD measure of UK market services GVA, though internationally comparable, may be based on earlier vintages of National Accounts data than that used in Chart 1.2.

In looking at data of this kind, it is important to acknowledge a degree of arbitrariness in whether businesses are classified as producing goods or services. A manufacturing firm that out-sources its production abroad while retaining marketing, design and distribution in the United Kingdom could easily be regarded as a service sector firm even though its final output is a good.

Services and Economic Prosperity

The trend documented above is often referred to as "deindustrialisation". When I was first a student of economics in the early 1980s, there was much discussion of this as an economic problem. It was often said that the UK economy had "too few producers". Moreover, it was taken to be a symptom of long-run economic decline relative to other advanced economies. There were even those who thought that an explicit policy of protecting

manufacturing jobs was needed to safeguard the standing of the UK economy in the face of global competition.

Our understanding of the process of structural change and the sources of growth has since moved on. This somewhat alarmist view of deindustrialisation and its implications was based on three myths about the service sector:

Myth 1: The *level* of productivity in the service sector is inevitably low compared to manufacturing.

Myth 2: The service sector does not benefit from productivity *improvements*.

Myth 3: Moving towards the production of services must worsen the UK's net trade position.

I will discuss each of these views in detail below and I will explain why I regard each of them to be a myth. But it will help if I set the scene. For this I require a brief digression on the general issue of what drives economic prosperity in a modern global economy.

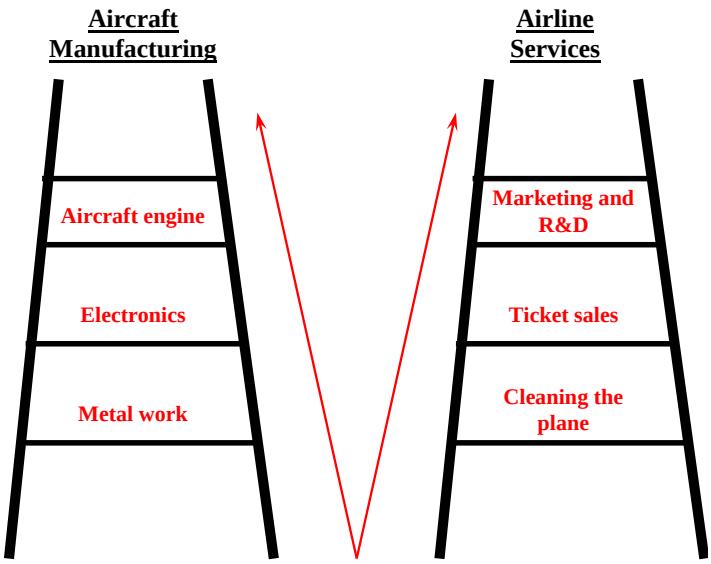
Most production uses a mixture of goods and services as inputs. It is useful to view the production process through the metaphor of a ladder.[4] Towards the bottom of the ladder are relatively simple production processes, while towards the top are processes that are more complex and specialised. Different outputs – be they goods or services – use different production ladders.

The main idea is illustrated in Figure 1 which gives an example of a manufacturing final good (aircraft manufacturing) and a final service (an airline). Within each there is a ladder with low and high value added services

[4] See, for example, Grossman and Helpman (1991).

associated with them. The Figure gives some concrete examples of goods and services at different rungs on the ladder.

Figure 1:



Increasing the number of rungs on the ladder is a metaphor for technological sophistication. Progress is also made by finding ways of producing or sourcing goods or services at any point on the ladder that are cheaper and better. One of the key economic decisions for any firm is which goods and services to produce in-house and which to purchase in from other suppliers.

The sophistication in production that is possible in a given economy depends upon the level of skills in the workforce, the availability of infrastructure, access to capital and the "institutions" that enable stable business planning and an effective legal and regulatory environment. These are the key productive capacities that support economic success and progress in an economy-wide sense. Looking across the world, the richest economies tend to produce more goods and services towards the top of the world ladder while those further down aspire to move up. In well-managed economies, productive capacities expand over time and with them a move in production to "higher rung" activities.

This view of what generates economic progress chimes well with recent discussions about the importance of intangible capital in the investment performance of the UK economy. An influential study by the US Federal Reserve Board by Corrado, Hulten and Sichel (2004), estimated intangible investment to be around 13% of GDP in the late 1990s. Recent evidence for the United Kingdom, by Marrano and Haskel (2006) suggests that around 11% of nominal GDP in 2004 is in the form of intangible investment. They attribute half of this to efforts to build the "economic competences" of firms in which they include firm-specific human and organisational capital. Other researchers, such as Bloom and van Reenen (2006) have similarly emphasised the importance of intangibles such as human resource management in firm level productivity. Such intangibles are arguably areas where business services may play a key role in improving productivity. While it is too early to tell for sure, accounting for intangible investment may help to explain the surprising weakness of UK business investment in the early part of this decade.

Business services may also be important in changing the qualitative nature of relatively standardised inputs into a product that is designed for the specific needs of particular final and intermediate consumers. This typically involves being located physically close to these consumers.[5] But it also requires more coordination, better institutions, more sophisticated contracts and a higher level of skills from the workforce.

In recent years, we have seen all kinds of businesses outsourcing processes to achieve lower costs and to take advantage of gains from specialisation. Some of this is outsourcing of low value added activities, in part to low-wage economies. But the growth of business services in the United Kingdom reflects in part outsourcing of high value added activities which are high up the production ladder allowing firms to take advantage of the specialised skills available in business services. The latter, in particular, can be a source

[5] See Hill (1999).

of productivity improvements. Business services are also often used directly in the outsourcing process.

The relocation of some production across the globe benefits advanced economies in two main ways. First, consumers and firms can buy these goods more cheaply and second, labour can be freed up from low value added tasks and redeployed further up the production ladder. The latter does require, however, that the workforce has the skills to relocate in higher rung activities.

The forces unleashed by globalisation in Asia follow this pattern. China has moved from a predominantly agricultural economy to labour intensive manufactures. A more specific example from India is the production of car seats which has been an enormously successful growth industry and India is now one of the leading producers of car seats, selling them to many of the world's leading car manufacturers. But this is sustainable as a particular point in the value chain, reflecting the endowments and opportunities of Indian workers.

Much of the growth and structural change in the UK economy in recent years can be captured with the quality ladder metaphor. Growth has been achieved by moving into higher value added activities while reallocating resources from those further down the value chain. The latter has not always been from choice, with competitive forces playing a significant role in determining what is viable in the face of world competition. You are only too aware in Wales of the personal hardship that this can create. But the overall consequence has been a transformation in the UK manufacturing sector and the growth in services that I have documented above.

The achievements of the manufacturing sector over the recent period are considerable even though it represents a smaller share of the UK economy. It is clear that there are many success stories, and I have heard first hand about some of them during my visit here. In such cases, manufacturers have found

their niche at a point in the value chain where they can exploit the considerable human resources and opportunities available in the UK.

But recognising the contribution of manufacturing does not validate the myths of deindustrialisation referred to above. I will briefly revisit each of them and show how applying the way of thinking that I am suggesting reveals each claim that I labelled as a myth above to be dubious.

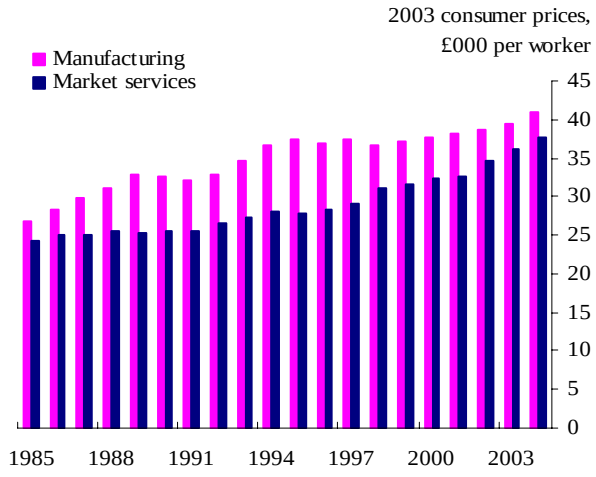
To understand myth 1, that services are necessarily low productivity activities, it is necessary to look beneath the aggregate picture. Chart 2.1 shows that on average, the real value-added income per service sector worker is lower than in manufacturing. Such figures, taken at face value, would perpetuate the myth that a movement towards services production must impoverish the UK economy.

But looking at the market services' sectors separately, a somewhat different picture emerges. Not all service sector production is low value-added and deploys workers less productively than in manufacturing. In terms of the quality ladder metaphor, it is clear that many service activities are indeed "high rung" economic activities. The UK's strong global position in business and financial services is a case in point. Chart 2.2 shows that real income per head in this sector exceeds income per head in manufacturing.

However, there is a central challenge. Globalisation has made it more difficult for less skilled workers whose jobs are more directly threatened by global competition. Some service sector jobs are less immune to global competition. Chart 2.2 shows that gross real value-added income per worker in distribution, hotels and catering is lower than in manufacturing. This is largely a reflection of these being relatively low-skilled sectors. Only by improving the skill base – particularly through investments in education and training – can this situation be changed.

The second myth is that services cannot benefit from productivity growth. One way to view this is given in Charts 2.1 and 2.2, which look at the changes in the level of real value added income per worker between 1985 and 2004. Both charts show that productivity looked at this way has been rising in services. The use of ICT is one important dimension of this. This is suggestive that innovation in services is important and can be a source of economic growth. This has been particularly important in business services which, as we argued above, are a key intermediate input into other economic activities. (Oulton, 2001).

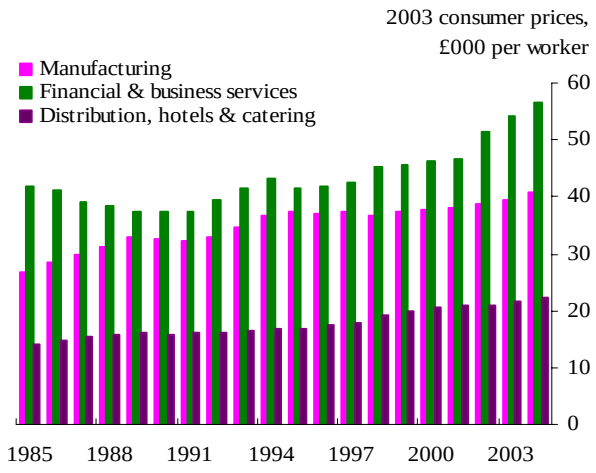
Chart 2.1: Real value-added income per employee



Source: ONS

Note: Real value-added income per employee is calculated as nominal GVA divided by the number of workforce jobs and then deflated using the consumption deflator

Chart 2.2: Real value-added income per employee



Source: ONS

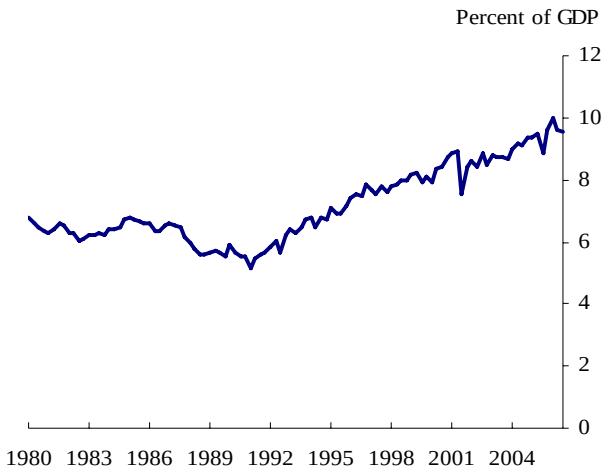
Note: See note to Chart 2.1

Finally, consider myth 3 that the growth in services is detrimental to the UK trading position. It remains true that, relative to output, exports are higher in manufacturing than in services. Moreover, many consumer services are inherently non-tradable. For example, few people travel abroad to have their hair cut or their clothes dry cleaned. However, business and financial services make an important contribution to net trade. For example, the sector accounted for a 23% share of UK exports in 2004. More generally, the services' trade balance was £23 billion in 2005, up from £9 billion in 1995. These earnings can be exchanged for goods produced from abroad.

Moreover, these goods can frequently be purchased more cheaply from countries that have a comparative advantage in producing them.

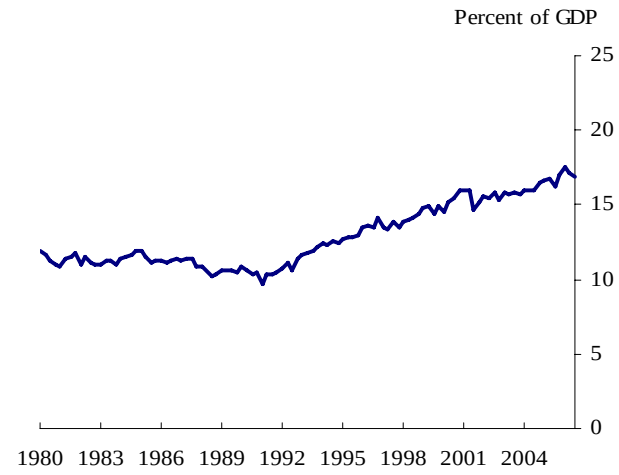
It is clear that services have become increasingly more globalised in recent years. This is particularly evident since 1992 – the share of services exports in GDP nearly doubled between 1992 and 2005 as shown in Chart 2.3. Services exports and services imports together have increased from around 10% of GDP to over 15% in the same period (Chart 2.4).

Chart 2.3: Globalisation in services – share of services exports in nominal GDP – UK



Source: ONS

Chart 2.4: Globalisation in services – services imports and services exports as a share of nominal GDP – UK



Source: ONS

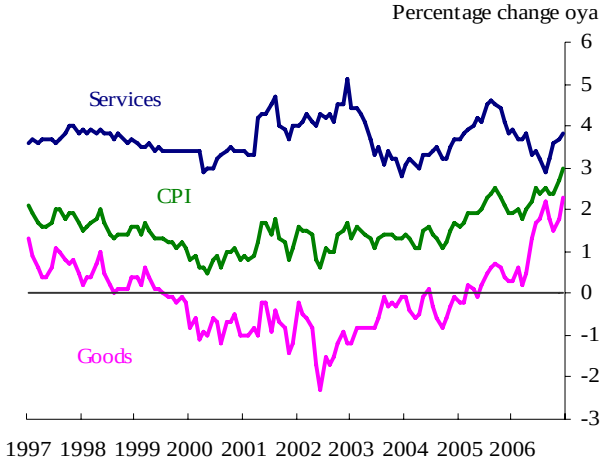
So let me summarise the story so far. The structural shift from manufacturing towards services is consistent with increasing prosperity and growth for the UK economy. What matters is not whether the output is in the form of services or manufacturing – it is the move towards the production of higher value added activities that enables the UK economy to progress. One of the key challenges is to maintain the skill base and to develop the right kind of business environment to permit continual movements of production up the value chain. The stability created by sound monetary policy plays a key role in delivering a favourable environment for business.

Services and Inflation

The discussion so far has focused on the real economy and the implications of structural change in the UK economy for economic prosperity. But the primary concern of the MPC is with inflation and setting interest rate policy to achieve the inflation target. To do so effectively, we need to understand the forces that lie behind patterns of change in the UK economy and to use this to form a judgement of where inflation is going over the medium run. The kind of broad trends that I have described above are a part of the background against which interest rate policy is set.

Let me begin with the following "eye-catching" fact about UK inflation which appears relevant to the discussion so far. Chart 3.1 shows that, since 1997, there has been a persistent tendency for the rate of inflation in consumer services to run ahead of the rate of inflation in consumer goods.

Chart 3.1: CPI goods versus services in UK



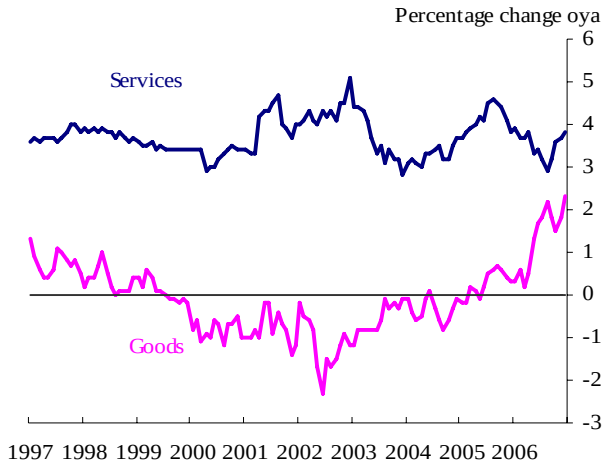
Source: ONS

Note: Last data point December 2006. Next release 13th February 2007.

It is worth noting that the UK experience depicted seems to be quite different from other advanced economies. To see this, I refer you to charts 3.2 to 3.7 which compare the rate of consumer service price inflation and consumer goods price inflation for the United Kingdom with that in France, Germany, Italy, Japan and the United States. None of these other countries shows a

pattern that is anything like as clear-cut as the pattern that we see in the United Kingdom. [6]

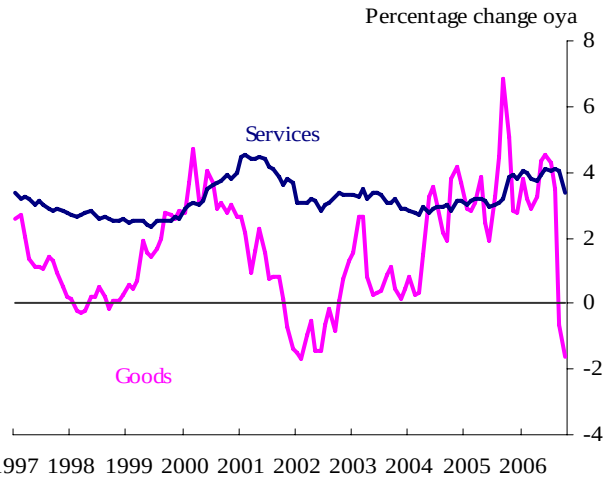
Chart 3.2: CPI goods versus services - UK



Source: ONS

Note: Last data point December 2006. Next release 13th February 2007.

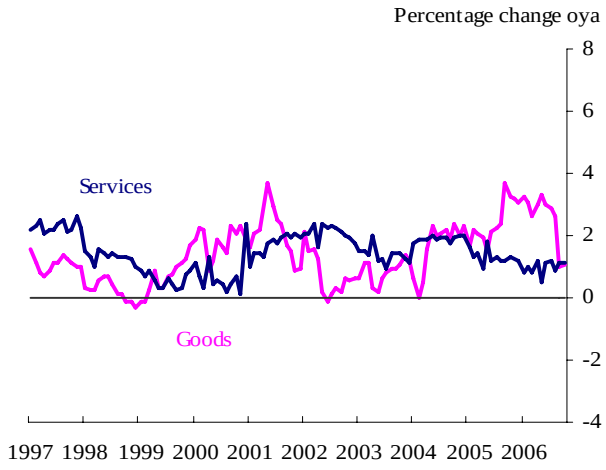
Chart 3.3: CPI goods versus services - US



Source: Bureau of Labor Statistics

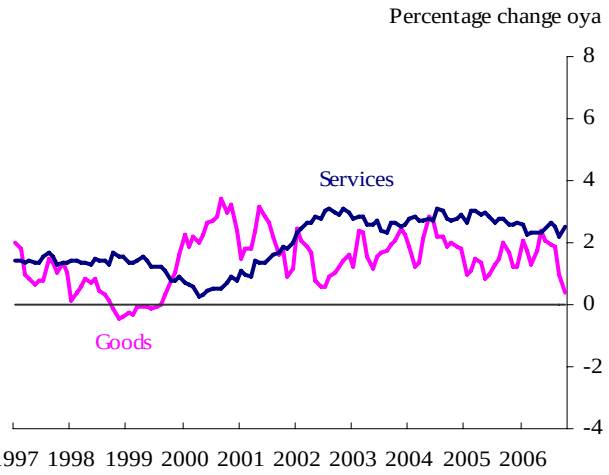
Note: Last data point October 2006. The methodology used to calculate US CPI and Japanese CPI differs from that used for UK CPI and from each other. US and Japanese CPI include imputed rents as services for example. See Lane and Lynne Schmidt (2006).

Chart 3.4: CPI goods versus services – Germany



Source: Eurostat
Note: Last data point October 2006

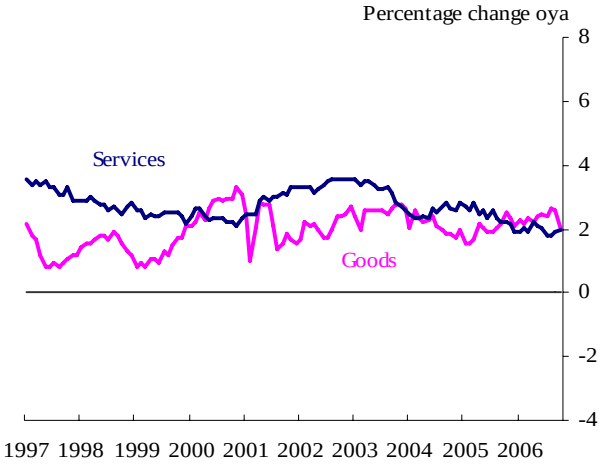
Chart 3.5: CPI goods versus services - France



Source: Eurostat
Note: Last data point October 2006

[6] While the reasons behind the international patterns require further analysis, developments the sterling effective exchange rate index (ERI) over this period are likely to be an important explanatory factor.

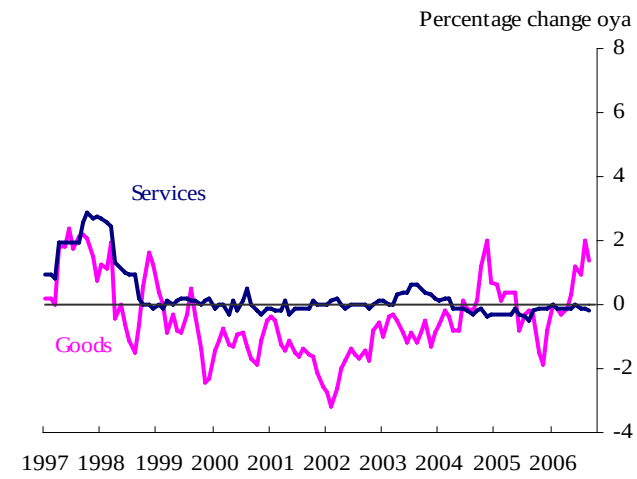
Chart 3.6: CPI goods versus services - Italy



Source: Eurostat

Note: Last data point October 2006

Chart 3.7: CPI goods versus services - Japan



Source: Statistics Bureau of Japan

Note: Last data point September 2006

When it comes to constructing a price index for services, there are a number of issues to be confronted. Some services, like haircuts, are fairly easy to define. But others present challenges. Take the case of the banking sector which was estimated to be around 5.2% of UK GDP for 2003. The difficulty lies in defining the output of banks. In principle, it is the flow of services that the bank provides to its customers. But calculating this flow, and then the corresponding price deflator, is not straightforward. One reason is that while there may be charges on some kinds of bank accounts, generally banks "charge" by paying a lower return on deposits than they lend at. The ONS has to extract a measure of user cost from data on the stock of deposits, loans, wages, fees and interest rates.

Oulton (2004) and Allen (2005) highlight the methods by which this can be done. For example, the output measure of indirectly charged services is mainly the value of deposits plus loans. To derive the experimental Banking Service Producer Price Index (the average price per loan and interest bearing deposit) from this, the number of large businesses outside of financial intermediation is used as a proxy for the number of loans and deposits. There are also issues when it comes to factoring services into National Accounts.

For example, banking output needs to be allocated between domestic households, government, overseas residents and intermediate demand.[7]

In summary, although services are now a large part of our economy and a crucial intermediate and final output, there are aspects of services measurement – both price and quantity – that are inherently more difficult than in the case of goods. This has implications for a body like the MPC and its attempts to understand what is happening in the UK economy.

Returning to Chart 3.1, there is a standard cost-based story, due to Baumol (1967), which explains why the relative price of labour intensive services will tend to increase over time. If such services do not benefit from significant labour saving technological change and wages are rising in the economy due to technological progress elsewhere, then we will tend to see this happening. This is sometimes referred to as "Baumol's law".

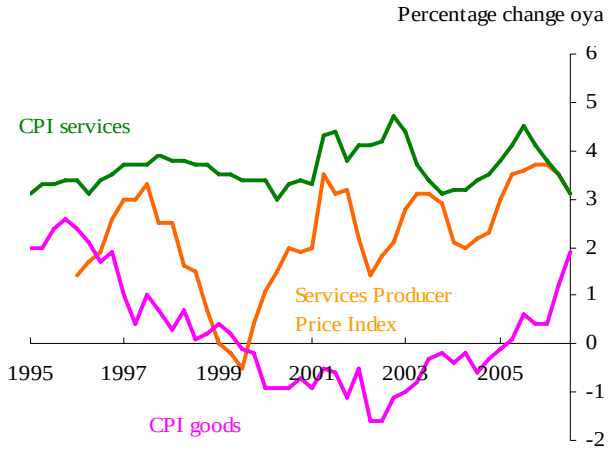
Baumol's law is also consistent with a larger share of national income being devoted to the production of services over time. This is because the demand for consumer services, restaurant meals being a good example, rises disproportionately with income.[8] Increased labour productivity in the non-service sector makes consumers as a whole richer and can lead to a larger share of income being devoted to consumer services even though services are becoming relatively more expensive.

This view of what drives the finding in Chart 3.1 is certainly plausible for an array of consumer services such as restaurants or hairdressers. But it is rather incomplete as an explanation of what has been happening to services in the United Kingdom. First, as we have already observed, much of the shift

[7] This allocation is related to the treatment of Financial Intermediate Services Indirectly Measured. See Tily and Jenkinson (2006).
[8] For example, Blundell, Pashardes and Weber (1993) estimate an income elasticity of demand of services by households of between 1.2 and 1.4 using data on 61,000 households from the British Family Expenditure Survey for 1970-84.

towards service sector output is in the form of producer services. In fact, service sector producer prices seem to be increasing at a higher rate than consumer goods prices – see Chart 3.8. This may be because, just as with final consumers, intermediate consumers spend a larger share of their revenue on services even as those services become relatively more expensive. And if such services are required more intensively further up the quality ladder, then this is consistent with business services also growing in importance. But such services may still be able to generate value-added income as wages, profits and returns on capital, and pass less on to their intermediate and final consumers.

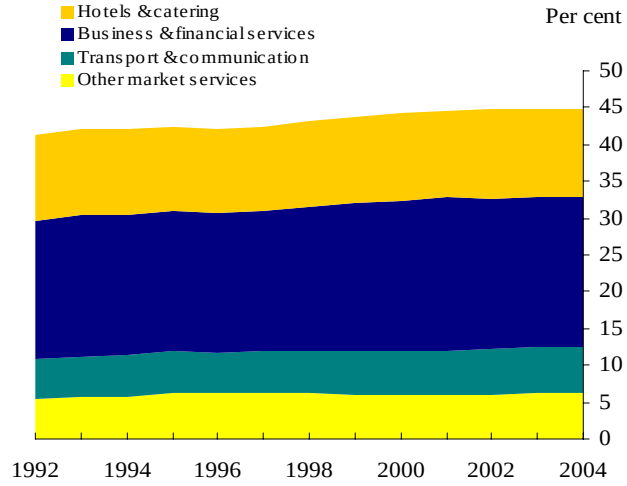
Chart 3.8: Inflation rates in goods and services



Source: ONS

Note: The Services Producer Price Index is an experimental series.

Chart 3.9: Direct share of households' final demand for services



Source: ONS

Note: Distribution and retail is not treated as a separate sector. Intermediate consumption for resale by the distribution sector is allocated directly to final demand by national accounts convention.

However, there is another issue raised by Chart 3.1 which goes more to the heart of the judgements that concern the decisions made by the MPC. The trend observed in Chart 3.1 constitutes a change in the *relative* price of consumer services and consumer goods while inflation refers to changes in the overall price *level*. What we can learn about relative price changes for overall inflation has been much debated. It is one of the main issues that has resurfaced in recent discussions about how monetary authorities should respond to the rise in energy prices, which is also a relative price change.

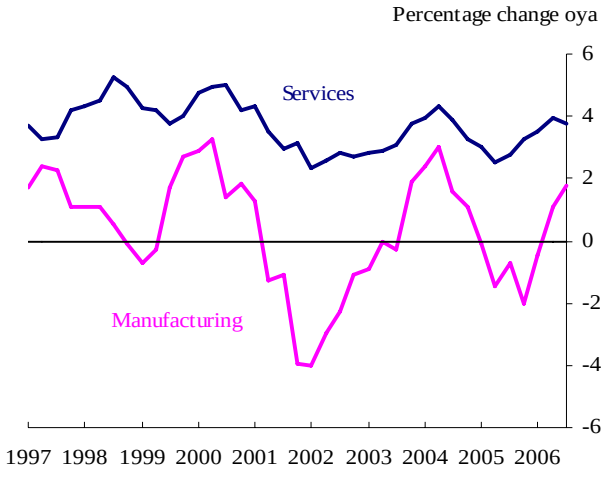
The rate of inflation is not determined in any one sector of the UK economy but by the balance of demand and potential supply in the UK economy as a whole. To keep inflation to the 2% target does not imply that all prices are rising at 2% - but that they do so on average. Experience of inflation "on the ground" can be very different. We have heard plenty about the fact that pensioners, young single people and middle class school-fee paying households experience inflation differently. But I have in mind something quite different – this is the fact that producers, who ultimately choose when to put up prices, experience different patterns of wage inflation and increases or falls in costs. Even in a world of stable inflation, there will be quite different underlying patterns of wage and price increases.

Returning to Chart 3.1, there is some evidence that it is the *overall* demand and supply conditions that determine the level of CPI inflation. Consumer services inflation and consumer goods inflation generally appear to move in opposite directions. This is quite unsurprising when consumers need to choose what to spend out of a given money income so that rising prices in some items implies less spending on others. Such rebalancing of consumer priorities has been an inevitable consequence of the recent increase in energy prices.

But even though it is the overall balance of supply and demand that matters, there are good reasons for assessing the current state of the UK economy by looking separately at goods and services. In particular, we are accustomed to the manufacturing and services sector moving at different speeds in the United Kingdom. Recent evidence suggests that the services sector is growing more strongly than manufacturing (see charts 3.10 and 3.11). However, in mid-2006, the pick-up in the euro-zone economies gave a boost to manufacturing which promised the possibility of some rebalancing between the service and manufacturing sector.

When the MPC assesses the state of the UK economy, it relies on a wide range of indicators. ONS data on output in manufacturing and services of the kind that we see in Chart 3.10 is an important source. The recovery in manufacturing through 2006 is clearly visible from this. However, such data are available with a lag and are often subject to revision. Survey data from the Chartered Institute of Purchasing and Supply (CIPS) provide an important additional source of intelligence. Chart 3.11 contains an additional quarter of data and shows that while still moving in a positive direction, the CIPS/RBS manufacturing output indicator declined somewhat towards the end of 2006. This contrasts with the CIPS/RBS service sector output indicator which has produced its highest reading for nearly ten years. While it is dangerous to put too much weight on a single number, this suggests a fairly robust picture.

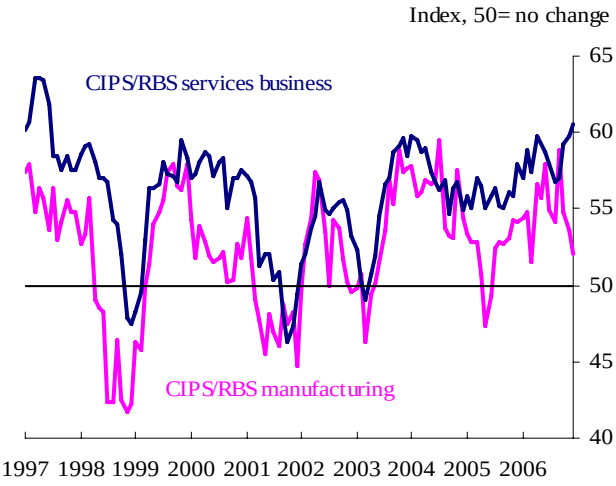
Chart 3.10: ONS services and manufacturing output



Source: ONS

Note: Data are quarterly. The last data point is Q3 2006. Services here is total services and therefore includes non-market services from the public sector.

Chart 3.11: CIPS/RBS services and manufacturing output



Source: CIPS/RBS

Note: Data are monthly. The last data point is December 2006.

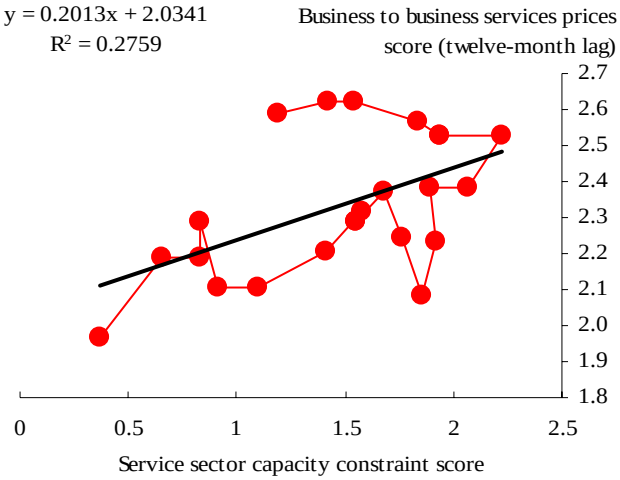
A key issue in assessing the balance of supply and demand in the economy concerns the extent of capacity utilisation in the economy. One way of getting a feel for this is from a variety of surveys administered to the manufacturing and service sectors. A typical question asked to a firm is "Are you currently operating: At full capacity/Below full capacity? ". While quite crude,

answers to these questions can be aggregated to give an economy-wide picture of spare capacity. An additional uncertainty in measuring spare capacity in the United Kingdom at the current time is that, with a plentiful supply of migrant labour, the concept of spare capacity is perhaps less well-defined than in the past.

It is sometimes suggested that it is inherently more difficult to make such judgements in the service sector and hence, as the service sector grows as a share of the economy, our estimates of spare capacity become ever more imprecise. While it is correct that the surveys may give only an imprecise reading on the overall level of spare capacity, I don't subscribe to the view that the answers to these questions are less informative than similar questions answered for manufacturing**.** Historically, the coverage of the service sector in these surveys has, however, been less comprehensive, although we do now have a wider range of survey indicators to assess the state of the service sector.

There does, however, appear to be some relevant information in some such series. Chart 3.12 matches Bank of England Agents' scores for service sector capacity utilisation against business-to-business service price pressures between 2005 and 2006 suggesting that there might be a relationship between the two.

Chart 3.12 Business to business prices versus service capacity constraints score (Jan 2005-Nov 2006)

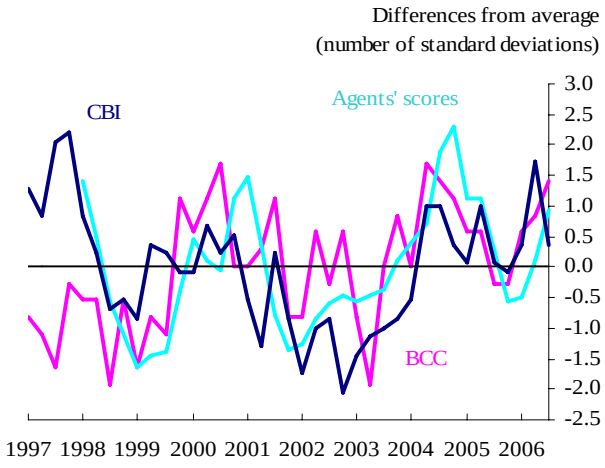


Source: Bank of England

Note: The red data points represent Bank Agents' scores between January 2005 and November 2006. A score of zero indicates that prices over the past three months were unchanged compared with the same period a year earlier. A positive (negative) score indicated that prices were higher (lower) than a year earlier. Capacity constraint scores are over the next six months. Before January 2005, this score reflected companies' current situation, rather than being forward looking.

Charts 3.13, 3.14 and 3.15 plot the available series on capacity utilisation in manufacturing and services since 1997 from a variety of surveys. The general story is one in which capacity utilisation in services has been tighter in the period since 2004 than in the preceding three years. The CBI and BCC measures also show some modest tightening of capacity in manufacturing over the same period.

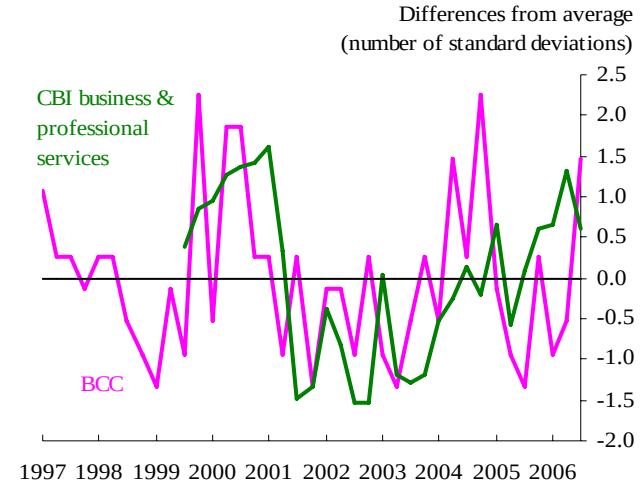
Chart 3.13: Capacity utilisation in manufacturing



Source: Bank of England, BCC, CBI

Note: Data are quarterly. Final data point is Q3 2006. Each series has been normalised by subtracting its mean and then dividing this value by the standard deviation. Means of BCC (35.9); CBI (38.5); Agents' scores (-0.75). Standard deviations of BCC (3.6); CBI (6.6); Agents' scores (0.66).

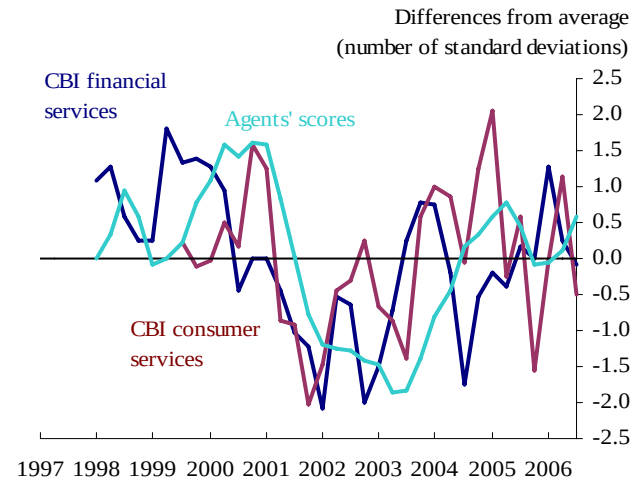
Chart 3.14: Capacity utilisation in services



Source: BCC, CBI

Note: Data are quarterly. Final data point is Q3 2006. Each series has been normalised by subtracting its mean and then dividing this value by the standard deviation. Means of BCC (38.3); CBI (-5.8). Standard deviations of BCC (2.5); CBI (19.6).

Chart 3.15: Capacity utilisation in services



Source: CBI, Bank of England

Note: Data are quarterly. Final data point is Q3 2006. Each series has been normalised by subtracting its mean and then dividing this value by the standard deviation. Means of CBI financial services (4.8); CBI consumer services (-15.6), Agents' scores (1.4). Standard deviations of financial services (20.5); CBI consumer services (21.3), Agents' scores (0.9).

Putting all of this evidence together, we might reasonably expect inflationary pressure at the current time to be coming more from the services sector in the economy in part driven by limited spare capacity. Moreover, shortages of skilled labour in these sectors may lead to upward pressure on wages for such workers. Evidence from the BCC survey suggests that the percentage of service sector firms reporting recruitment difficulties is currently close to its average.[9] To the extent that the economy is operating in a single labour market, this may lead to generalised wage pressure that will ultimately affect all firms in the economy.

I turn, finally, to a brief discussion of globalisation and its implications for services. There has been much recent discussion of globalisation and its implications for the UK economy as a whole and its implications for inflation. See Bean (2006). Most directly purchased consumer services are non-traded services and hence largely immune from the forces of global competition. But business services are not. We are only too familiar with relocation of call centres to low labour cost environments. Just as in the case of manufacturing that I discussed earlier, this should be thought of as a movement along the

[9] See Bank of England (2006).

value chain allowing for labour in the United Kingdom to be redeployed more productively. It is consistent with the quality ladders view of economic change that I discussed above.

A frequently made argument is that global forces in the 1990s created favourable "tailwinds" by reducing the prices of many kinds of manufactured goods. This may be a feature of trade in services and, we have already observed, there has been an increase in the share of trade devoted to services in the past 15 years or so. It remains uncertain whether greater global competition in services will limit service sector price increases in future. However, whether or not this comes to pass, it is important to remember that the assessment of inflationary pressure requires looking at the balance between demand and supply overall.

In summary: we have observed a tendency for consumer services price inflation to run ahead of consumer goods price inflation over the past ten years. However, this does not imply an inflationary bias in the structural change from the production of services to goods. Changes in CPI depend on the balance of demand and supply factors in the economy as a whole. However, the current strength of the service sector, as evidenced in the survey data to which I have referred, is germane to judgements about the current strength of the UK economy.

Concluding Remarks

This speech has focused on some broad trends in the UK economy that are likely to continue. I have argued that the growth of business and financial services is not necessarily damaging jobs and prosperity in the UK. Let me be clear that I am not trying to downplay the important role played by manufacturing in the United Kingdom. But the general context is one in which prosperity is maintained in both services and manufacturing by

improving the skills base and business climate to support movements towards higher value added economic activities.

The forces of globalisation will continually put pressure on activities that are exposed to international competition. The United Kingdom is full of businesses – both manufacturing and services – that have shown themselves to be more than equal to the challenge of globalisation. The United Kingdom's economic performance from the 1990s onwards is one of an orderly structural shift in a context of broad macro-economic stability and low inflation. There is little reason to believe that this will change in the future provided that the fundamentals remain in place.

The rise of the service sector has created challenges for the ONS which has to keep ahead of structural changes in the UK economy. As an MPC member, I will continue to keep my eye on the bigger picture and the forces that shape the balance of demand and potential supply in the economy as a whole. The fact that manufacturing series are more readily available and better measured should not give them undue emphasis in policy discussions.

One of the forces behind the success of the MPC since 1997 is the level of intelligent debate, analysis and commentary that the MPC has encouraged. The MPC does not only have to make the right policy decision, it also has to provide guidance about economic trends so that decision makers throughout the economy can interpret their implications. The minutes of the meetings provide a key vehicle for communicating the views of the committee. Those of our latest policy meeting, which will be published on January 24th, will explain the thinking behind last week's decision to raise Bank Rate by 25 basis points. The December minutes made clear the concerns about upside risks to inflation among some members of the MPC. Our decision this month must be viewed in that context and financial markets had already been pricing in an increase of around 25 basis points for February.

I have learned during my short tenure that there is an appetite for stories about process and personalities on the MPC. However, it is the economic issues that count in our decisions and following them provides the best guide to where interest rates are going. I accepted the invitation to join the MPC last summer on the premise that I would exercise my independent judgement in assessing what the data are telling us about trends in the UK economy. My decisions will be guided by this alone. This means recognising that we are uncertain about many things. But we do not live in a world that defies interpretation and uncertainty is not an excuse for inaction. The structural changes that have taken place, and will continue to take place, in the UK economy are important. Understanding them in a wider context does, I believe, lead to better policy.

References

Allen J (2005) 'Loan and deposit services from UK banks included in the experimental CSPI. The development of a corporate services price index (CSPI) for banking', *Economic Trends*, no 605, pages 33-39.

Bank of England (2006), *Inflation Report*, November 2006.

Baumol, W (1967), 'Macroeconomics of unbalanced growth: the anatomy of urban crisis', *American Economic Review*, vol. 57, pages 415-26.

Bean, C (2006), 'Globalisation and inflation', *Bank of England Quarterly Bulletin*, vol. 46 (4), Autumn 2006.

Bloom, N and J van Reenen, (2006), "Measuring and Explaining Management Practices Across Firms and Countries", CEPR Discussion Paper No. 5581.

Blundell, R, P Pashardes and G Weber**,** (1993), **"**What do we Learn About Consumer Demand Patterns from Micro Data?", *American Economic Review*, 83(3), 570-597.

Cassing, S (1996), 'Correctly measuring real value added,' *Review of Income and Wealth*, vol. 42(2), pages 195-206.

Corrado, C, C Hulten and D Sichel (2004), 'Measuring Capital and Technology: An Expanded Framework,' *Federal Reserve Board Finance and Economics Discussion Series,* no 2004-65.

Diewert, E (2005), 'Progress in Service Sector Productivity Measurement: Review Article on Productivity in the US Services Sector: New Sources of Economic Growth', *International Productivity Monitor*, Centre for the Study of Living Standards, vol. 11, pages 57-69.

Duguay, P (2006), Productivity, Terms of Trade, and Economic Adjustment Remarks by Pierre Duguay Deputy Governor of the Bank of Canada, to the Canadian Association for Business Economics, Kingston, Ontario , Bank of Canada.

Grossman, G M and E. Helpman (1991), 'Quality Ladders in the Theory of Growth', *Review of Economic Studies*, vol. 58, pages 43-61.

Hill, P (1999), 'Tangibles, intangibles and services: a new taxonomy for the classification of output', *Canadian Journal of Economics*, 1999, vol. 32(2), pages 426-46.

Lane W and M Lynne Schmidt (2006), 'Comparing US and European inflation: the CPI and the HICP', *Monthly Labor Review*, Bureau of Labor Statistics.

Malley, J, V Muscatelli, and U Woitek (2003), Some New International Comparison of Productivity Performance at the Sectoral Level, Journal of the Royal Statistical Society, Series A, vol. 166(1), pages 85-104. Data from http://www.eco.rug.nl/ggdc, Groningen Growth and Development Centre, 10-Sector Database, United Kingdom (1947-1996), Table 1.8.

Marrano M G and J Haskel (2006), 'How Much Does the UK Invest in Intangible Assets?', Queen Mary College University of London Working Papers no 578.

Oulton, N (2001), 'Must the Growth Rate Decline? Baumol's Unbalanced Growth Revisited', Oxford Economic Papers, Oxford University Press, vol. 53(4), pages 605-27.

Oulton N (2004), 'A statistical framework for the analysis of productivity and sustainable development'.http://www.hm-treasury.gov.uk/media/FD6/5F/allsopp_oulton_140.pdf

Tily, G and G Jenkinson (2006), 'A change in the method of recording payments for banking services in the UK National Accounts', Office of National Statistics, available at http://www.statistics.gov.uk/articles/nojournal/FISIM_progress_report.pdf