The growth of employment in the service industries has been one of the features of economic change in the twentieth century. It has also become a source of controversy as some scholars have identified the growth of services and the decline of industry as the cause of poor economic performance. Here Clive Lee provides a review of the debate and argues that, in reality, the service sector contains a wide variety of different activities, whose growth and decline have many diverse effects on economic performance.

# The Service Sector and economic growth

Both economic historians and economists have invested great efforts in the attempt to explain the conundrums of economic growth. But, in spite of the large part played by services in both modem and pre-industrial economics, this group of activities has received little attention. When services have been considered in the context of economic growth they have been regarded as being, at best, parasitic, feeding off more productive sectors of the economy or, at worst, inimical to the entire process of economic development. Since the service sector has become an extremely large part of the modern economy its contribution, malign or otherwise, cannot be ignored.

## *Services and explanations of growth*

Neither economic historians nor economists have accorded the service industries much credit in their accounts and explanations of economic growth. The thesis developed by the classical economists in the nineteenth century relied heavily on the notion of capital accumulation in terms of tangible goods. Economists then largely ignored growth for almost a century until the 1950s. In a celebrated inaugural lecture delivered in 1965, Kaldor developed an explanation of economic growth driven by manufacturing productivity. He subsequently diagnosed the rather slow growth of the United Kingdom as a function of the excessively large service sector which, he argued, retained labour when it was in short supply. It thus starved manufacturing of productive resources and consequently inhibited economic growth. [1]

The selective employment tax introduced by the Labour government was designed with the specific intention of 'shaking excess labour out of services by levying a charge on employment in that sector while the creation of manufacturing employment was rewarded with subsidies. The tax regime did not last long enough to have any significant impact, being overtaken by events in the form of rising unemployment in the 1970s. But similar ideas underpinned the diagnosis offered for the ills of the economy by Bacon and Eltis.[2] This was an attack on the size of the public sector, which was almost entirely comprised of services, on the grounds that it absorbed workers, who would have been better employed as producers in manufacturing.

In recent years the House of Lords, through a select committee, has expressed anxiety at the erosion of the manufacturing sector in favour of growth in services which were dependent upon it. The committee also expressed anxiety about the adverse impact this could have on the balance of payments since only one fifth of services were traded internationally. [3] Theoretically the culmination of this strand of thought is encompassed in Baumol's growth model which divides the economy into two sectors, one productive (manufacturing/agriculture) and one non-productive (services). Wages in the productive commodity sector are linked to productivity gain. But growth creates demand in both sectors through increased income generation. Wage rates in the unproductive sector will follow those in the productive sector, increasing costs and wages. This may attract labour away from the productive sector, thus diminishing overall productivity and reducing the growth rate of the economy. [4]

The gloomy prognosis of economic theorists has been reiterated in part by historians. Explanations of growth have customarily been couched in terms of technological advance, and the industrial revolution thesis remains a popular informal model. When economic performance has been depicted as poor, explanations have usually focused on industrial weakness, such as the slow growth of new industries in the Victorian and interwar periods, and the problems which have reappeared in recent decades. More generally, Wiener argued that Britain failed to develop an industrial culture, and that the establishment based on public schools, ancient universities, the City and the Empire created its wealth by other means, namely through service sector growth.[5]

## *Definitions and sectoral growth*

The most obvious, and most famous, definition of services was provided by Adam Smith who noted that, contrary to commodities, services rendered 'generally perish in the very instant of their performance, and seldom leave any trace or value behind them for which an equal quality of service could afterwards be procured'.[6] This characteristic makes the service industries difficult to measure in the way that commodities like steel or wheat are valued, especially as services tend to merge imperceptibly with other activities. Although there has been some variation in the definition of services such that some have included construction and utilities while others have excluded transport incorrectly, there is now general agreement about what constitutes services. Their defining characteristic is that given by Smith, that they disappear when performed and cannot be stored, although, of course, they can be repeated.

There have been a number of attempts in recent years to find the most suitable way of dividing services into component sectors. The

Clive H. Lee is Professor of Historical Economics at the University of Aberdeen. His publications include *The British Economy since 1700: A Macroeconomic Perspective* (1986) and *Scotland and the United Kingdom: The Economy and the Union in the Twentieth Century* (1995).


Graph 1: *Sources:* C.H. Lee, *British Regional Employment Statistics, 1841-1971* (1979). C.S.O. *Annual Abstract of Statistics 1995.* Tables 2.1 and 6.2.

International Standard Industrial Classification identified four main groups of service industries: (a) wholesale and retail trade, hotels and restaurants; (b) transport, storage and communication; (c) finance, real estate, insurance and business services; (d) community, social and personal services. The major categories adopted in the British Census of Population included: transport and communications, distribution, insurance and banking, the professions, miscellaneous services (such as hotels, restaurants and domestic service), and public administration and defence as employment categories 22-27 inclusive.[Graph 1] Other definitional schemes have sought to distinguish between the major functional roles of services such as those which were needed in the delivery of commodities, such as transport, storage, cleaning and repair and those which were designed directly for persons, such as health treatment, hairdressing, restaurants and transport. Such categories can be subdivided further into those supplied privately and those provided by local or central government. An increasingly popular distinction is that between consumer, producer and public sector services. This is very similar to a functional division into: (a) business services - accountancy, research and development, advertising, engineering, employment agencies; (b) household services - hotels and restaurants, personal care, leisure, repairs; (c) collective services - health, education, government, defence, non- profit organisations; (d) intermediate services - trade, transport, communications, insurance and finance.

## *Structural change in services: employment and output*

Given the trend of academic opinion as illustrated above, it is not surprising that the service sector has received increasing attention in recent years as its growth threatened to realise anxieties about its effect on the performance of the economy as a whole. Why did the service sector grow so strongly? In fact, Census of Population data reveal that services comprised a substantial part of total employment at the beginning of Queen Victoria's reign and have increased in both absolute terms and relative to the rest of the economy throughout the century and a half since then, increasing from 28.8 per cent of all employment in 1851 to 46.9 per cent a century later and to over 70 per cent by the 1990s. In relation to the population served, these activities generated 1,297 jobs per 10,000 people in 1851 and 2,750 in 1991. As Graph I shows, this overall growth contained within it substantial restructuring within the services themselves.

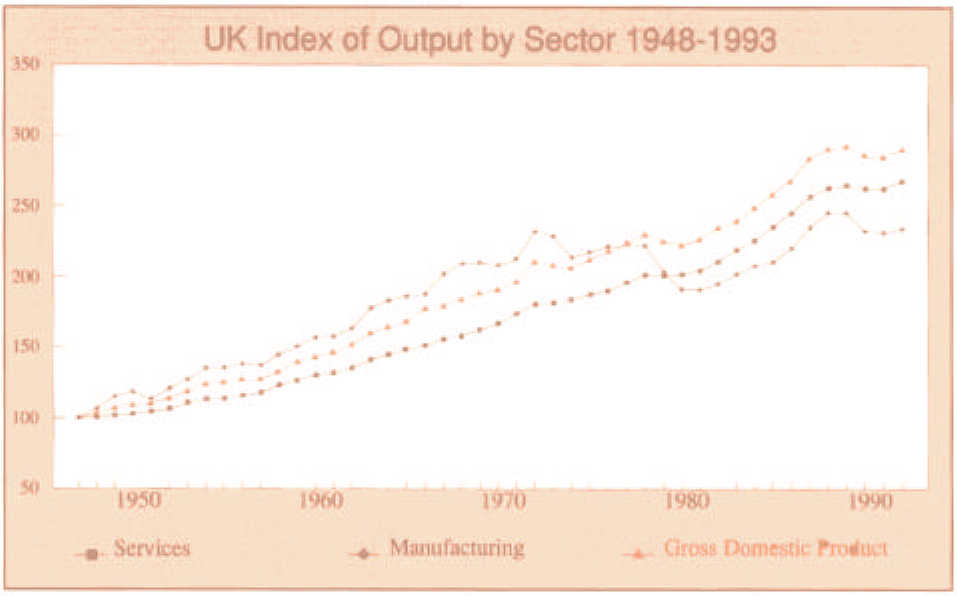
In the nineteenth century miscellaneous services, the greatest part of which was domestic service, mainly for women, was the dominant component in the service sector. In 1851 there were almost a million domestic servants, increasing to a peak of 1.8 million in 1891 before collapsing to half a million by 1951. The rise and fall of domestic service was as spectacular, although less often noted by historians, as the expansion of other sectors like agriculture and mining. The boom in domestic service reflected both economic growth and the inequitable distribution of income and wealth.

Servants were not cheap. Mrs Beeton's celebrated *Book of Household Management,* published in t861, estimated that £150-200 per year was the minimum income needed to be able to afford servants. Male servants were twice as expensive as females, so a family income of £600 was required if a footman or butler was to be included in the household. A survey conducted in 1894 in London found that one third of the households employing servants had either one or two. The rapid decline of employment in domestic service has been explained in terms of falling middle class birth rate, alternative work for young women especially, and the familiar cause of structural change, the substitution of machines for labour. In this case, domestic appliances such as washing machines and vacuum cleaners initially increased the productivity of servants and then supplanted them.

The growth of Victorian domestic service, as a consumer service, was a response to middle class affluence. The other service growth sectors before the First World War conform better to the usual view of services as a direct supplement to growth in production. Any substantive economic growth must create the need for an improved transport network. The emergence and replacement of transport systems from canals to railways, motor vehicles and aeroplanes is a theme much explored by economic historians. The nineteenth century was, of course, the great age of the railway which in turn was a response to economic advance. In particular, coal and other mineral traffic was of great importance to Victorian railway proprietors and accounted for one fifth of all revenue to the beginning of the present century. The increased number of people and growing complexity of economic life also stimulated distributive services. These were partly oriented towards consumers, as the range and quality of consumption increased and partly a necessary adjunct to productive industries, The pervasiveness of distributive activities, and their imperfect distinction from production in the nineteenth century, both in reality and in the classifications of contemporary statisticians, makes it difficult to estimate with any precision the scale or growth of distribution. Estimates for the Victorian period have been unavoidably inflated by the inclusion of some producers. In some services, such as food processing and distribution especiay, the two activities were often undertaken by the same person or were known by the same title as butcher or baker. Even so, the scale and importance of distribution cannot seriously be doubted.

In the twentieth century, transport and personal services have experienced relative and eventually absolute decline in employment principally as the result of competition, as the railway was challenged by road transport for both freight and individual travel, and productivity, as in the case of the railways, where new technology dispensed with the need for workers such as firemen, guards and administrative staff. The fact that the service industries overall continued to grow so strongly throughout the twentieth century while some sectors declined obviously indicates massive growth elsewhere. The dominance of distributive trades reflects the increasing structural complexity and consumerism of the modern economy. Far more commodities are available in an ever increasing array of quality, type, price and colour than ever before in response to the growth in spending power. The forms of distributional system have evolved and multiplied with some gains in productivity. The photographs of general stores with a vast array of assistants assembled outside are clearly mementoes of a past age. Pre-packaging and self-service have reduced the demand for labour, and a small supermarket can now be operated by a few assistants. But the effect of shops making better use of less staff has been offset by the vast proliferation of distributive outlets from department stores to the recent developments in the creation of massive shopping malls such as the Metro on Tyneside and Meadowhall in Sheffield, as well as supermarkets and retail centres on trading estates throughout the country.

But there has also been new and impressive employment growth in services in three other sectors: in the professions, financial services and public administration. The impressive increase of the two former sectors reflects the growth of demand for both consumer and producer services. Increases in individual prosperity, a strong characteristic of the modern era and the second half of the twentieth century in particular, have generated demands for insurance and banking facilities, building society loans for housepurchase, and, increasingly, for the investment of savings. Similarly, individual citizens draw upon the skills of the medical profession, lawyers, accountants and teachers. Industry and commerce depends on the same range of services, but the growth especially of financial services cannot be explained entirely in terms of derived demand from industry. The British financial sector and, particularly, the City of London has been a major component of the economy since the eighteenth century, drawing sustenance in the early years from landed interests and international commerce, expanding greatly in response to the opportunity to finance first British railways and then railways in many other parts of the world, and emerging in the latter part of the nineteenth century as the centre of world finance. This pre-eminence could not be sustained in the long run, but London is still a major international finance centre and its traditional international perspective remains undisturbed. The third of the new growth sectors is public administration. Public sector services have increased rapidly since the late nineteenth century as successive governments have undertaken the obligation to provide social security benefits, pensions, health, education, defence and a myriad of other services for their citizens.




Graph 2: *Source: J.* Wells, 'Uneven development and de-industrialisation in the UK since 1979' in Francis Green (ed.), *The Restructuring of the U.K.* economy (1989)

The public sector has become a major component of the modern economy, much greater than is suggested simply by the employment data because some public sector workers are, of course, included under the professions, such as teachers. As a share of national income, the public sector grew from under ten per cent in 1880 to a peak of 52 per cent a century later before the government clawed it back to 46 per cent by the beginning of the 1990s.[7]

## *Service sector productivity*

The substantial growth of services in the twentieth century, and especially in recent decades, has focused attention on the effect this has upon the growth of the economy particularly through productivity. The measurement of service sector productivity does pose a number of problems. In some cases it may be questioned whether the notion of productivity is relevant or beneficial. For example, if a doctor, lawyer or hairdresser increases his or her productivity by increasing the number of customers seen per hour this may reflect an increase in labour productivity but a loss in the quality of the service which depends essentially on personal care. Statisticians have added a further element of confusion by calculating the value of output in some services simply in terms of the cost of labour inputs. By definition this precludes any labour productivity increase.

Estimates of labour productivity in services for the nineteenth century derived for the United Kingdom, United States, France and Japan all suggest that some services, at the time, not only generated productivity gain but actually had a relatively high level of productivity. Foremost amongst these were transport and communication, notably railways which represented the greatest aggregation of capital investment in all countries.[8] Professions and financial services also generated a substantial gain in added value. Estimates for the United Kingdom have also suggested that service sector productivity was weaker than productivity growth in other sectors in the Victorian era and actually declined between the wars as employment grew faster than output. A variety of complementary explanations have been suggested including the impact of government legislation to ensure a socially desirable provision of railway services even on unprofitable routes, feeble control of operating costs in state monopolies like the Post Office, and the tendency of services to hoard labour in unproductive activities during depression.

During the Second World War service activities, other than the armed forces, lost labour and this increased their productivity.[9] Since the 1950s the services have enjoyed sustained productivity increase at an annual rate between two and four per cent. In some sectors, such as personal services and transport/communications this has been achieved partly by cutting employment; elsewhere, such as in the financial services, it has been secured by increasing the per capita output of an expanding labour force. Some of the major companies in the economy belong to the service sector, including the main high street banks, insurance companies like the Prudential, General Accident and Sun Alliance, retailers like Marks & Spencer and Boots, reflecting the obvious fact that dynamic growth and competitive edge is not confined to manufacturing. British productivity growth was sustained through the great boom of 1950-73, but fell thereafter, especially rapidly during the remaining years of the 1970s. In the earlier phase Britain took advantage of technological advances developed in the United States and elsewhere to update production and organisation.

## Services, growth and de-industrialisation

The recent attention paid to the service sector has been due largely to structural changes which have taken place in the economy since the downturn of growth in the 1970s. Both growth rates and productivity increase have decelerated. While this experience was cormmon to all the major industrial nations, the United Kingdom has tended to fare worse than most of its closest comparators such as France and Germany. For those who have assumed that industry is the prime driving force for both national income and productivity, the scale of de-industrialisation in the United Kingdom has been extremely worrying.[Graph 2] Manufacturing has fallen sharply as a share of both output and employment since 1979, and services have expanded in lieu. Between 1979 and 1987 manufacturing employment fell by two million while jobs in the service sector grew by the same amount, resulting in an effective sectoral redistribution of almost one job in ten. Since services now account for a very large share of both employment and output it is imperative that they con- tribute to productivity. In fact, they have done so, accounting for rather more than manufacturing between 1950-73 and rather less between 1973-87.[10] Furthermore, through the financial sector, services have made a substantive contribution to export earnings, allaying to some extent the fears often expressed about the impact of de-industrialisation on the balance of payments. But anxieties do remain. Further export gains in this direction may be hard to secure in a competitive area in which the United Kingdom is already highly competitive, and, overall, services do seem to be less successful than manufacturing in generating productivity.

## Conclusion

There is little doubt that the service industries will remain in the forefront of economic controversy in the foreseeable future. Not only have they become part of the de-industrialisation and productivity debate, but they have also become part of the related arguments about privatisation and the role of the public sector. Many of the industries which were privatised in the 1980s were services, including British Airways, British Telecom, and others are designated for (or going through) the same change of ownership, including British Pail. Furthermore, government efforts to cut public expenditure necessarily focused on services, as in the provision of opting out from local authority control for schools and the creation of trust status for hospitals, The productivity performance of the two types of ownership and control structure will doubtless become a testing ground for rival schemes and a continuing source of dispute. The service industries have always been an important part of the economy, whether in terms of employment or output. Perhaps the higher awareness of their importance generated by recent controversy will encourage historians to explore rather more fully than hitherto their contribution to earlier development. They may even unearth some further subjects of controversy.

## References


[1] **N. Kaldor,** *Causes of the Slow Rate of Growth in the United Kingdom* (1966).

[2] **R. Bacon & W. A. Eltis,** *Britain's Economic Problem: Too Few Producers (1976).*

[3] **House of Lords,** *Report from the Select Committee on Overseas Trade* (1985).

[4] **W. Baumol,** 'Macroeconomics of Unbalanced Growth', *American Economic Review* 57 (1967).

[5] **M. J. Wiener,** *English Culture and the Decline of the Industrial spirit (1981).*

[6] **Adam Smith.** The *Wealth of Nations (1776).*

[7] **C.H. Lee,** 'The Service Industries' in P,. Floud & D. McCloskey (eds.), *The Economic History of Britain since 1700, Volume 2: 1860-1939* (2nd.,1994).

[8] **N. Gemmell & P. Wardley,** 'The Contribution of Services to British Economic Growth 1856-1913'. *Explorations in Economic History,* 27 (1990).

[9] **R. C. 0. Matthew, C. H. Feinstein &J. C. Odling-Smee,** *British Economic Growth 1856-1973* (1982).

[10] **N. F. R. Crafts,** 'Can De-Industrialis ation Seriously Damage Your Wealth?', *Hobart Paper* 120 (1993).



**ReFRESH** is sponsored by the Economic History Society and appears twice yearly in the Spring and Autumn. It is edited by Dr David Jenkins, Dr Paul Johnson and Dr Katherine Watson.

The first seven issues of **ReFRESH** are available as: A. Digby & C.H. Feinstein, eds., *New Directions in Economic and Social History* (MacMillan, 1989), £9.99 pb and £25 hb, ISBN 0 333 49569 1 and 0 333 49568 3. Issues 8 to 14 are available as A. Digby, C. Feinstein & D. Jenkins, eds., *New Directions in Economic and Social History, Vol II* (MacMillan, 1992), £9.99 pb and £35 hb, ISBN 0 333 56809 5 and 0 333 56808 7.

The U.K. subscription rate for **ReFRESH** is £3.50 for 1 year or £6.00 for 2 years. (Overseas: £4.50 for 1 year or £8 for 2 years. Remittances should be made in Sterling.) Bulk orders for 10 or more copies of issues 10 to 21 may be purchased for £1 each in the U.K. Please send cheques, payable to **ReFRESH**, to the Editors at the Department of Economics, University of York, Heslington, York, YO1 5DD.

ISSN 0268-683 X

Printed by Peter Turpin Associates, York