

# **Productivity and Performance of Public Sector Organisations**

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## **Introduction**

The growth, development and prosperity of nations and organisations depend fundamentally upon productivity. Little, however, is known about the productivity of about 70% of a developed economy's activities. Attention is primarily focused upon the growth of productivity of the manufacturing sector of an economy. In this post industrial age, however, the services sector, including public services, usually account for about three-quarters of Gross Domestic Product (GDP). Within firms in the manufacturing sector central services contribute much to value added but little is known about the productivity of these central services.

Despite its importance our knowledge about measures of productivity in the various sectors of an economy is very thin. Equally we know little about the linkages between productivity and growth (Baumol et. al. [1]).

Of the services sector of developed economies the public sector is by far the dominant element. In 1995/ 96 public expenditure in the UK was 43.4% of GDP, at

market prices. National income accountants measure the public sector in terms of its inputs. This has the consequence of assuming that productivity increases in the public sector are zero (Brown and Jackson [2]) and produces a “relative price effect” in the national income accounts which in turn is reflected in public expenditure rising as a share of GDP. The nature of this relative price effect which follows from the assumption of a productivity differential between the public and private sectors is explored in this paper. Is the productivity of the public sector necessarily less than that of the manufacturing sector? To answer this question it is necessary to have reliable measures of productivity or value added that will enable comparisons to be made. Such measures are, however, not available. In recent years, however, attempts have been made to produce performance indicators for public sector activities. These developments within the framework of a “balanced scorecard” are examined.

Attempts to compare the productivity of public sector utilities before and after privatisation have produced mixed results. Never-the-less the emergent view is that some productivity improvements have been recorded but these arise more as a result of increased competition rather than a change in ownership.

Given the size of the public sectors of modern economies a small increase in public sector productivity will have a significant impact upon national economic growth and prosperity.

## Thinking About Productivity

Economics provides a strict definition of productivity, it is the ratio of output to input.

Let  $\phi$  be productivity then

$$\phi = \frac{Q}{K + \beta Q}$$

where  $Q$  = total output per time period

$K$  = fixed factor of production

$\beta$  = variable factor per unit of output

$$\therefore \phi = \frac{1}{K/Q + \beta}$$

Productivity will increase over time if  $\beta$  decreases i.e. the volume of the variable factor of production is reduced per unit of output and/ or if  $K/Q$  falls i.e. the amount of the fixed factor per unit of output declines. Whilst  $K$  might fall in the long run, in the short run it is fixed which implies that  $K/Q$  will fall if the rate of output growth per time period increases. This can arise through improved management techniques. In the long run technical change will reduce  $K/Q$ .

Hayes and Clark [3] from an extensive study of US factories found that capital investment in new equipment was necessary to maintain continuous improvement in total factor productivity. However whilst new technology and capital investment may be necessary for improvements in total factor productivity they are of themselves not sufficient. Much depends upon the management of the changes - how the new technology is implemented and whether labour is adequately trained and skilled in its

use. Changes to production processes have to be actively managed and a failure to do so will result in lower levels of productivity.

There is, however, a weaker definition of productivity which is more appropriate for discussions of public sector productivity performance. That is, productivity is the results which are achieved per unit of resource. A “results” based approach overcomes the problems involved with the lack of adequate measures of public output or the value added by public services. Discussion of public services productivity in terms of results focuses attention upon the strategic objectives of the public sector. Performance measures or measures of success then become surrogates for productivity measures.

Lest it be thought that this is a significant departure from private sector practice it is not. Improvements in productivity show up in improved results as indicated in performance measures such as the rate of return on capital; the growth in sales; the increase in market share and so on. Also, improvements in productivity arising from specific activities such as R and D or an advertising campaign are equally difficult to isolate and measure in the private sector. These and similar activities are judged in terms of their “results” - i.e. did they meet specific performance targets.

A distinction has to be drawn between productivity and efficiency. They are different concepts though frequently confused. “Downsizing” a much softer term which replaced the harsher words of redundancy and layoffs results in measured increases in productivity and efficiency. Capital and labour services which did not add net value (i.e. did not cover their costs) were dispensed with. In many cases cheap capital replaced more expensive labour. The remaining capital and labour produce

more output thus “productivity” is seen to increase - i.e. after redundancy pay and plant closures have been written off. These are, however, efficiency gains.

Productivity, however, means “getting more out of more” i.e. producing more whilst at the same time getting the most out of the organisation’s resources. It means expansion in output, capital and labour. Increasing productivity should be associated with growth in employment. As already noted the sources of productivity growth are technological innovation and improvements in the quality of the workforce.

For example, investment in IT has produced efficiency gains particularly in the services sector where white collar clerical jobs have been reduced. On the banking sector clerical workers have been replaced by ATMs. In general labour has been substituted by capital in the “transactions intensive” sectors of the economy. These are, however, one off efficiency gains. The issue of productivity is, how can these be sustained? Schumpeter [4] many years ago argued that success in a dynamic competitive environment requires new products, new technologies and new markets. This in turn demands investment in human capital and innovation.

## **Unbalanced Productivity and The Public Sector**

Baumol’s [5] model of unbalanced productivity has been used to provide powerful insights to the dynamics of the public sector. The essence of the approach is that if it assumed that the growth in productivity in the private manufacturing sector of an economy exceeds that in the government sector and if, furthermore, it is assumed that money wages grow at the same rate in both sectors then a number of

consequences follow from the “arithmetic” of some very plausible assumptions (see Annex).

First, provided that the income elasticity of demand for public sector goods is at least equal to the price elasticity of demand then the share of public expenditure in GNP (and also taxation’s share) will rise over time.

Second, those employed in the public sector as a proportion of total employment in the economy will also rise over time.

Third, these observations will be true for zero growth in the *output* of the public sector. In other words, the dynamics that follow from the unbalanced productivity growth model imply that it will cost the public sector more and more over time simply to stand still.

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FIGURE 1  
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These are indeed powerful insights which help to temper a number of extreme interpretations about the efficiency of the public sector drawn from vulgar reading of national income statistical time series. This can be illustrated in Figure 1. The economy is represented as two sectors. The private manufacturing sector producing output ( $Y_p$ ) and the government sector producing publicly provided services ( $Y_g$ ). Productivity growth in the private sector is given by  $\gamma$  and productivity growth in the government sector is  $\alpha$ . There is a productivity differential  $\gamma > \alpha$ . In Figure 1 the

production possibility frontier moves out in such a way which reflects this productivity differential. It moves along the horizontal axis faster than along the vertical axis.

If it is assumed that the economy grows along the ray AB this implies that the ratio of government to private outputs ( $Y^g/Y^p$ ) remains constant. However, the relative prices of government to private outputs, given by the slope of the production possibility frontier increases. This is shown by the different gradients of CD and EF. In other words, the productivity differential gives rise to a relative price effect. Publicly provided goods become relatively more expensive compared to private goods and the share of public expenditure (and taxation) in GNP will increase.

It should be noted that nothing judgmental is being claimed about the relative efficiencies of the two sectors. Even if the two sectors were operating at 100% efficiency on their efficiency frontiers the same results would hold true.

This analysis proceeds on the assumption of constant demand conditions i.e. fixed consumer preferences. Suppose, however, that over time consumers shift their preferences away from private goods to government goods. This is shown as a movement from G to H. Then the relative price effect is even greater. Not only will the relative price of government services have increased but the quantity demanded will also increase. It, therefore, follows that public expenditure as a proportion of GNP will also increase. Again this does not represent inefficiency. Provided that the government services produced are in accordance with consumers' demands and that they are being produced at minimum cost then there is no allocative inefficiency.

Finally, this analysis has so far been conducted assuming a fixed or unchanging service environment. This, however, is seldom the case in the public sector. To

illustrate what is meant by the service environment consider the police services. Assume that the service output of the police is to maintain a certain level of public safety which can be thought in terms of the probability of someone being involved in a particular category of crime. The police deploy resources through a set of activities defined by a technology in order to keep that probability (level of safety) constant.

Now suppose that there is an increase in the propensity to commit a crime (i.e. be the victim). There is a crime wave. Then the police need to allocate more and more resources just to stand still. Output (i.e. the level of safety as measured in probabilistic terms) doesn't increase but the volume of inputs do. Without reflecting upon what is happening the wrong inference could be drawn - namely that productivity is in decline. In that case  $\alpha$  would be negative whilst  $\gamma$  is positive and the relative price effect would be even greater. This is illustrated in Figure 2 in which the production functions are drawn parametrically to different service environments (H).

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FIGURE 2  
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What this analysis does is to place public sector productivity at the centre of any understanding of the dynamics of the public sector and the interpretation of time series statistics relating to the public sector.

### **Productivity in the Public Sector**

What is known about productivity in the public sector? The same question applies to the services sector generally. Is it, for example, strictly true that public sector productivity growth is slower in the public sector compare to the private sector? Can productivity differentials be employed to explain the rapidly rising costs of health care and education services; the rising price of opera tickets; the rising costs of legal services; and the rising price of insurance. Can the relative price effect also be used to explain the decline in the quality of many public services as rising costs impact upon declining real public sector budgets? Does this unbalanced productivity phenomenon help to contribute to an explanation of “public squalor amidst private affluence” (Galbraith [6]).

Whilst productivity and wealth in the private sectors of the major OECD industrialised nations is growing the private and public services which contribute so much to the quality of life are constrained through lack of resources. These issues and their attendant questions were raised by Baumol and Bowen [7] over thirty years ago in the context of the performing arts and yet they have not been fully appreciated.

Productivity in the various sectors and industries of an economy do not display wild fluctuations over time. Those areas of the economy which lagged behind others 50 years ago tend to do so today. These lagging industries have embedded in them a fundamental production function which generates their price history. This is the case of personal services (public and private) as demonstrated by reference to the unbalanced productivity model which gives rise to a “cost disease” - the cumulative and persistent increase in their costs usually exceeds the average rate of inflation.

The basic feature of the personal services is the labour intensity of their production function. The “service” element is the personal attention given by doctors, nurses, teachers, social workers and in the case of restaurants chefs and waiters. Any substitution of labour by capital would completely destroy the nature of the service. This raises an important methodological point which is often ignored. Whilst it is possible through technical change to substitute capital for labour in the production of personal services if the nature of the service changes then is it legitimate to count this as a productivity improvement?

Because personal services are difficult to standardise it is problematic to automate the production process. Whilst a robotic assembly line can be devised that will mass produce identical automobiles; fridges; CD players; personal computers, etc, when it comes to personal services the precise nature of the problem to be dealt with has to be identified and then a customised service has to be designed. This is certainly the case with medical treatment; student tuition; a haircut or a gourmet meal.

The quality of personal services is embedded in the quantity and quality of the labour content that is used to produce them. If the amount of time that a doctor spends with a patient or a teacher spends with a student is reduced then some might regard this as a productivity improvement but it can also be perceived, and usually is, as a reduction in quality. Despite the availability of new medical technologies and teaching aids there is still a minimum amount of time which doctors and teachers need to spend with their clients and these barriers are inescapable.

Baumol has illustrated these features of public services in a customary imaginative and colourful way through the example of the production of a Mozart quartet. The productivity of the quartet has remained constant for all time. It is not possible to

increase its productivity by reducing the number of players by one for then it ceases to be a quartet and the product is completely destroyed in the process of increasing productivity. The product is also destroyed if the players speed up their playing and complete their performance in 10 minutes rather than 15 minutes! (Baumol and Bowen op cit).

Of course modern technologies have resulted in the mass broadcasting of a Mozart quartet via radio, television and CD but whilst that has increased the access of audiences it has not increased productivity of the *production* of the performance. These technological changes apply more to the productivity of the consumption technology. Moreover, a recording of a performance is a different product to a live performance. Like is, therefore, not being compared with like.

If the wages of the quartet players increase over time whilst productivity remains stagnant then the cost disease means that performance costs will steadily rise over time. This accounts in part for the increase in the costs of the BBC and the Royal Opera House. Inefficiency nor the extraction of high rents by performing artists are not to blame.

On the one hand the costs of public services are bound to rise whilst on the other tax cutting governments cut back on public spending. What are the consequences? Reductions in the quantity and quality of public services.

What do the data reveal? Baumol's [8] own studies refer to the USA but similar conclusions can be drawn for the major OECD countries. Take medical care, for example, between 1947 and 1986 the annual rate of increase in the price of a visit to a general practitioner was 5.5% per annum compared to the annual rate of inflation

of 4.2% per annum. This 1.3% differential p.a. when compounded over a 40 year period means that the absolute price of a physician's visit increased by 750% whilst that of the general price index rose by about 600%.

When it comes to the cost of a patient day for an episode of care in a hospital the picture is even more dramatic. The US Bureau of the Census shows that the cost of a patient day increased by 11.7% (compound) per annum. Over a 40 year period this amounts to a 9000% increase. How can productivity improvements be used to counter this?

Technological aids certainly help to monitor patients but do not dispense with the services of nurses and doctors. Rather they add to the quality of the service and at the same time to the cost. Reducing the amount of time a patient stays in bed will increase the volume of throughput but will not reduce the cost per patient bed day. In an act of desperation someone suggested that the only way in which costs could be reduced was to have more than one patient in a bed!

Even increasing the throughput of patients is a contested productivity improvement. Whilst it might mean that waiting lists are reduced faster - hence a productivity improvement to the system as a whole, nevertheless, this has to be balanced up against the increase in the volume of outpatient care and also that many believe that whilst patients leave hospital quicker they can also leave sicker!

## **Public Sector Productivity and Privatisation**

What has happened to public sector productivity as a result of privatisation? Whilst this is a comparatively simple question to ask to answer it is full of problems. First, it is necessary to ensure that the objectives of the utilities that were privatised are the same pre and post privatisation. It is essential to compare like with like. Yet there is every reason to suppose that this is not the case. Public enterprises pursued multiple objectives which included political as well as commercial goals. For example, the price (and hence profits) of nationalised industries in the UK were frequently used as part of the government's income (welfare) distribution policy - price rises were frequently constrained and losses were made. Also, the nationalised industries were often used as employer of last resort. After privatisation these socio-political objectives were lost.

After privatisation the profits of the privatised utilities increase (Bishop, Kay and Mayer [9]). Was this due to productivity improvements or was it because of increases in prices? Electricity prices rose by 13% after privatisation in 1992 but customer complained about the perceived reductions in the quality of services.

In an important study by Hartley and Parker [10] the performance of the newly privatised companies was examined from three perspectives :

- (i) total factor productivity
- (ii) employment
- (iii) financial ratios

They could find no conclusive improvements in performance, including productivity, as a consequence of privatisation thereby concluding that ownership was not the key to productivity improvements. Rather it is to be found in the quality of management and the degree of product market competition. Hutchinson [11] even found that there might be evidence that public ownership was associated with higher rates of growth of

labour productivity. Similar results are found in Foreman-Peck and Manning [12]; Bishop and Kay [13]; and Bishop and Thompson [14].

## **Differential Productivity**

Is there evidence of productivity differentials between the public and the private sectors? Simply comparing average output per person in the manufacturing sector of the UK economy between 1960 and 1995 with output per person for the whole economy gives an average of 5.1% p.a. for manufacturing and 2.4% for the whole economy. It is clear from this simple comparison that the average annual increase in productivity for the private and public sectors is below that for manufacturing. Thus, there is ample evidence to support the unbalanced productivity thesis and the cost disease or is there?

Whilst the above comparisons made above are undoubtedly crude it is extremely difficult to obtain more refined productivity measures for public services. We know what should be measured but it is in practice very difficult to carry out the measurement. First, there are no ready measures of public service outputs. Second, because public services are not sold on open markets there are no measures of value added.

In recent years, however, active measurement of the performance of the public sector has been undertaken. Much of this has been summarised in Jackson [15].

## **The Public Sector's Balanced Scorecard**

Productivity improvements show up as improved results. Thus, one way of searching for the snark of public sector productivity is to devise a set of performance indicators which will reflect improvements in results. Results based performance indicators are, however, more than just financial indicators. Following the work of Kaplan and Norton [16] on the “balanced scorecard” it is now generally accepted that the success of any organisation must be evaluated against a wide set of results indicators, some financial and some non financial. The balanced scorecard approach should, therefore, provide insight into the public sector unbalanced productivity thesis.

The balanced scorecard devised by Kaplan and Norton (op cit) sets out four perspectives of performance. These are :

- financial
- customer
- internal business processes
- organisational learning

see Figure 3.

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FIGURE 3  
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One of the key features of the balanced scorecard approach is that it links strategy to performance. As one observer remarked, “organisations can charge over the edge of a cliff with great efficiency”. In other words efficiency is necessary but not sufficient.

Performance must be leading in the right direction and that can only be discovered if a clearly articulated strategy exists.

It is well known that “you get what you measure”. Performance indicators and measures are powerful motivators. They signal what management thinks to be important and it should come as no surprise when employees direct their energies at delivering in these areas. Unless the performance indicators are balanced across the four key areas that Kaplan and Norton suggest then activities within the organisation become biased and a different kind of unbalanced productivity can emerge. A range of performance indicators which are tied into the organisation’s strategy increase the chances of achieving higher rates of productivity improvement (Jackson [17]).

The public sectors of the major OECD countries have over the past fifteen years devoted a great deal of effort to improving the measurement of the performance of government departments and agencies. They have produced measures that can be thought of as constituting some kind of balanced scorecard for the public sector whilst public sector managers have increasingly focused upon performance management of activities and results driven strategies (Jackson, op cit).

Research carried out by Jackson and Palmer [18] and covering the period 1990 - 1994 shows that performance measurement data are primarily used for the purposes of accountability and control. Changes in the data recording and measurement system along with changes to the definitions of variables renders useless the employment of time series of performance measures for the purpose of analysing trends in public sector productivity.

This means that to date no adequate measures of the trends in public sector productivity exist; neither for the whole of the public sector nor for individual services such as education or health. Adjustments to the National Income accounts are, therefore, not possible with the result that public expenditure as a proportion of public expenditure over time will rise purely as a consequence of the relative price effect convention of assigning a zero productivity increase to the public sector.

Whilst this might suggest a situation of despair all is not gloom. The publication of annual performance indicators by the Audit Commission does enable some conclusions to be drawn about the changing state of local government services in England and Wales.

The most recent set of indicators refer to 1995/ 96 and were published in February 1997 (Audit Commission [19]). They reveal improvements in the areas of social services, special education needs, council tax and benefit services since the performance indicators were first published in 1995. These improvements were made against a background of reduced real public expenditures. Some of the summary results are shown in Table 1 which also gives a flavour of the kind of performance indicator which is used.

Whilst the activity based improvements outlined in Table 1 refer primarily to operational processes they do not reveal anything about the amount of value added or improvements in productivity. They provide qualitative indications that the *efficiency* of public services is probably improving - at least on the basis of the indicators employed. What cannot be concluded from these data is whether or not productivity has improved. As already noted productivity and efficiency are not the same thing.

## **Conclusions**

Productivity measurement in the public sector is in its infancy. This article has reviewed the main conceptual issues which need to be considered by any measurement system. Whether or not services, which are currently in the public sector, remain there or are transferred to the private sector the measurement problems will remain to be resolved. Given the importance of these services in the total of GDP there is a great danger that the total productivity of an economy will be greatly underestimated. Just how much this is remains to be seen.

The principal problems centre around the difficulties of measuring the output of the public sector. This means that crude productivity indicators which rely upon input and activity measures will result in the Baumol disease problem because the implicit productivity assumptions will understate the true measure.

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## Annex

### *The Unbalanced Productivity Model*

In a now famous paper Baumol [5] presented a model of unbalanced productivity growth. This has been generalised and extended by amongst others Jackson and Ulph [20] and Leslie [21]. Following Leslie the essence of the model can be expressed as follows.

An economy is divided into three sectors, the private marketed services sector; the non-marketed government sector; and the private production (manufacturing) sector. The outputs of these sectors are represented as:

$$(1) \quad Y_{m t} = e^{\alpha t} L_{m t}$$

where  $Y_{m t}$  = output at time t in the private marketed service sector  
 $L_{m t}$  = employment in the private marketed service sector  
 $\alpha$  = rate of productivity growth

$$(2) \quad Y_{g t} = e^{\alpha t} L_{g t}$$

where  $Y_{g t}$  = output at time t in the government non-marketed sector

For simplicity of construction only, it is assumed that the rate of productivity growth in these two sectors is (on average) equal.

$$(3) \quad Y_{p t} = e^{\beta t} L_{p t}$$

where  $Y_{pt}$  = the output of the private production sector

The unbalanced productivity story depends upon the assumption that  $\alpha$  and  $\partial$  differ between the services and the manufacturing sectors.

Jackson and Ulph [20] demonstrated that if the price and income elasticities of demand were equal and that if consumers maintain their consumption of services and manufactured goods in fixed proportions then :

$$\frac{Y_{gt}}{Y_{mt}} = C_1$$

and

$$\frac{Y_{mt}}{Y_{pt}} = C_2$$

where  $C_1$  and  $C_2$  are constants.

If perfect competition is assumed in labour markets then the money wage rate will grow at the same rate in all sectors of the economy. Let this rate be  $\delta$ . Then it follows that :

$$W_{gt} = b_1 W_{mt} = b_2 W_{pt} = W_0 e^{\delta t}$$

where  $W_0$  = the base money wage rate

Note that because  $\alpha$ ,  $\delta$  and  $\partial$  are parametric to the model this approach explains the growth in relative prices not absolute prices (Leslie [21]).

Differences in average labour quality between sectors are reflected in the parameters  $b_1$  and  $b_2$ . The parameters will also capture any distortion in labour markets.

Having established the basic foundations of the model it is now possible to proceed to explore the properties of the unbalanced productivity approach.

First, it can be used to generate the universal observation that as an economy develops then there is a shift in employment out of the productive manufacturing sector and into the services sector.

$$L_s = L_g + L_m$$

where  $L_s$  is total employment ( $L$ ) in the services sector made up of government and private marketing service employment.

Thus, the share of employment in the service sector is

$$\begin{aligned} \frac{L_s}{L_s + L_p} &= \frac{1}{1 + (L_p / L_s)} \\ &= \frac{1}{[1 + Y_p e^{(\infty-\partial)t} / (Y_m + Y_g)]} \end{aligned}$$

In terms of outputs :

$$\frac{(Y_{m,t} + Y_{g,t})}{Y_{p,t}} = C_1 C_2 + C_2$$

$$= C_0$$

$$\frac{L_s}{L_s + L_p} = \frac{I}{I + C_0^{-1} e^{(\infty-\delta)t}}$$

As  $t \rightarrow \infty$  since  $\delta > x$  then  $C_0^{-1} e^{(\infty-\delta)t} \rightarrow 0$ .

It, therefore, follows that the share of employment in the services sector of the economy will increase as the economy grows. As employment in the services sector grows productivity growth in that sector declines to the limit  $x$ .

Now consider unit labour costs in the government sector.

$$\frac{W_g L_g}{Y_g} = B_g e^{(\delta-\infty)t}$$

where  $B_g$  is a constant.

The corresponding expression for the private product sector is :

$$\frac{W_p L_p}{Y_p} = B_p e^{(\delta - \infty) t}$$

Because  $\infty < \partial$  then labour costs will rise more rapidly in the government sector relative to the private product sector.

In terms of relative prices (P)

$$P_g = (1 + \pi_g) B_g e^{(\delta - \infty) t}$$

$$P_p = (1 + \pi_p) B_p e^{(\delta - \infty) t}$$

where  $\pi$  is the profit mark up. In the case of  $\pi_g$  it is assumed that the government sells its output on the open market. This is generally not true and will be relaxed shortly.

The relative growth in relative prices is  $P_g/P_p$  is  $\partial - \infty$ . This means that the price of government output relative to private manufacturing output will rise because  $\partial > \infty$ .

What follows from this? If individuals wish to maintain a constant proportion of services (government and private sector) to private production in their budgets then more and more of their after tax income will be devoted to expenditure on services. It also follows that the amount of GNP taken in taxation will also increase over time.

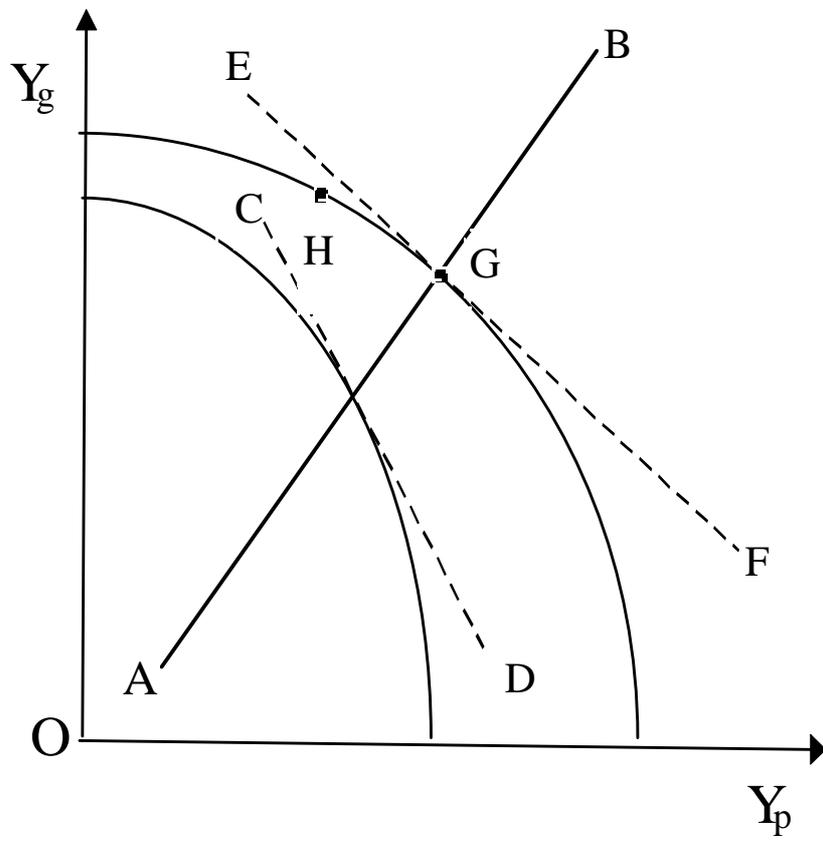


FIGURE 1

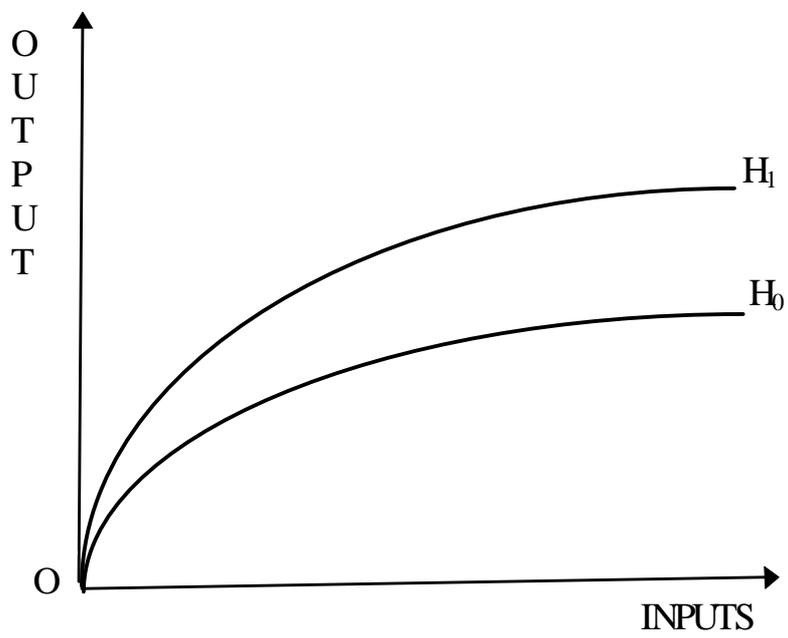


FIGURE 2

### FIGURE 3

**Table 1****Key Performance Indicators****Local Government England and Wales 1995/96**

<b>Service</b>	<b>% Improved</b>	<b>% Stayed the Same</b>	<b>% Worse</b>
Special educational needs statements prepared within 18 months	59	2	39
Equipment to help people live at home provided within 3 weeks	51	8	41
Adults into residential care who were offered single rooms	54	6	40
Children in council care in foster homes	63	9	28
Trading standards inspections per high/medium risk premises	50	2	48
Average time to re-let council homes	42	5	53
Tenants more than 13 weeks in rent arrears	33	18	49
Household waste recycled	48	20	32
Household planning applications in under eight weeks	45	0	55
Council Tax Benefits processed in 14 days	65	4	31
Council Tax collected	74	6	20
Cost of Council Tax collection	51	10	39
Food premises inspections	46	8	46

**Source: Audit Commission 1997 and Local Government Chronicle 7.3.97**