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The ambiguities of recent economic growth

UK macroeconomic performance needs to be re-assessed

In a complex world the notion of "output growth" is ambiguous

The growth of a nation's output may seem a simple idea. So it would be if people made only one product, and the nature and price of the product did not change. In the real world not only are there thousands of products and services with ever-changing prices and qualities, but also new products are being introduced all the time. As a result the notion of "economic growth" is ambiguous. The October 2001 issue of this *Review* drew attention to a serious problem with the national accounts, which had been building up since 1995. It noted that the trade imbalance, relative to gross domestic product, could be described in two ways. One was the ratio of the actual excess of payments for imports over exports to GDP, all in current prices; another was the ratio of excess of imports over exports to GDP, all in constant prices (currently with a 1995 base) and in a form consistent with the rest of the national accounts. Conceptually, the two measures of the trade deficit had to be identical at the base date (i.e., 1995) and that is indeed the case in the UK's official statistics. They relate to the same underlying economic notion and, in normal conditions, they ought to take similar values at all dates.

The ambiguities are very serious with the UK's external trade at present

But the period since 1995 has been most unusual. According to the first concept of the export-import balance (i.e., in actual prices of today), the UK has a deficit, but in the first quarter of 2002 it had increased by only 1.7% of GDP since Q4 1995 and was a fairly modest 2.2% of GDP. By contrast, according to the second concept of the balance, the deficit in Q1 2002 had increased by 6.7% of GDP since Q4 1995 and reached an unprecedented 7.2% of GDP. As explained in the accompanying research paper, any assessment of the British economy in the last few years must take a view on which of these concepts is "right".

The real GDP data have been overstating "imbalances" in the economy

The conclusions may be controversial. The first point is that the divergence between the two measures of the trade balance can be explained largely by changes in the ratio of export to import prices. Exports have become more expensive relative to imports, enabling the UK to increase its import purchases strongly and yet still to be "paying its way in the world". Some of the price shift has been in trade in goods, but the bulk of it appears to have been in trade in services. The UK has been specialising in business services, whose output and exports have boomed in recent years, and withdrawing from such service activities as shipping and aviation, as well as spending more on foreign travel and holidays. Crucially, the prices of business services have been rising and the prices of such items as freight rates and holiday stays have been falling. The UK's gain here is difficult to measure because no agreed method exists for measuring real output in some service industries. Nevertheless, the pattern of specialization reflects an appropriate resource re-allocation by an advanced country with a skilled workforce and has led to a genuine boost in "output", even though it is not captured in the real-terms GDP figures. More polemically, the real-terms GDP figures have been overstating the "imbalances" in the economy and are giving a misleadingly pessimistic view of the economy's performance.

In the 1990s the UK made an astute resource shift to high-value-added business services

Professor Tim Congdon **26th June, 2002**

Summary of paper on

"A tale of two concepts"

Purpose of the paper

The research paper returns to themes discussed in the October 2001 *Monthly Economic Review.* It asks why two different measures of the same underlying economic variable - the ratio of the trade balance to gross domestic product - have diverged so dramatically since 1995.

Main points

* **The ratio of the trade balance (in goods and services) to GDP can be measured in two ways, first, in current price terms and on a balance-of-payments basis, and, secondly, in constant prices in a form consistent with the national income accounts.**

* **The two deficits were the same in 1995, which is at present the base year for the national accounts.**

* **On a real, national accounts basis (i.e., in terms of the data which enters the calculation of GDP), the UK's trade deficit has plunged massively into the red since 1995. The deficit in Q1 2002 was 7.2% of GDP, which was the highest in the post-war period. (See p. 5.)**

* **On a nominal, balance-of-payments basis (i.e., in terms of actual payments), the UK's trade deficit has widened moderately since 1995. The deficit in Q1 2002 was 2.2% of GDP, much smaller than in the mid-1970s and the late 1980s. (See p. 7.)**

* **The gap between the two deficit concepts - now 5.0% of GDP - is extraordinary compared to the historical record. The gap widened sharply in Q4 2001 and Q1 2002, raising questions about the credibility of the GDP statistics.**

* **The UK has been specialising in business services, whose output and exports have boomed over the last decade. (See the charts on p. 12 and p. 14.) It has been running an increasing deficit on shipping, air travel and tourism, where prices have been falling.**

* **A resource shift towards activities with rising prices and away from activities with falling prices is a genuine gain in national welfare, which may not be captured by real-terms GDP data.**

This research paper was written by Professor Tim Congdon

A tale of two concepts

What is really happening to the British economy?

Last few years good for the economy, but puzzling

The late 1990s and opening years of the 21st century have been a curious period for the British economy. According to all estimates (including the purchasing-power-parity estimates prepared by Lombard Street Research and given in its monthly *Portfolio Strategy* publication), the pound has been heavily over-valued since late 1996. A big puzzle has been the economy's ability not only to cope with this over-valuation, but even to prosper. The last few years have undoubtedly been good ones in economic terms. Consumption has risen by about a quarter since 1996, while the UK's gross domestic product per head seems to have improved relative to the European norm. (Using the current price and current exchange rate data, the UK's GDP per head in 2001 was $23,934, compared with $22,457 in Germany, $22,122 in France and $19,037 in Italy. Ten years earlier it was $17,323, compared with $21,122 in Germany, $20,683 in France and $20,147 in Italy.) What has been going on?

Two concepts of the trade balance, i. actual balance in money terms as % ratio of nominal GDP

The analysis turns out to be more complicated than expected, because of serious difficulties with key macroeconomic data. The October 2001 issue of this *Review* noted a marked divergence between two concepts of the UK's trade imbalance. (The work in the October 2001 *Review* was mentioned by Mr. Anatole Kaletsky in a recent article in *The Times.*) One concept is the excess of actual payments on the UK's imports of goods and services over its exports of goods and services, as published in the balance-of-payments statistics. This excess can of course be expressed as a ratio of national output, with nominal GDP at market prices being the appropriate denominator.

ii. "net exports" as % of GDP, all in real terms and on national accounts basis

A second and slightly more complex concept emerges from the need to integrate measures of exports and imports with the national income accounts. Exports are an addition to demand and imports a withdrawal, and "net exports" (i.e., exports minus imports) are one influence on GDP. GDP is estimated by National Statstics in three ways - by adding up outputs (or "gross value added"), by adding up incomes and by adding up expenditures. In principle, all three approaches should give the same answer; in practice, they often differ by large amounts. Particular difficulties arise when the nominal data are deflated by price indices to reach "GDP in real terms". The job of reconciling the conflicting estimates is crucial in arriving at a final view which approximates "the truth". But often that can only be done by quite heavy statistical intervention with certain components of GDP, including exports and imports. At any rate, the UK's trade imbalance can be measured by net exports as a ratio of national output, where exports and imports, as well as GDP itself and all its domestic components, are in constant 1995 prices.

The concepts relate to the same underlying economic reality, and in the long run

All this may seem ponderous. Surely, "the ratio of exports over imports of goods and services, on a balance-of-payments basis, to GDP at current market prices" comes to much the same thing as "the ratio of net exports to GDP, on a national accounts basis, at constant 1995 prices". They do refer to the same underlying economic reality. Indeed, at the base date (i.e., the 1995 year) they are identical in

are very similar

the official statistics. (They have to be; that is the way the statistics are compiled.) Further, over long periods the two series move very closely together and the sum of the differences between them is virtually nil.

But since late 1995 they have diverged by an astonishing 5.0% of GDP

But since 1995 something very odd appears to have happened. The two concepts have moved far apart. In the final quarter of 1995 both concepts indicated a trade deficit of 0.4% - 0.5% of GDP. By contrast, in the first quarter of 2002 they were different by a remarkable 5.0% of GDP. The nominal-terms balance-of-payment-basis concept of the deficit had increased, but not very much, to 2.2% of GDP, while the real-terms national-accounts-basis concept had widened to 7.2% of GDP. Not only is this divergence out of line with previous experience (see the chart on p. 7), but also it raises fundamental questions about the economy's underlying behaviour and performance.

Assessment of the UK economy depends on which concept is "right"

Two totally different assessments of the UK economy can be made, depending on which concept is "right". Suppose that the real, NA-basis measure is preferred. The UK economy can then be represented as having serious balance-of-payments trouble today and a painful period of adjustment ahead. As the chart on p. 5 shows, the rise in this concept of the deficit is the largest and most prolonged in the post-war period. One obvious causal factor at work was the appreciation of the pound in late 1996, implying that the pound is now over-valued and due for a substantial correction. The correction may to some extent eliminate the over-valuation, but it will lead to upward inflation pressures. Further, several years are needed in which exports rise faster than imports. In turn that will require restraint over consumption, as after previous periods of balance-of-payments deterioration. (Note that much of the concern about "imbalances" in the economy - including that articulated by Mr. Mervyn King at the Bank of England and also discussed in previous Lombard Street Research publications - has been a response to the real-terms national accounts data.)

If real terms, national accounts measure preferred, UK's economic situation is difficult

Suppose, alternatively, that the money, BOP-basis measure is chosen. The widening in this concept of the trade deficit is from 0.5% of GDP in Q4 1995 to 2.2% of GDP in Q1 2002. An adverse shift of almost 2% of GDP matters and needs to be remembered in any macroeconomic analysis, but it is not particularly dramatic. The chart on p. 7 demonstrates that the move into deficit on this measure is modest compared with developments both in 1973 and 1974, and in 1986 - 8. Another salient feature is that the slippage has been very small since the end of 1998. In Q4 1998 the money, BOP-basis measure of the deficit was 1.7% of GDP. In the following three years it increased by little more than 0.1% of GDP each year. A fair interpretation would be that the UK economy can keep its external payments under control at the current exchange rate. There is no need for a big devaluation. Moreover, consumption does not have to be be restricted over the next few years in order to release resources for the trade balance.

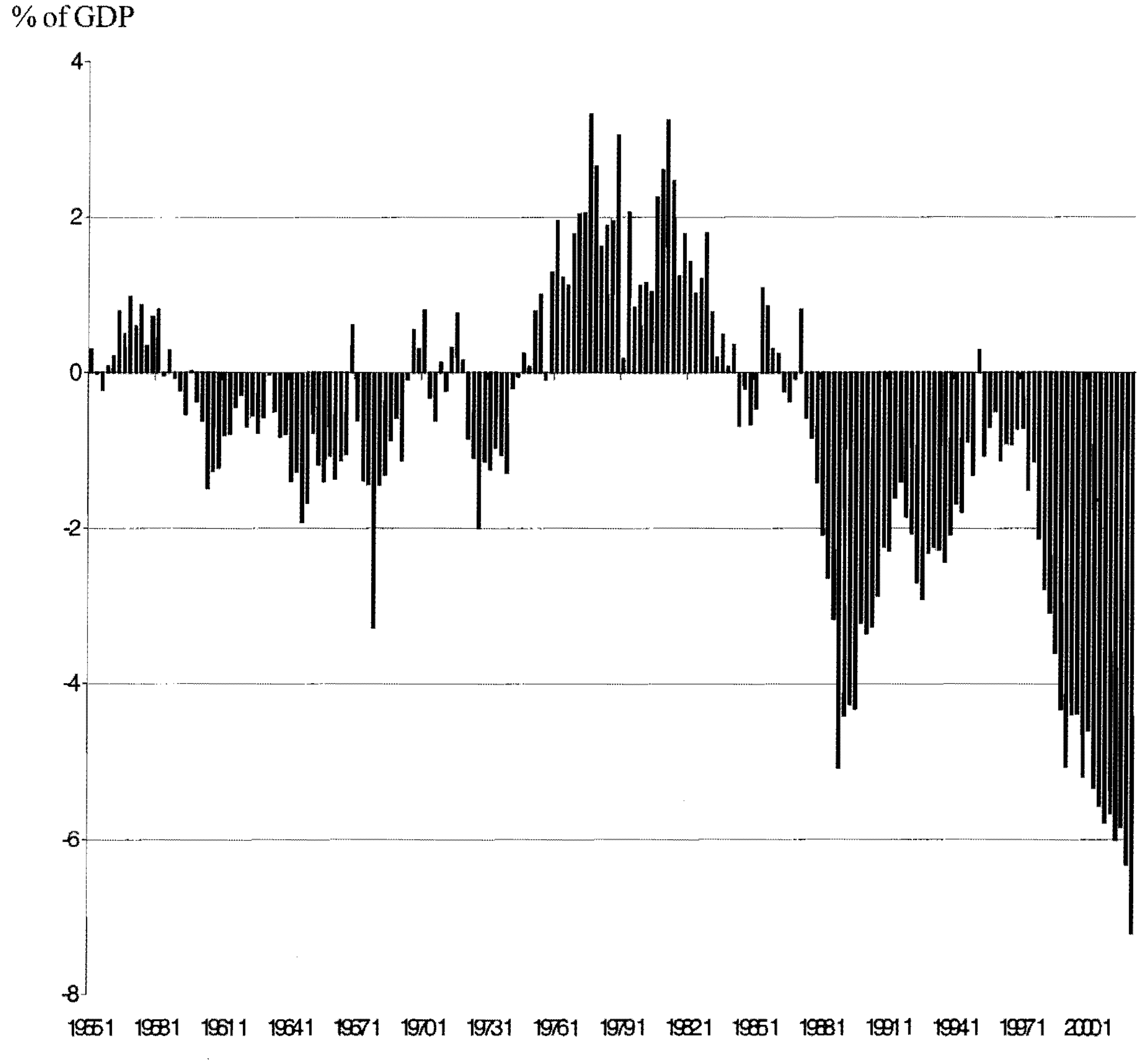
But, if money terms, balance-of-payments-basis measure is chosen, UK economic outlook much more benign

Obviously, the debate here is not just a technical and definitional. It has profound implications for economic policy. The explanation for the wide divergence between

Is this everything you always wanted ...

...to know about the trade gap, but were afraid to ask?

Chart shows exports of goods and services minus imports or goods and services (i.e., "net exports"), as % of GDP, on national accounts basis with all magnitudes in constant 1995 prices. Chart is of quarterly data, with Q1 2002 as last value



In the long run a reasonable expectation for most nations is that exports and imports are similar in value and grow at a similar rate. The UK followed that pattern for most of the post-war period. The sum of the current account imbalances over the past 55 years has been a tiny fraction of output, while in the 47 years from 1948 to 1995 the compound annual growth rates of exports and imports in constant 1995 prices were 4.4% and 4.3% respectively. However, when measured on this same basis (i.e., constant 1995 prices), they have diverged since 1995, with exports up by 6.0% a year and imports 8.6% a year. The latest six-year period has plainly been unusual. Not only have imports outpaced exports by a wide margin, but also both exports and imports have recorded exceptionally high growth rates. The contrast between the last six years and the previous 50 years is interesting, but may be due partly to problems of data collection and interpretation.

Sharp increase in divergence between two concepts in latest quarters

the two deficit concepts needs to be found, in order to prevent mistakes in both interpreting events and framing policy. The October 2001 issue of this *Review* offered some suggestions, but since then the need for an explanation has become more compelling. In Q3 2001 the real NA-basis deficit was 5.8% of GDP. According to the national income accounts, export volumes did very badly compared with import volumes in Q4 2001 and Q1 2002, and the real NA-basis deficit therefore widened to 7.2% of GDP in Q1 2002. It was this unfavourable change in net exports which was responsible - in arithmetical terms - for the stagnation of national output in the two quarters. By contrast, the nominal BOP basis deficit was *smaller* in Q1 2002 than in Q3 2001. (It fell from 2.4% to 2.2% of GDP.) So the gap between the real NA-basis deficit and the nominal BOP-basis deficit widened by as much as 1.5% of GDP in two quarters, a development large enough to shake policy-makers' confidence in the data.

Change in the terms of trade may seem the natural explanation for the divergence between the concepts,

The obvious theory to account for the gap between the two concepts is that the relative prices of exports and imports have changed since 1995, with export prices increasing faster than import prices. As shown in the October 2001 *Review* and on p. 7 here, the only previous example in the post-war period of a sudden and big divergence between the two concepts was in late 1973 and early 1974, when the leap in oil prices caused import prices to advance compared with export prices. National Statistics does in fact prepare a series on "the terms of trade" (i.e., export prices divided by import prices and presented as an index with a base of 100 at a particular date, which at present is the year 1995). It is an easy matter to make a cross-check between this series, drawn from balance-of-payments statistics, and export and import price deflators in the national accounts.

but the official terms-of-trade series cannot account for the size of the discrepancy

The official series for the terms of trade has indeed improved in recent years, rising from 99.8 to Q4 1995 to 105.3 in Q1 2002. The fact that there has been an improvement fits with other information, which is encouraging. However, the scale of the positive change in the terms of trade is not large enough to resolve the puzzle. With trade in goods at about a quarter of GDP, the 5 1/2% improvement in the terms of trade over the 25 quarters to Q1 2002 "explains" only about a quarter (i.e., 1 1/4% of the 5%) of the gap which opened up between the two trade deficit concepts over the same period. The bulk of the gap is still unexplained. (Note that the terms-of-trade shift easily explains nearly all of the gap between the concepts in the mid-1970s. The official terms-of-trade series fell from 106.7 in Q1 1973 to 86.5 in Q1 1974. With trade at about a quarter of GDP, the implied divergence between the two deficit concepts would be about 5% of GDP. It was in fact 5% of GDP, more or less.)

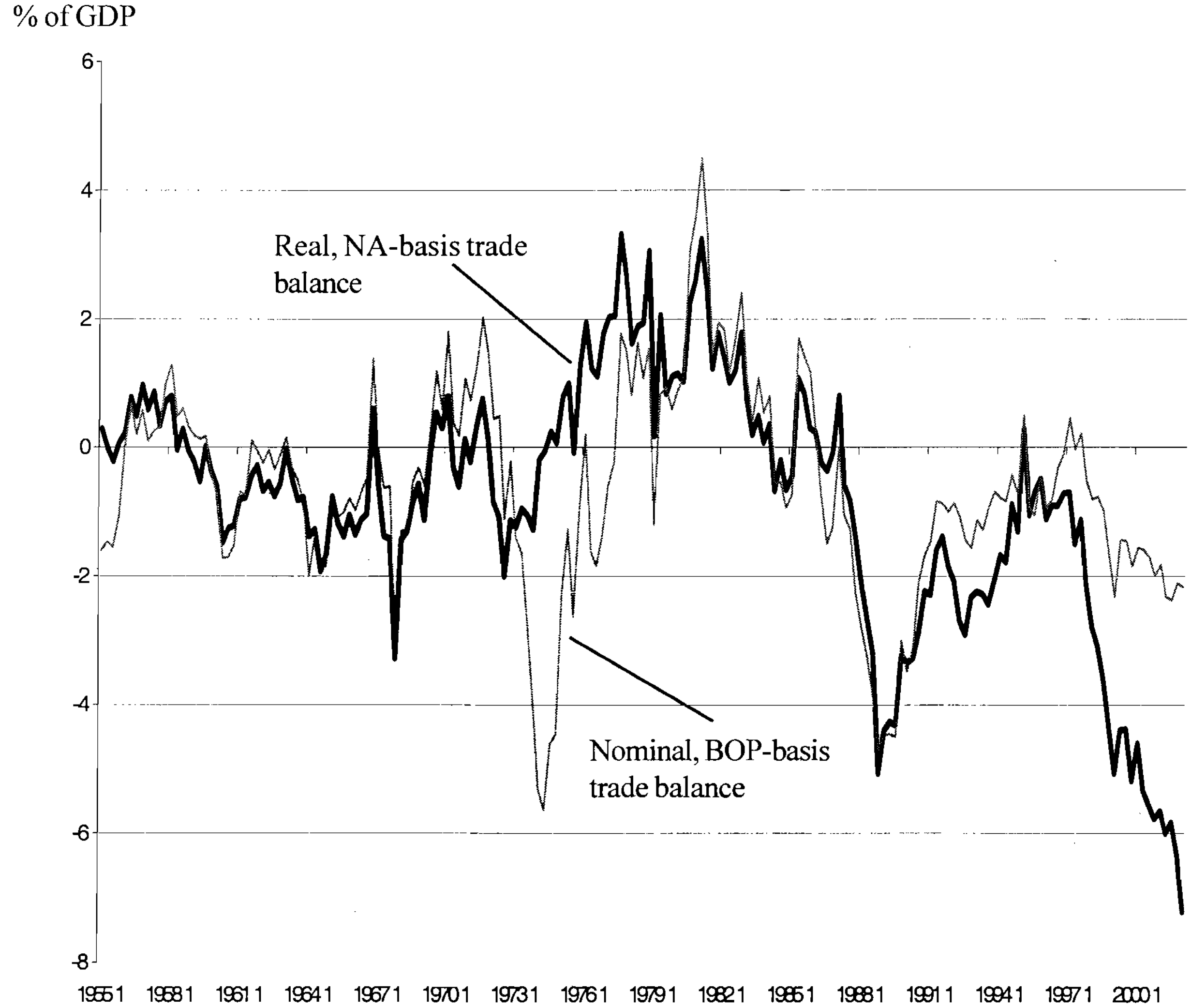
Official terms-of-trade series relates *to goods*, unlike export and import

There is a further possibility, a difference in the composition of the official terms-of-trade series and the price series which determines the export and import deflators in the national accounts. The October 2001 issue of this *Review* noted that the terms-of-trade series related to trade *in goods*, while the export and import price deflators relate to trade *in goods and services*. By implication, the gap between the two

Two names for the same thing?

Widest-ever divergence between the two concepts

Chart shows i. net exports as % of GDP, as in previous chart, and ii. the ratio of the balance on goods and services to GDP, also as a %, where both the balance on goods and services and GDP are in current price terms, and the balance on goods and services is on a "balance-of-payments basis". Quarterly data, Q1 2002 is last value.



The chart on p. 5 showed that the UK's trade gap - measured on a national accounts basis in constant 1995 prices - has widened alarmingly in the last six years. The trade gap reached 7.2% of GDP in Q1 2002, by far the highest deficit in the post-war period. But this chart is more reassuring. It shows that, when the trade balance is measured in current prices and on a so-called "balance-of-payments basis", the deficit has increased only modestly in recent years. In Q1 2002 it was 2.2% of GDP. It is the recent divergence between the two series which motivates the analysis in the research paper. The latest developments are most unusual. A similar discrepancy was opened up in the mid-1970s, but that had an obvious explanation in the surge in oil prices. Otherwise differences between the two series were minor in the 40 years to 1995. Note, in particular, the sharp slide in the real, NA-basis trade balance in Q4 2002 and Q1 2002 as the nominal, BOP-basis trade balance improved slightly.

deflators, which relate *to goods and services*

deficit concepts could be attributable to very favourable developments in *the relative prices of the UK's service exports and imports*. Here again much relevant information is provided by National Statistics.

Very large difference in price changes for exported and imported *services* "explains" most of discrepancy between two concepts of trade deficit

The chart on p. 9 compares the terms-of-trade series with the ratio of the export price deflator to the import price deflator. The outcome is as expected and confirms the main points of the analysis so far. The relative price of the UK's *service* exports and imports must have developed much more favourably in recent years than the relative prices of *goods* exports and imports. From Q4 1995 to Q1 2002 the ratio of the export price deflator to the import price deflator in the national accounts increased by 13.1%. Multiplying this by, say, 33% (i.e., the share of exports and imports of goods *and services* in GDP) gives a number of almost 4 1/2%. This is not quite equal to the 5% gap between the two deficit concepts opened up over the period, but it is very close. *It follows that extremely advantageous movements in the relative prices of export and import* ***services*** *"explain" the bulk of the difference between the two deficit concepts. A discussion of these extremely advantageous price movements then becomes very important in judging the UK's macroeconomic situation and prospects.*

But why have prices of exported and imported services moved so far apart?

Further investigation shows that the problem of understanding what has been happening to the UK's external accounts is closely related to the problem of describing the changing structure of the economy itself. Almost unnoticed by the Government and the media, the UK has enjoyed in the last few years an extraordinary boom in international business services. In its annual *Pink Book* National Statistics gives data on trade in services, which is grouped into 11 categories - "transportation" (i.e., payments for air and shipping freight, mostly); "travel" (foreign holidays, again mostly); "communications" (including telephone services); construction (work by contractors abroad); insurance; financial; "computer and information"; royalties and license fees; "other business"; "personal, cultural and recreational" (language tuition, payments for orchestras abroad, and so on); and "government".

UK's trade can be categorised into "goods", "business services" and "other services"

It is not taking too many liberties to say that these 11 categories belong to two groups - "international business services" and "other services". Transportation, travel and government are other services; the other eight categories are international business services. The UK's export and import totals, and its balances between exports and imports, can then be put into three groups - goods as such, international business services, and other services. The chart on p. 10 shows the balances on these three groups, as a share of GDP, over the 12 years to 2001. The result is fascinating and something of a surprise.

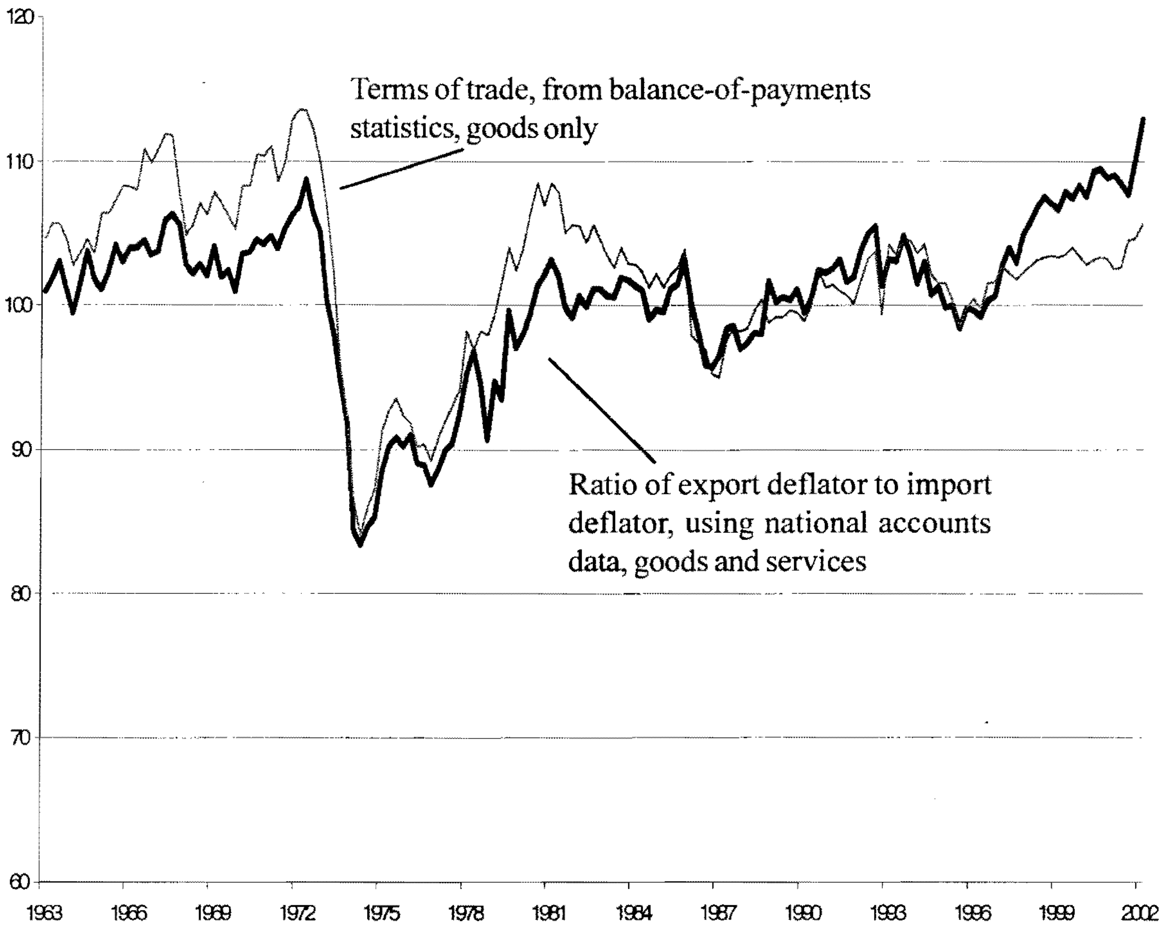
The deficit on goods was similar in 2001 to its level in 1990. It narrowed in the early 1990s, helped by the recession in those years and the pound's devaluation in late 1992, but has since widened out. The changes in the deficit on goods bear the imprint of the business cycle and exchange rate changes, in much the way an observing economist would expect. The deficit on goods has been offset by a surplus on business services, which behaves very differently. As the chart shows, the surplus on

Explaining the gap between the gaps

Are export or import prices responsible for the conundrum?

Chart shows terms of trade (i.e. export prices divided by import prices), ***for goods only****, as published with the balance-of-payments statistics, and the ratio of the export price deflator to the import price deflator, where exports and imports are* ***of goods and services****, as published in the national accounts. Chart is of quarterly data, with Q1 2002 as last value.*

1995 = 100



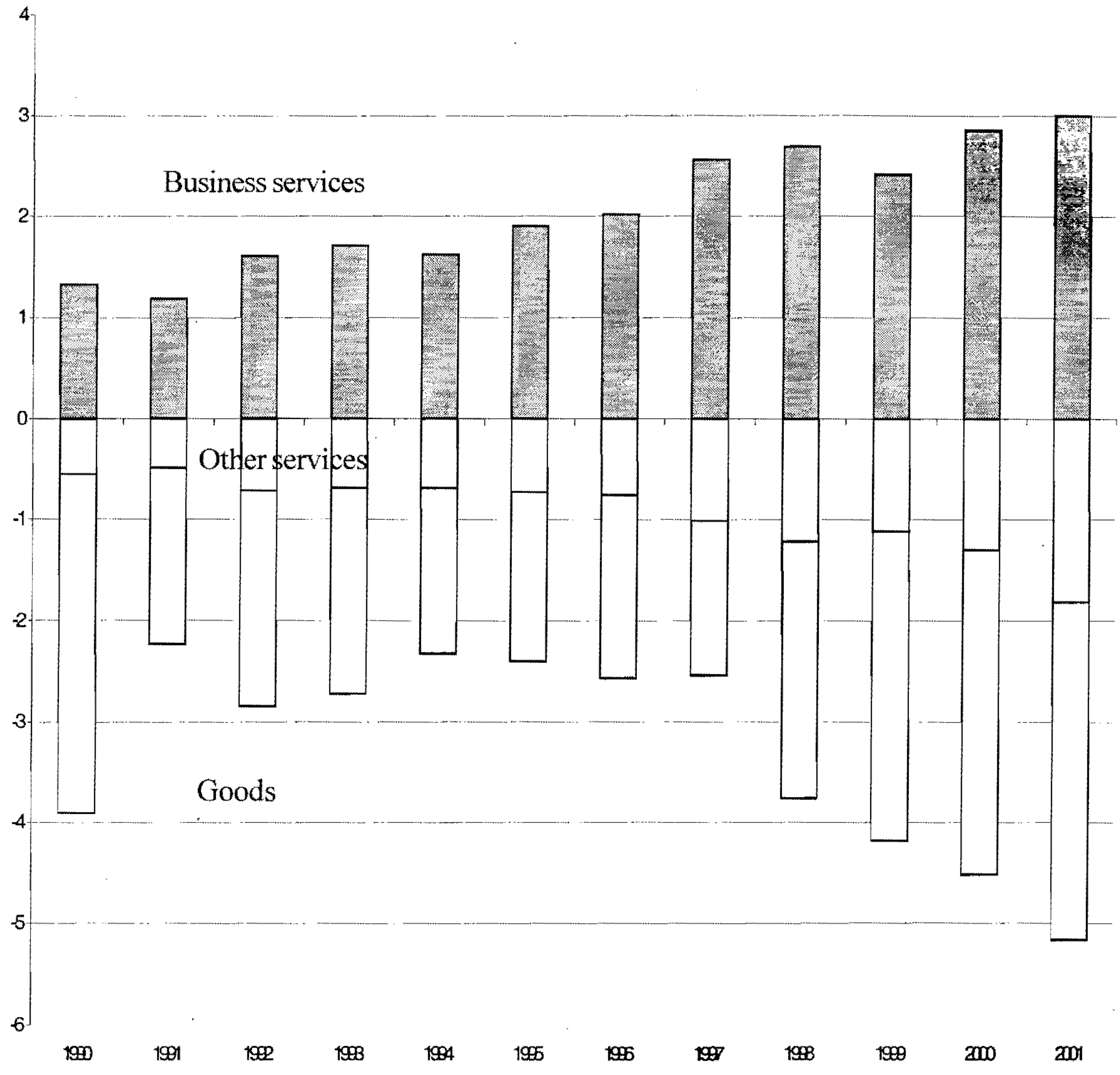
Source: National Statistics

Two key factors differentiate the real, NA-basis and the nominal, BOP-basis trade balances - prices (i.e., the deflators used to convert the nominal data into real) and composition (because, for example, weighting systems have to be used in the preparation of the price deflators). As the role of differences in composition ought to be minor in periods as short as five or six years, contrasting movements in the prices of imports and exports must be crucial. The argument in the text showed that changes in the relative prices of exports and imports *of goods* could explain only a part of the discrepancy between the two trade balance concepts. This chart demonstrates the favourable movements in the relative prices of exports and imports *of services* have indeed been significant since 1995. The ratio of the export to import deflator in the national accounts, which includes services, has jumped by over 10% since 1995, whereas the official terms-of-trade series (goods only) is up little more than 5%.

Business services to the rescue

Surplus on investment income also helps

Chart shows balances on different types of UK external trade, using current prices and on balance-of-payments basis, as % nominal GDP at market prices.



In the current *Pink Book* data on exports and imports of business services, disagggegated to broad industrial categories, are published on a continuous basis only as far back as 1991. However, detailed statistics for trade in "invisibles", including "financial and other services", were prepared by the Office for National Statistics before 1991. One message seems to be that in the 1980s financial services as such were far more dynamic than "other business" (which in the *Pink Books* of the time included "consulting engineers", "process engineers", chartered surveyors and so on), but that in the 1990s the "other" category was almost as rapidly growing as financial services. The composition of the UK's balance of payments in services has radically altered in the post-war period. As recently as the 1970s the UK's credits from exports of shipping and aviation services were above its debits on imports of these services, but in 2001 the UK had a deficit of £3.5b. on "transportation".

Surplus on business services *increased* when the pound was (allegedly) over-valued

business services - although subject to quite marked fluctuations from year to year - has had a strong upward trend over the past decade. The surplus on business services is now about 3% of GDP. *A remarkable feature is that the surplus on business exports climbed in the late 1990s, despite the pound's actual or supposed over-valuation. It was 1.9% of GDP in 1995 (before the pound's big surge in late 1996) and 3.0% of GDP in 2001.*

Indeed, the increase (of 1.1% of GDP) in the surplus on business services in this six-year period was not much different from the increase (of 1.6% of GDP) in the deficit on goods. The overall balance on goods and services did slide into a significantly larger deficit in the six-year period, but the deficit on "other services" saw a larger adverse change (of 1.1% of GDP) than the deficit on goods. The UK has become a heavy net importer of transport and travel services, as well as a heavy net importer of goods, but it goes a long way to cover these two deficits by a massive surplus on business services. (Notice that this is a marked evolution from what once seemed an established historical pattern. For most of the 20th century the UK had a large surplus on services in shipping and aviation, which used to pay for a deficit on goods. That surplus has gone and another type of surplus on service trade has taken its place.)

These developments are valuable background to understanding recent price movements on export and import services. The argument so far has been that a very favourable swing in the relative prices of exports and imports *of services* explains most of the gap between the two trade deficit concepts which has motivated the analysis in the research paper. But what has been responsible for this very favourable swing in the prices of tradeable services?

Disaggregated data on business service exports did not exist before 1991!

But they *doubled,* as a share of GDP, in the 1990s

Of course, the surplus on business services has arisen because exports have climbed faster than imports. Before 1991 National Statistics did not prepare comprehensive data on exports of many business service categories. But, a consecutive and consistent data set for the eight business service categories exists only for the years since 1991. Exports of such services are estimated to have risen from £14.9b. in 1991 to £50.6b. in 2001, or from 2.6% of GDP to 5.1% of GDP. (See p. 12.) No one knows whether this boom has been a once-for-all change in the structure of the economy or not. There is at least a possibility that the boom - which is obviously connected with the "globalisation" of economic activity - is far from mature.

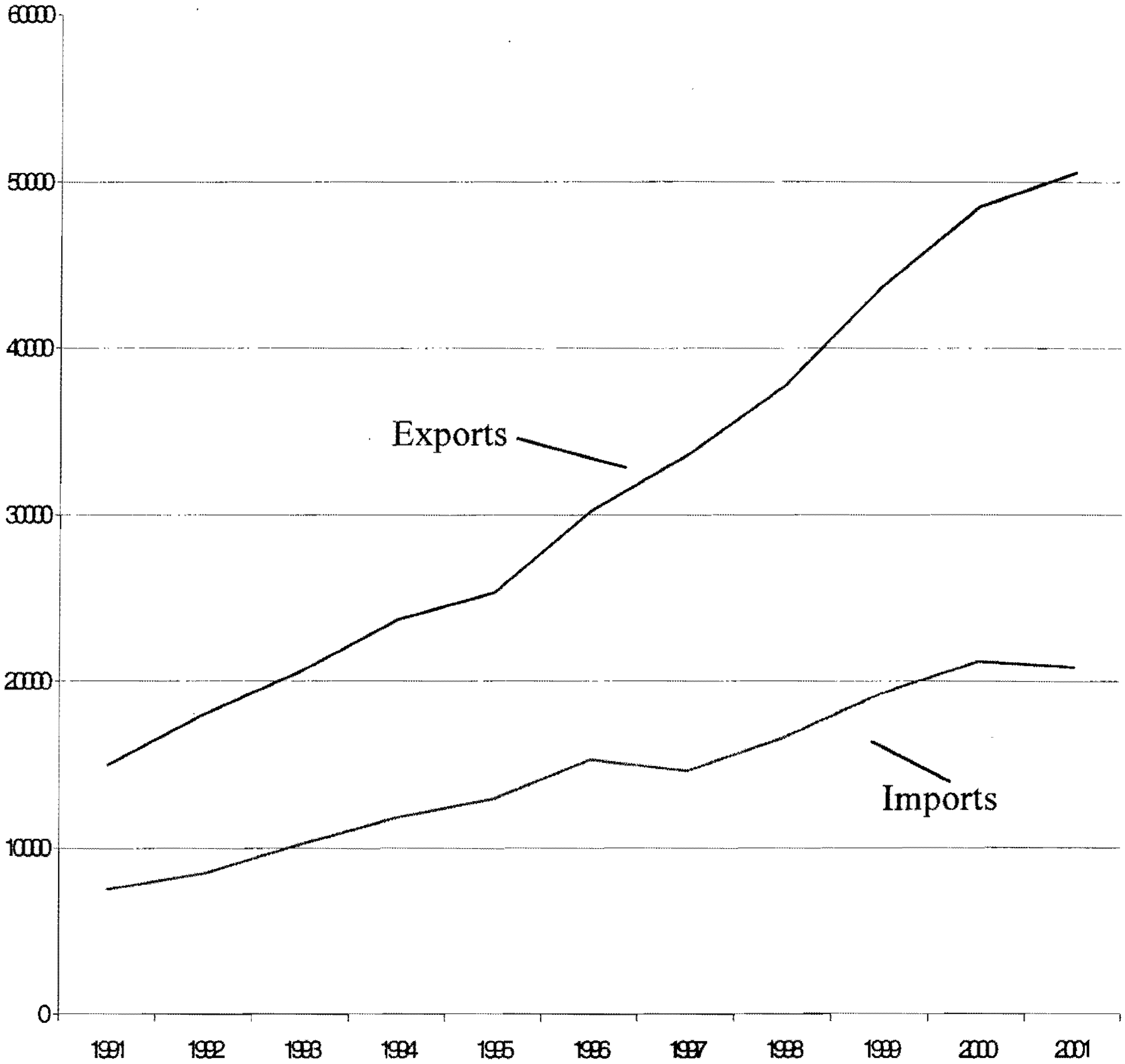
Big change in structure of the economy because of dynamism of business services

The structure of UK national output as a whole has been radically affected by the dynamism of business services. In the 18 years to 2001 manufacturing output grew at a compound annual rate of 1.8%, compared with 3.9% for business services. This was noteworthy, but the last six years have been astonishing. From 1995 to 2001 manufacturing output barely grew at all, creeping up at a compound annual rate of 0.4%, while business services' output advanced at a compound annual rateof 5.1%. Of course, much business services' output (like much manufacturing output) is for the UK home market. Nevertheless, the ability of these activities to deliver

The boom in international business services

The bright spot in the British economy

Chart shows value of exports and imports, in £m. and current prices, of all services except "transport", "travel" and "government". Annual data, 2001 last value.



As explained on p. 10, consecutive data series on business service exports and imports are published only for the period since 1991. The largest items of business service exports in 2001 were financial services and insurance (£12,960m. for "financial services" as such, £4,873m. for insurance, making £17,833m. in total), and "other business" (£22,595m.). From 1991 to 2001 financial services exports are estimated to have climbed 326.3% (i.e., more than quadrupled), while "other business" advanced 256.4% (i..e. rose more than three and a half times). At the same time nominal GDP went up by 69.7%. So the importance of the UK's exports of these services in GDP increased dramatically. Whereas they had been 1.8% of GDP in 1991, they were 4.1% of GDP in 2001. This structural shift in the economy coincides with other information (notably on on the buoyancy of business services' *output*, see p. 14) as well as being consistent with the prosperity of London and the South-East.. "Other" business services are extraordinarily diverse, including legal, accounting and marketing services.

5%-a-year real growth in the context of a supposedly over-valued pound goes quite a long way to explaining the UK economy's resilience after the exchange rate appreciation of late 1996.

and, crucially, the split between price and quantity changes in service output is difficult to measure

The boom in international business services is therefore vital in understanding how the UK economy has managed to prosper in recent years. It also has a vital bearing on the apparently anomalous gap between the two trade deficit concepts. *The point is that the conversion of nominal values of service sector output into real values is notoriously difficult.* The ambiguity in the notion of "real" services output is inherent in the very concept of such output, and can lead to interesting and highly controversial results. Take the example of a law firm which over five years doubles its fee income and keeps its staff constant. A standard practice in national income accounting is to measure real service sector output by employment and to regard all wage increases as a price change. The law firm is then judged to have doubled its price level over the five years *and to have had no increase in real output*. Insofar as the fee income is earned from foreign clients, the implication is a sharp rise in export prices and an unchanged quantity of exports. The UK's law firms - and indeed many of its professional practices in accounting and management consultancy - have in fact seen high growth in both total revenues and revenues from international clients over the last decade.

Prices of UK's business services exports have kept on rising,

This example suggests that one source of the upward drift in the real NA-basis concept of the trade deficit has been statisticians' difficulty in splitting the nominal value of services output into the quantity and price components. The export price series used in calculating the terms of trade can be compared with the export price deflator in the national accounts, to check on the possibility. (See the chart on p.15.) The NA export price deflator has indeed moved ahead of the BOP export price series in recent years, which is another nicely-fitting piece of the jigsaw..

while the prices of its imports of transport and travel services have fallen since 11th September

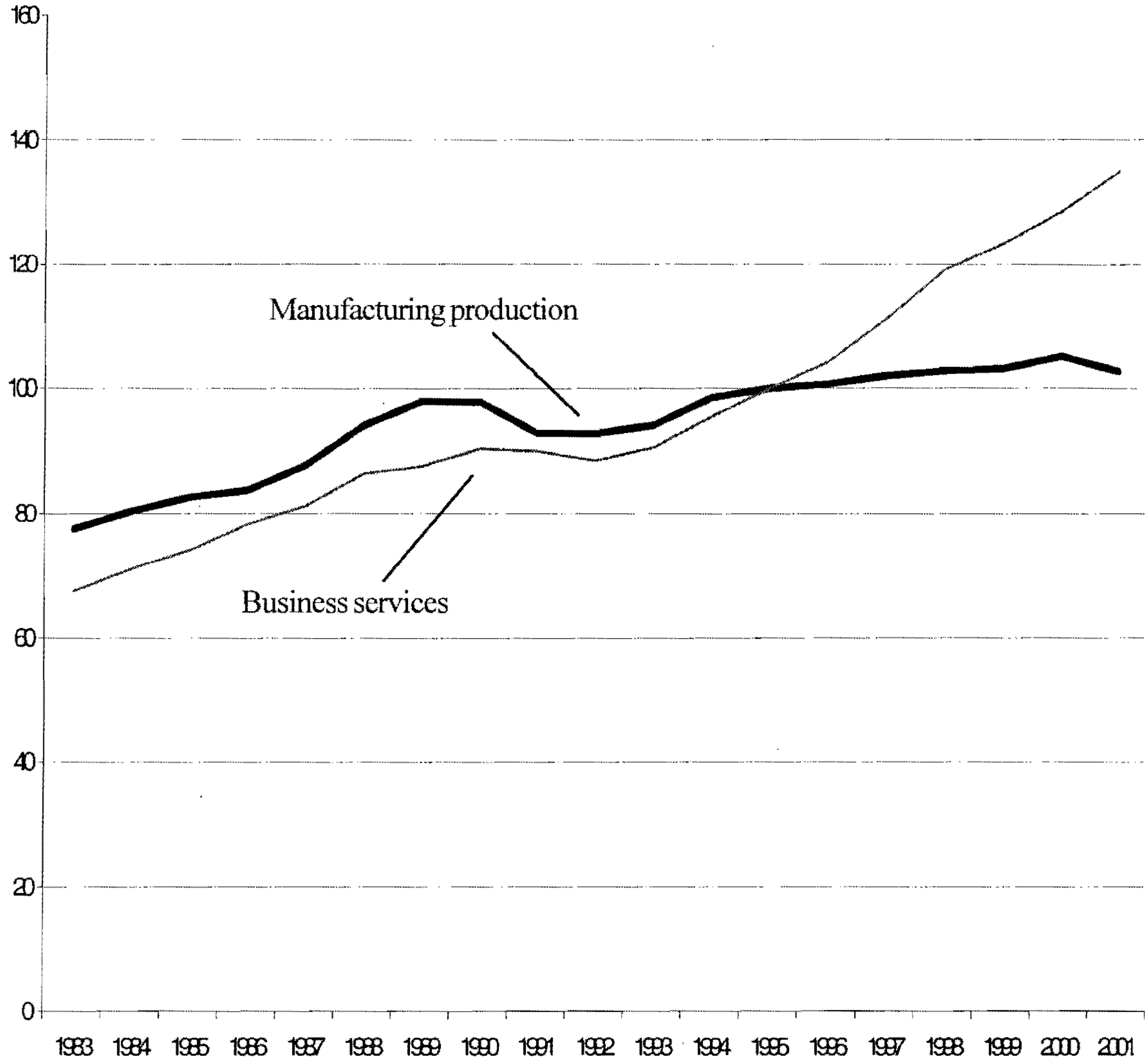
Perhaps more surprising is that the NA import price deflator has fallen behind the BOP import price series, implying severe downward pressure on the prices of imports of services. Without much more detailed information it is uncertain exactly what has been happening here, but the emergence of a big deficit on trade in transport and travel may be relevant. In the late 1990s the sluggishness in the world economy and intense competition led to over-supply of both shipping and aviation services, and big price cuts. Of course, these price cuts were greatest in late 2001 after the shock of 11th September. The UK is a big net importer of transport and travel services, as well as a big net exporter of business services. The widening divergence between the two trade deficit concepts in Q4 2001 and Q1 2002 may be attributable to the contrast between persisting inflation in business service exports and marked deflation in imports of transport and travel services. The theoretical ability of such developments to cause the odd GDP data of Q4 2001 and Q1 2002 is undoubted.

So the pieces of the statistical jigsaw puzzle can be made to fit together. Despite the measurement chasm that has opened up between them in recent years, the two

The transformation of the UK economy

Business services' output overtakes manufacturing output

Chart shows output, in constant 1995 prices and with 1995 = 100, manufacturing and business services, annual data. In 1995 the gross value addeds of the two types of activity were similar. Annual data, 2001 last value.



In 1995 the output of the business and financial services' sectors combined was slightly less than manufacturing output, but they must now be more important. Between 1995 and 2001 the real output of business services rose by 5.1% a year, whereas the real output of manufacturing crept foward at only 0.4% a year. Indeed, the disparity between manufacturing and business services is of long standing. In the 18 years to 2001 manufacturing output grew in real terms by a compound 1.6% a year, whereas the output of business services advanced by a compound 3.9% a year. One of the interesting questions here is how long the boom in business services can continue, because - as they become large relative to the whole economy - their growth rate will increasingly approximate to that of the whole economy. As the boom in international business services reflects the globalization of the world economy, the UK benefited disproportionately from this trend in the 1990s.

The role of export prices

Business service exports not the whole problem

Chart compares price deflator for exports of ***goods and services*** *in national accounts, which is* ***seasonally adjusted****, with export price series used in calculating the terms of trade, which relates* ***to goods only*** *and is* ***not seasonally*** *adjusted. Data are quarterly, with Q1 2002 as last value.*

Year 1995 = 100

This chart helps to understand the relative importance of two types of product, exported goods and exported services, in the divergence between the two trade deficit concepts. The pound appreciated sharply on the foreign exchanges in late 1996. Not surprisingly, both the export price index used in the terms-of-trade series and the export price deflator in the national accounts fell over the next two years. But the fall was less in the export deflator, which includes services, than in export prices in the terms-of-trade series, which does not. Oil prices played some role here (which depressed goods prices in 1998), but generally rising prices for business services (such as increasing legal and consultancy fees) should also be mentioned. More surprising (although not shown here) is that a similar exercise on the import side shows that the price of imports of goods fell less than the price of imported services, a pattern which may be due to the importance of transport in the UK's imports of services.

concepts of the UK's trade deficit do relate to the same thing. But that still leaves unanswered the questions, "which measure of the deficit is the best one to follow?" and – more broadly – "how should policy-makers respond to the very ambiguous statistical picture of the UK economy which they now confront?".

UK's astute re-allocation of resources to "niche" areas of production, with pricing power, in the 1980s and 1990s

A reasonable interpretation of the data is that the UK's companies and individuals made some excellent decisions on the allocation of resources in the 1990s (and perhaps in the 1980s, too, as there is always a lag between action and outcome). Essentially, they pulled out of "commodity" areas of production, in both manufacturing *and services* (such as shipping), and specialized in "niche" areas of production, again of both manufacturing and services. "Commodity" areas of production are those where the product is undifferentiated and easily-copied, where supply is characterized by economies of scale, and where the demand is highly price-elastic; "niche" areas of production are those where the product is differentiated (and protected by branding, high advertising spend or patents) and not easily-copied, where supply is subject to diminishing returns, and where the demand is price-inelastic. So the UK (or rather millions of private agents in the UK) shifted resources from – for example – making steel, clothing and synthetic fibres to supplying British *and foreign* companies with expensive legal, financial, accounting and marketing advice.

Real-terms GDP and trade deficit figures are misleading and understate UK growth in recent years

This was a very sensible pattern of specialization in a globalising world economy where – in general - "commodity production" is moving to low-cost Asia. It was also entirely logical for a nation with only 1% of the world's population, which – for largely historical reasons – is a leader in the supply of certain types of corporate expertise. Because of this pattern of specialization, the UK enjoyed a favourable terms-of-trade change *in service activities*, which national income accountants have had difficulty in measuring and presenting. This change is as genuine a boost to the UK economy as any other positive terms-of-trade development, although there is room for debate about whether it will prove partly cyclical. *Insofar as it is structural, the "correct" measure of the UK's trade-deficit-to-GDP ratio is the money-terms deficit on a balance-of- payments basis, not the real-terms deficit on a national-accounts basis.* In short, the real-terms GDP figures have, in recent years, given an impression of UK growth *which is too low* and suggested an interpretation of the UK's external payments *which is too pessimistic*.