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Addendum

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Summary

This addendum brings together the concepts of economic potential, taxable capacity, and the economic upper limit to taxation.

It complements those chapters in Volume 3 dealing with Spatial Economics, in which Colin Clark's work on economic potential is discussed, and a series of five maps is used to illustrate changes in the pattern of economic potential over time (pp.44-71).

In the 1970s, Ronald Burgess had analysed the economic upper limit of taxation in relation to economic potential and the taxable capacity of firms, which he equated to the sum of net disposable property income (or profits), and the total amount of taxation.

The effect of different methods of taxation on the geographical distribution of the economic upper limit to taxation is illustrated in Figure 1, and Colin Clark's map of economic potential within the UK, as it was calculated in 1966, is reproduced in Figure 2.

These empirical observations suggest that the economic upper limit to taxation will vary not only from time to time, but also from place to place within any given country or region, and that it will be affected by the characteristics of the system of taxation.

Figures 3 to 6 develop the concept of the gradient of economic potential and its impact on specific local authority areas in the UK.

If the system of taxation is not related to the taxable capacity of firms, then participation in a customs union is likely to intensify the concentration of commercial activity in areas of high potential around London and the south-east.

Conversely, a reduction in the general level of taxation will tend to disperse economic activity across a wider geographical area.

The upper limit of taxation

In Figure 1, a region with economic potential rising from P1 to P2 has a total taxable capacity bounded by the area P1, T1, T2 and P2.

Given a uniform tax incidence across the region, the economic upper limit to taxation is bounded by the area a, b, c, d. If taxation is raised above the line b-c, the economic upper limit will first be exceeded in areas with low economic potential. Firms operating at position T1 will no longer be profitable, and may raise their prices.

Under a proportional tax system, the upper limit is bounded by the area a, e, f, d. Provided that taxation remains below the level of the line e-f, all firms are able to achieve the normal rate of profit.

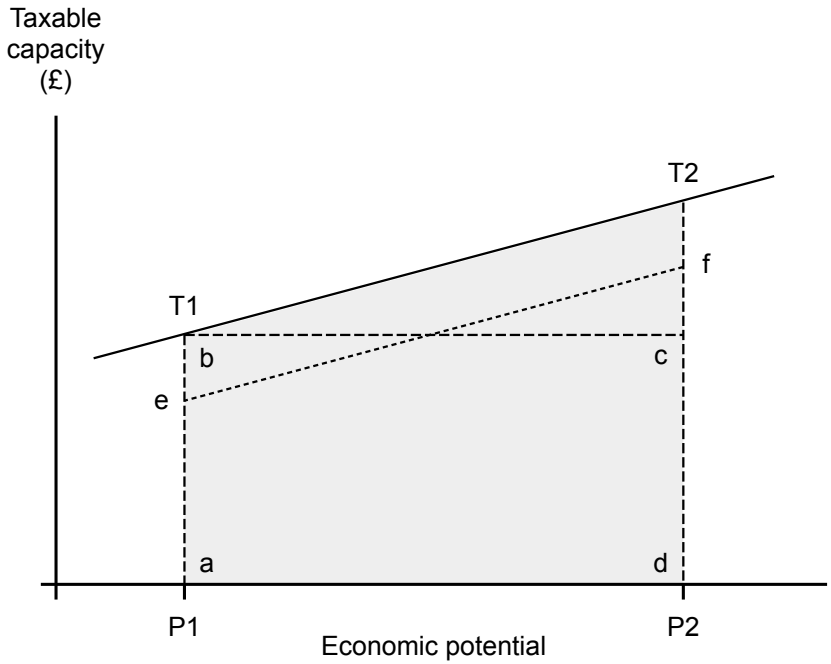

Figure 1: Economic potential and the upper limit of taxation

Taxable capacity

The concept of an economic upper limit to taxation owes much to the early empirical investigations carried out by Colin Clark.[1]

In his development of this concept, Ronald Burgess concluded that the effective incidence of taxation can be assumed to fall upon profits, and that economic potential is an indication of the relative taxable capacity of firms in different areas of a trading economy.

He took up this theme in an early ESA research paper on local government,[2] and developed it further in a later publication on the relationship between high taxation and the annual rate of inflation, from which Figure 1 has been reproduced in a modified form.[3]

Economic potential

The distribution of economic potential in the UK, as calculated by Colin Clark in 1966, is illustrated in Figure 2. The detailed method of calculation is set out in the original publication.[4]

The economic potential at any location is measured in arbitrary units and, in this case, covers a range from 800 to 1400 units. The gradient of economic potential runs predominantly from north to south, and there is a marked concentration in the south-east region.

In his discussion of these results, Clark stated that: 'A potential of 1150 units, on this arbitrary scale, appears to constitute a clear dividing line. Outside it lie the whole of Scotland, most of Wales, the remoter parts of Northern England, Devon and Cornwall, and part of East Anglia.' On this basis, he proposed differential rates of taxation across the UK, with higher rates applied in the areas with relatively high economic potential, and lower rates elsewhere.

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1 *Public Finance and Changes in the Value of Money*. Economic Journal, Vol. 55, No. 220, December 1945, pp.371-389.
2 *Local Government Finance*, ESA Research Paper No. 2, January 1970.
3 *Fanfare to Action*, ESA Research Paper No. 3, January 1973, pp.43-47.
4 *Industrial Location and Economic Potential*, Lloyds Bank Review, 82, 1966.

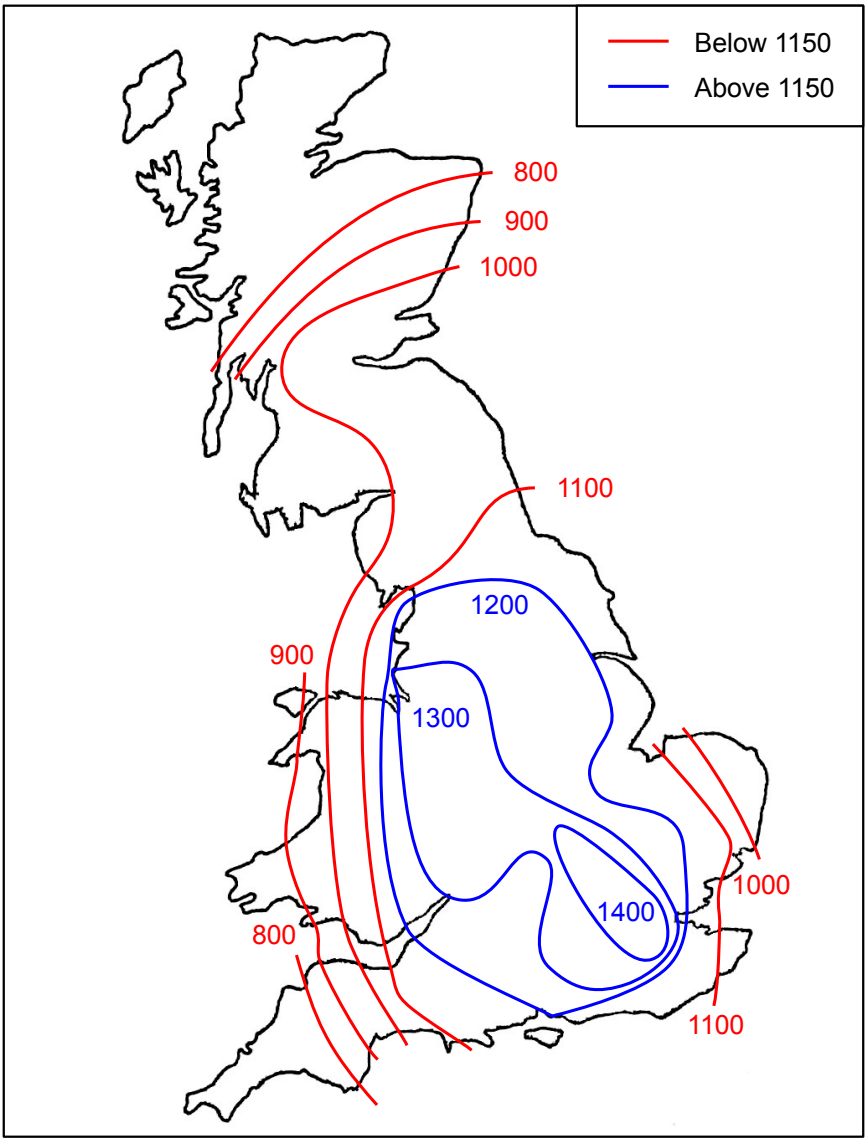

Figure 2: The distribution of economic potential in the UK

The gradient of economic potential

Figure 3 reproduces the 1966 distribution of economic potential in relation to four local authorities, namely Moray, Northumberland, Derbyshire, and the Greater London area. It may be assumed that this represented the position prior to joining the customs union of the EEC in January 1973. As the level of taxation rises, firms in areas of low economic potential are likely to raise their prices, move towards areas of higher economic potential, or cease trading.

The effect of a customs union

Colin Clark also calculated the potential effect of a customs union on the distribution of economic potentials in western Europe.[5]

Figure 4 shows an extension of Clark's analysis, adjusted to use the same scale of units as in Figures 2 and 3, and with the area of high potential around Greater London retained at 1400 units.

The general effect is to increase the steepness of the gradient of economic potential from north to south. Other things being equal, an increase in the level of taxation above the economic upper limit will tend to intensify the concentration of commercial activity in the south-east, whilst reducing the level of activity in other areas.

The reduction of taxation

Figure 5 is a speculative illustration of the effect of a reduction in taxation using the same scale of units as in the previous figures.

The gradient of economic potential from north to south is less intense. As taxation is reduced below the economic upper limit, there is a dispersal of economic activity away from the south-east, and an increase in the commercial attractiveness of other areas.

5 *Industrial Location and Economic Potential in Western Europe*, C. Clark, F. Wilson and J. Bradley, Regional Studies, Vol. 3, Issue 2, pp. 197-212, 1969.

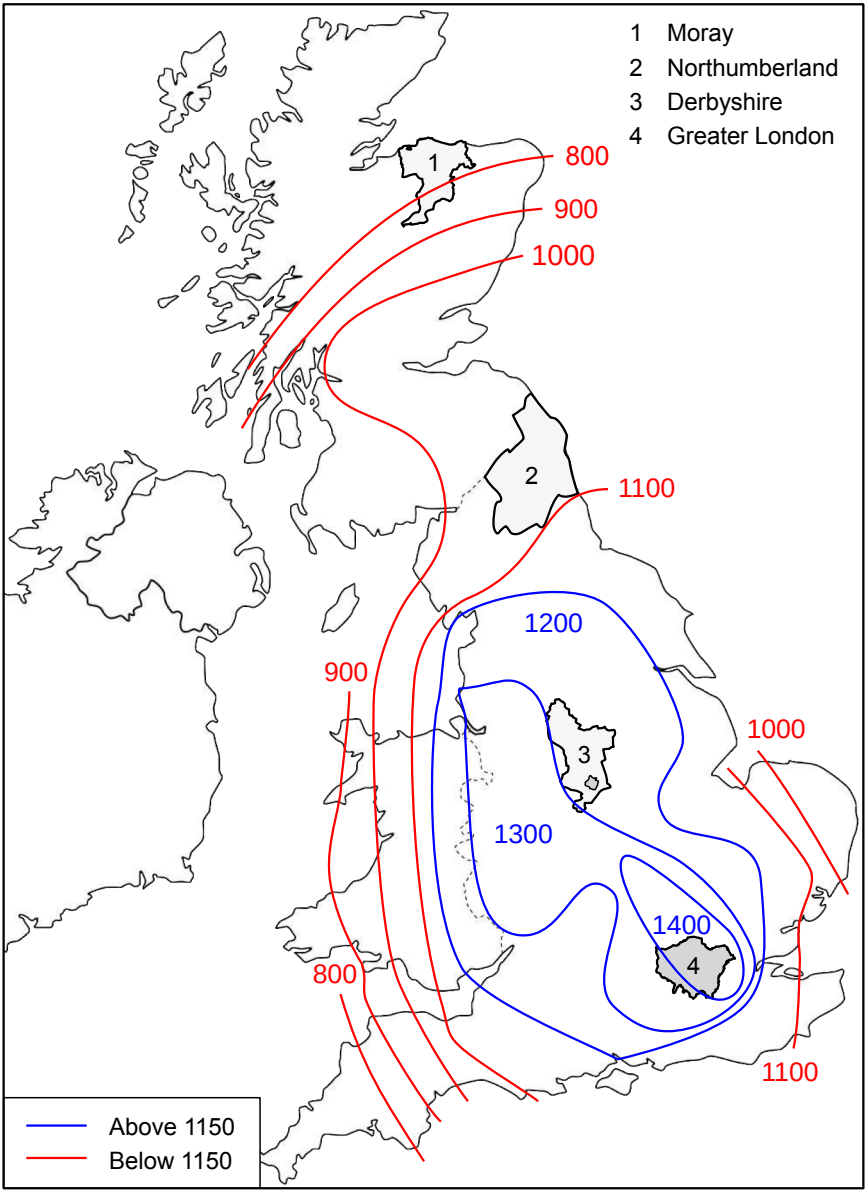

Figure 3: The distribution of economic potential (1966)

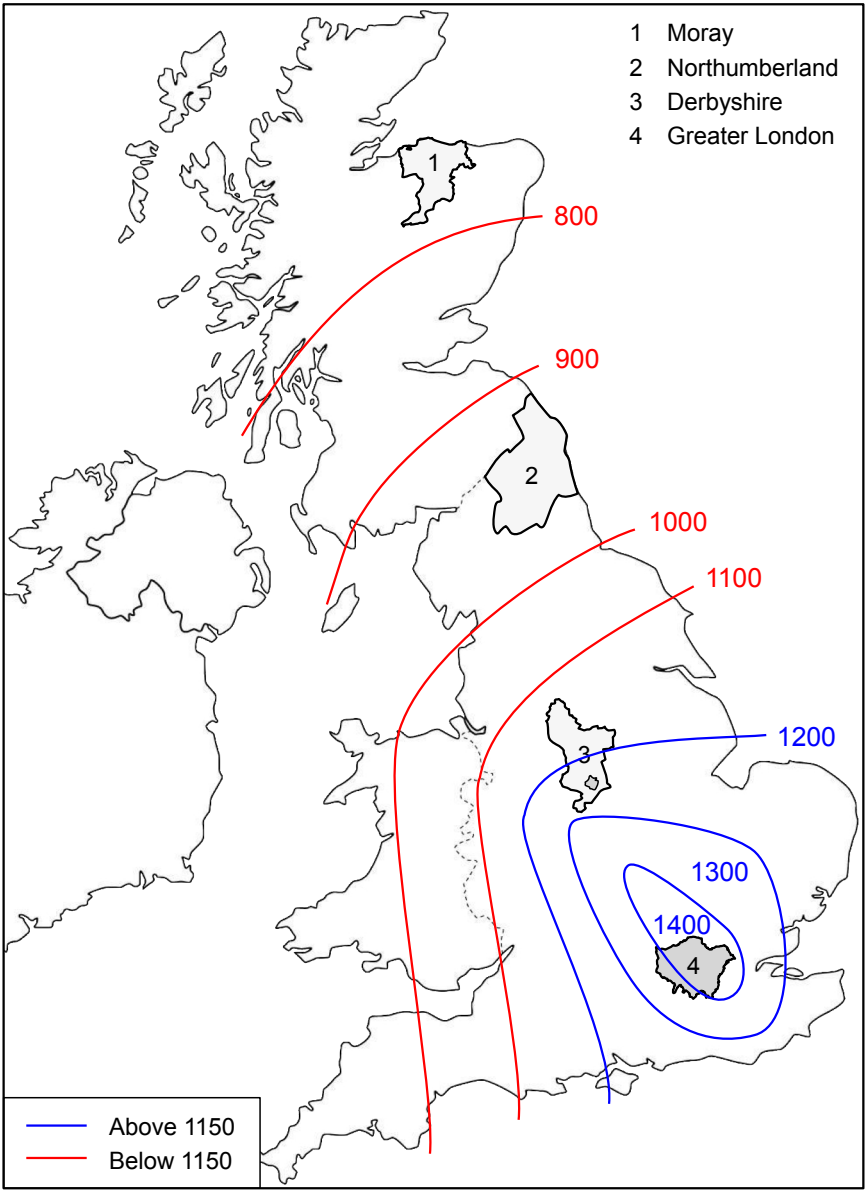

Figure 4: The concentration effect of a customs union

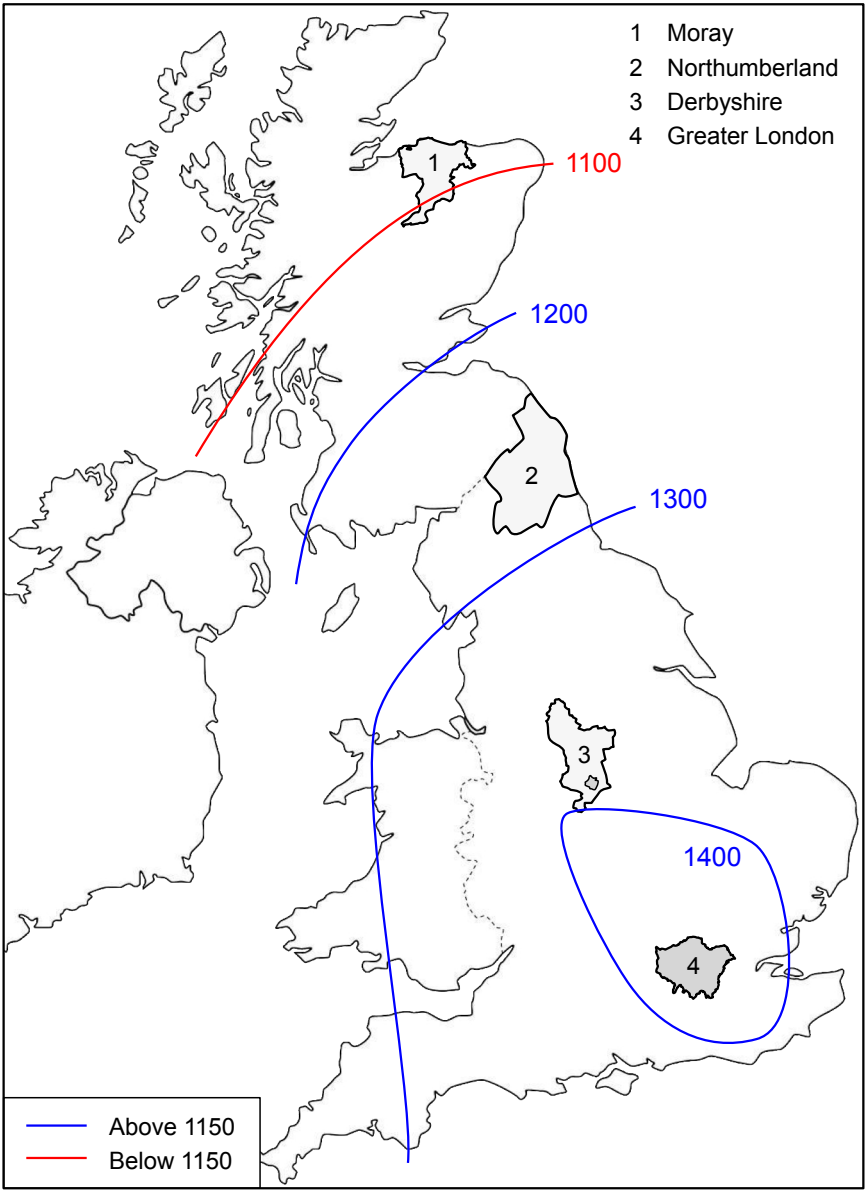

Figure 5: The dispersal effect of the reduction of taxation

The location of industry

Figure 6 compares the gradient of economic potential in relation to the local authority areas of Moray, Northumberland, Derbyshire, and Greater London under the three different scenarios considered.

For those firms which fall within the category of a *foot-loose* industry, the economic potential of a local authority area is likely to be a significant factor affecting the firm's choice of location.

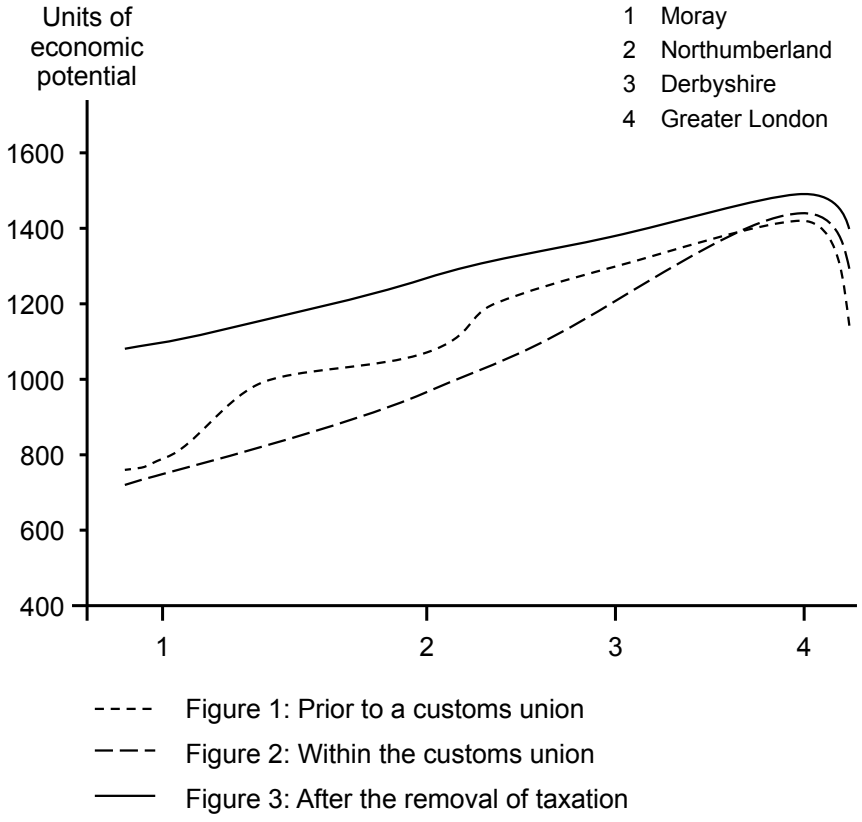

Figure 6: The gradient of economic potential