# Cronfa - Swansea University Open Access Repository

_____

This is an author produced version of a paper published in:
_Scottish Journal of Political Economy_

_____

Cronfa URL for this paper:
http://cronfa.swan.ac.uk/Record/cronfa49898

_____

**Paper:**

Varian, B. (2019). The growth of manufacturing protection in 1920s Britain. _Scottish Journal of Political Economy_
http://dx.doi.org/10.1111/sjpe.12223

_____

http://www.swansea.ac.uk/library/researchsupport/ris-support/

**The growth of manufacturing protection in 1920s Britain**

*Abstract*

Prior to the Import Duties Act of 1932, an assortment of legislation expanded the scope of manufacturing protection in Britain. This article assesses the magnitude of manufacturing protection before the Import Duties Act and finds that, in 1930, 9% of net manufacturing output occurred in a protected industry. In the late 1920s, protected industries exhibited above-average growth in labour productivity. However, protection was disproportionately extended to newer manufacturing industries, which presented greater potential for productivity growth. This article concludes that protection did not enhance productivity growth in Britain's manufacturing industries in the late 1920s.

*Introduction*

The Import Duties Act of 1932 imposed a tariff of at least 10% on almost all manufactured imports (Sebag-Montefiore, 1943, pp. 22-6).[1] Quite appropriately, economic historians have regarded the Imports Duties Act as a watershed in Britain's trade policy, with Capie (1978, p. 399) going so far as to claim that the Act 'ended almost eighty years of more or less complete free trade'. Yet, it

---

[1] The Import Duties Act, which became effective in March 1932, imposed a general tariff of 10%. The Act also created the Import Duties Advisory Committee which was authorised to recommend that the Treasury order additional import duties on certain commodities. The first and most substantial Treasury Order for additional duties was issued in April 1932.

should be recognised that the Act was preceded by a variety of legislation that incrementally extended tariff protection to several of Britain's manufacturing industries, beginning during the First World War and continuing through the 1920s. In a recent article, de Bromhead et al. (2019, p. 331) acknowledged the protective legislation of the 1920s, but asserted that 'Notwithstanding these departures from nineteenth century practice, British trade policy remained predominantly liberal until 1930'. Is it possible that economic historians have advanced a narrative too dismissive of the protection that came before the Import Duties Act?

The actual magnitude of protection in 1920s Britain has been obscured by the piecemeal manner in which the legislation was enacted (and reenacted, in the case of the McKenna duties). The purpose of this article is to take stock of the protective legislation enacted from 1915-1930 and quantify the protected share of Britain's manufacturing sector in 1930, the year of the *Fourth Census of Production*. It has been observed that protective tariffs applied to a mere 2-3% of Britain's imports in the years just before the Import Duties Act (Capie, 1978, p. 401). Yet, to the extent these tariffs provoked a foreign-domestic substitution, this figure is likely to understate the magnitude of protection.

This article then examines the relationship between protection and the growth of labour productivity in the 1920s. In this respect, the research here further pursues a line of inquiry set out in Broadberry and Crafts (2011, pp. 271-2). Notably, they found that the Import Duties Act of 1932 had no statistically significant effect on the growth of labour productivity in those industries

to which it extended protection of 20% *ad valorem* or greater.[2] However, they also reported comparatively high labour productivity growth in the 1920s and 1930s in 'early protected industries'—those that received protection before 1932. This phenomenon is explained here.

*The extent of protection*

Perhaps the most noted piece of pre-1932 protective legislation was the Finance (No. 2) Act of 1915, which included the McKenna duties, as they came to be referred, on cinematographic films; clocks and watches; motorcars and motorcycles; and musical instruments. These duties were renewed annually by succeeding finance acts, until MacDonald's short-lived Labour Government allowed the McKenna duties to expire in August 1924. The McKenna duties were reinstated in July 1925 and remained in effect until being subsumed into the General Tariff in 1938 (Sebag-Montefiore, 1943, p. 14). The Finance (New Duties) Act of 1916 imposed an import duty on matches.

In the years immediately following the First World War, there were two pieces of protective legislation. The Dyestuffs (Importation Regulation) Act of 1920 prohibited the importation of dyestuffs, except under government license. The Safeguarding of Industries Act of 1921 levied duties on a broad assortment of narrowly-defined commodities, which can be generalised as scientific instruments. The act also levied duties on some chemicals. The expansion of protection was revived in 1925. Additional manufacturing industries, viz.: cutlery, gloves, and

---

[2] Their difference-in-difference analysis of labour productivity growth between 1924/30 and 1930/5 did not yield a statistically significant coefficient for those industries which received a tariff of 20% or more.

incandescent mantles, were 'safeguarded' under the Safeguarding of Industries (Customs Duties) Act of 1925, though these protective tariffs were limited to a duration of five years and, indeed, lapsed in December 1930. Further industries were granted protection in the finance acts of the late 1920s: silk and artificial silk (1925); embroidery and lace (1925); packing, wrapping, and tissue paper (1926); translucent and vitrified pottery (1927); buttons (1928); and enamelled hollow-ware (1928).

It might be questioned whether these tariffs were of a primarily protective or revenue-raising character. In fact, the McKenna duties were originally imposed with the aim of preserving shipping space and foreign exchange for imports more crucial to a wartime economy (Sebag-Montefiore, 1943, p. 2). However, the continuation of these duties well past the end of the First World War can be taken as evidence of protection, even if that was not the original intent.[3] As for the McKenna duty on motorcars, Foreman-Peck (1979, p. 255) estimated that this tariff was responsible for raising domestic production by at least 40%. Thus, the tariff was protective in its effect. Similarly, the imposition of an import duty of 2s. per lb. on artificial silk (rayon) yarn, though described by politicians as a revenue-raising luxury tax, was nevertheless followed by a precipitous decline in imports from £3.1 million in 1925 to £0.5 million in 1926 (Statistical Office, 1927).[4]

---

[3] This interpretation is supported by the lack of corresponding excise duties for any of the McKenna industries.

[4] The Finance Act of 1925 also levied an excise duty of 1s. per lb. on rayon yarn, with the difference between the import and excise duty conferring a degree of protection upon the domestic industry.

The dutiable share of Britain's manufactured imports would not provide an accurate measure of the extent of protection, since substitution of domestic for foreign manufactures would have reduced the dutiable share of imports, as illustrated by the motorcar and artificial silk industries. Rather, the extent to which British manufacturing was protected is measured by the share of net manufacturing output occurring in protected industries. Table 1 presents the industries receiving protection prior to the Import Duties Act, as well as the relevant legislation, the year protection commenced, and the net output of the industry in 1930, as determined from the *Fourth Census of Production* (Board of Trade, 1935). Matching the commodities specified in the legislation to the industry classifications used in the census is an inexact process. Although, recourse to the most disaggregated data in the census enables an acceptable degree of accuracy. At the most disaggregated level, the census usually only reports gross output; for this reason, the net output of certain industries, identified in the notes to Table 1, is estimated assuming that these industries had the same value-added share as the overarching industries.

In 1930, £91.6 million, or 9% of Britain's net manufacturing output occurred in protected industries.[5] While it is reasonable to conclude from this figure that Britain's trade policy was still 'predominantly liberal', 9% of the manufacturing output of one of the most important manufacturing economies in the world is hardly negligible. Of course, this figure does not capture the many linkages between protected and non-protected industries (e.g. between dyestuffs and

---

[5] Net manufacturing output was £1,065.0 million in 1930. Manufacturing output is taken to be 'factory' industrial output, as defined in the census. Non-factory industrial output (e.g. utilities) is excluded from this figure, since it is mostly non-tradable, with the notable exception of coal.

textiles) through which protection may have further distorted the British economy. Altogether, the decade of the 1920s was one in which Britain made a moderate advance in the direction of protection.

*Labour productivity*

This section examines the relationship between protection and the growth of labour productivity in Britain's manufacturing industries during the 1920s. Crafts (2012) has argued that periods of weaker competition in the British economy, including weaker competition abetted by tariffs, coincided with slower relative growth in productivity. Yet, from 1924-30, average labour productivity growth was 3.0% p.a. among protected industries, but only 1.4% p.a. among non-protected industries.[6] How can this anomaly be explained?

In this period, consistent data for Britain's manufacturing industries, at a sufficiently disaggregated level, are only available in the censuses of production, which occurred in 1924 and 1930. For each of the 108 factory industries, the *Fourth Census of Production* reports both gross output in 1930 and, retrospectively, gross output in 1924 revalued at constant 1930 prices.[7] Thus, it is possible to calculate the growth rate of *real* labour productivity in each industry. The following

---

[6] See the notes to Table 2 for which census-defined industries are considered protected.

[7] There are 107 factory industries listed in the *Fourth Census of Production*. However, the census includes sufficient data for separating the industry of chemicals, dyestuffs, and drugs into dyestuffs (protected) and chemicals and drugs (non-protected), making for 108 industries in the analysis.

cross-sectional OLS regression equation is then estimated, with the dependent variable being the annualised growth of labour productivity for the six years from 1924-30:

$$\left(\frac{Y_{1930}}{L_{1930}} \Big/ \frac{Y_{1924}}{L_{1924}}\right)^{1/6} - 1 = \alpha(P) + \beta_1(X_1) \ldots \beta_{11}(X_{11}) + \gamma(N) + C + \epsilon$$

Y is output valued at 1930 prices. L is the number of persons employed. P is a dummy variable taking a value of 1 for a protected industry. X is a dummy variable for the group to which the industry belongs.[8] This variable captures factors specific to a group of industries, such as material input prices. The groups are those designated in the census.

The extension of protection was not random, but rather disproportionately directed to Britain's 'new industries' in the 1920s (Richardson, 1961, p. 380).[9] While the literature on the interwar economy frequently references Britain's 'new industries', this concept requires some discussion here. Among the new industries, there were several common tendencies. Perhaps the chief tendency was that 'Their expansion was based on the exploitation of new techniques which required a fairly high degree of scientific expertise and technical knowledge' (Aldcroft, 1970, p.

---

[8] There are 12 census-defined industry groups, hence 11 dummy variables. Iron and steel serves as the reference industry group. The only statistically significant coefficient for an industry group is the positive coefficient for non-ferrous metal trades.

[9] According to Richardson (1961, p. 380), '…almost all the new industries had received some form of tariff protection before the fundamental change in British commercial policy [in 1932]'. However, this is rather overstating the extent of protection, since several important new industries, such as aircraft, aluminium, and electrical engineering, were untouched by protective legislation in the 1920s.

178).[10] Further distinguishing Britain's new industries from its older industries, including the staple industries of textiles, iron, and steel, was a greater orientation toward the domestic market, rather than the export market (Richardson, 1961, p. 366). Of course, many of the new industries sprang from the arrival of new commodities, such as aircraft and cinematographic film. Still, other new industries, such as electrical engineering and motorcars, had their beginnings before the First World War, but only emerged in earnest in the following decade. The new industries of the interwar era might also rightly be described as Britain's latter Second Industrial Revolution industries, as they generally embraced the practices of the Second Industrial Revolution, particularly scientific management and the specialisation of production.[11]

A control variable (N), taking the value of 1 for a new industry, is included in the regression equation. The use of this variable exploits the fact that not all protected industries were new industries (e.g. cutlery, gloves) and not all new industries were protected (e.g. aluminium, electrical engineering). The concept of new industries is largely unamenable to quantification, since the census lacks data capturing important characteristics of the new industries, such as the application of scientific knowledge. Therefore, new industries are identified from a well-

---

[10] It should be observed that interwar Britain was at a comparative disadvantage in many of these science-intensive industries (Crafts, 1989, p. 134).

[11] In his article 'The Second Industrial Revolution', Jevons (1931, p. 16) observed, 'In England specialisation is characteristic of the newer industries'.

established historical narrative (Pollard, 1967, pp. 99-110; Aldcroft, 1970, pp. 177-206).[12] Of the 14 new industries identified, six received protection before 1932.

Table 2 presents the results of the regression. Column 1 indicates that protected industries realised a statistically significant higher growth in labour productivity. However, after controlling for new industries (column 2), the coefficient of protection greatly decreases and is statistically insignificant. Columns 3 and 4 include the industry-group dummies (coefficients not reported); there is no material change in the coefficients of interest. From a cross-sectional analysis of British industries, it cannot be claimed that protection enhanced the growth of labour productivity in recipient manufacturing industries during the late 1920s.

Still, it might be questioned whether this finding simply arises from the manner in which new industries have been identified, i.e. from an historical narrative. New industries were typically, though not exclusively, marked by rapid growth in labour productivity.[13] An alternative approach to assessing the relationship between protection and productivity growth in Britain's pre-1932 protected industries is to compare British and foreign productivity growth in individual protected industries. Such a comparison obviates the need to designate an industry as either new or non-new. Having removed differences in industrial vintage from the comparison, the productivity performance of Britain's protected industries can be evaluated against benchmarks characterised by similar potential for labour productivity growth in the late 1920s. The United States, another

---

[12] Other partial lists of new industries include Richardson (1961, p. 360, f.n. 1) and Aldcroft (1966, p. 313, f.n. 38). See the notes to Table 2 for those industries designated as new.

[13] Electrical engineering was a new industry in which labour productivity growth was remarkably low at -0.0% p.a.

large and industrial economy, represents an obvious comparator country, and one with sufficient data for making such a comparison. Given the data available, it is possible to match five of Britain's pre-1932 protected industries, which are listed in Table 3.

These five manufacturing industries were also protected in the United States. The intensity of protection was broadly similar between Britain and the United States. In Britain, the McKenna duties on clocks and watches; motorcars and motorcycles; and musical instruments were all 33⅓% *ad valorem*, although the duty on packing and wrapping paper was set at 16⅔% *ad valorem*. It should be remarked that the nominal tariffs legislated from 1915-30 were generally higher than the 10-20% nominal tariffs that the Import Duties Act of 1932 and Import Duties Advisory Committee applied to most of Britain's manufactured imports. In the United States, the Fordney-McCumber Tariff Act of 1922 imposed moderate *ad valorem* duties of 25% on motorcars, 30-40% on most musical instruments (e.g. phonographs and pianos), and 30% on wrapping paper (Department of Commerce, 1926).[14] Of course, effective tariffs, rather than nominal tariffs, would permit a better comparison of the intensity of protection in British and American industries.[15] Effective tariffs for British and American industries in the 1920s have been estimated by Kitson

---

[14] In 1925, the *ad valorem* equivalent tariff on total dutiable imports into the United States was 37.6%.

[15] An effective tariff measures the tariff protection applied to domestic value-added in an industry, accounting for (protection-reducing) tariffs on imported material inputs. Nevertheless, at the industry level, effective and nominal tariffs are highly correlated. For an analysis of this correlation in 1930s Britain, see Kitson et al. (1991, p. 331, f.n. 8). For an analysis of this correlation in industrial countries, more generally, see Cohen (1971).

et al. (1991) and Archibald et al. (2000), respectively. Discrepant industry classifications mostly prohibit a comparison of British and American effective tariffs in the five industries. However, such a comparison is possible for the largest of Britain's pre-1932 protected industries, the motorcar industry, which, in the 1920s, received broadly similar effective tariff protection in Britain (55.4%) and the United States (63.6%).

Table 3 compares the annualised growth of labour productivity in Britain's protected industries and their American counterparts. Apart from clocks and watches, Britain's productivity growth compares unfavourably against that of the United States. Although, productivity growth was only slightly slower in the leading new industry of motorcars. It may be tempting to ascribe the generally slower productivity growth of the British industries (compared to their American counterparts) to reasons such as a monetary policy inhospitable to industry, or even to the different intervals used in calculating the British (1924-30) and American (1925-9) growth rates. However, as Broadberry (1997, p. 30) has calculated, there was actually a slight relative improvement in the aggregate manufacturing labour productivity of Britain, compared to that of the United States, during the interval from 1924/5-1929/30. Against this backdrop, the figures in Table 3 would suggest that productivity growth in Britain's pre-1932 protected industries was not strong, but rather lacklustre.

**References**

Aldcroft, D. H. (1966). Economic progress in Britain in the 1920s. *Scottish Journal of Political Economy*, **13**, 3, pp. 297-313.

Aldcroft, D. H. (1970). *The Inter-War Economy: Britain, 1919-1939*. London: B. T. Batsford.

Archibald, R. B., Feldman, D. H., Hayford, M. D. and Pasurka, C. A. (2000). Effective rates of protection and the Fordney-McCumber and Smoot-Hawley Tariff Acts: comment and revised estimates. *Applied Economics*, **32**, 9, pp. 1223-6.

Board of Trade (1935). *Final Report of the Fourth Census of Production of the United Kingdom (1930)*.

Broadberry, S. N. (1997). *The Productivity Race: British Manufacturing in International Perspective, 1850-1990*. Cambridge: Cambridge University Press.

Broadberry, S. and Crafts, N. (2011). Openness, protectionism and Britain's productivity performance over the long run. In Wood, G., Mills, T. C. and Crafts, N., *Monetary and Banking History: Essays in Honour of Forrest Capie*. London: Routledge, pp. 254-86.

de Bromhead, A., Fernihough, A., Lampe, M. and O'Rourke, K. H. (2019). When Britain turned inward: the impact of interwar British protection. *American Economic Review*, **109**, 2, pp. 325-52.

Capie, F. H. (1978). The British tariff and industrial protection in the 1930's. *Economic History Review*, **31**, 3, pp. 399-409.

Cohen, B. I. (1971). The use of effective tariffs. *Journal of Political Economy*, **79**, 1, pp. 128-41.

Crafts, N. F. R. (1989). Revealed comparative advantage in manufacturing, 1899-1950. *Journal of European Economic History*, 1, pp. 127-37.

Crafts, N. (2012). British relative economic decline revisited: the role of competition. *Explorations in Economic History*, **49**, 1, pp. 17-29.

Department of Commerce, Bureau of Foreign and Domestic Commerce (1926). *Foreign Commerce and Navigation of the United States for the Calendar Year 1925*.

Department of Commerce, Bureau of the Census (1928). *Biennial Census of Manufactures: 1925*.

Department of Commerce, Bureau of the Census (1933). *Fifteenth Census of the United States; Manufactures: 1929*.

Foreman-Peck, J. S. (1979). Tariff protection and economies of scale: the British motor industry before 1939. *Oxford Economic Papers*, **31**, 2, pp. 237-57.

Jevons, J. H. (1931). The Second Industrial Revolution. *Economic Journal*, **41**, 161, pp. 1-18.

Kitson, M., Solomou, S. and Weale, M. (1991). Effective protection and economic recovery in the United Kingdom during the 1930s. *Economic History Review*, **44**, 2, pp. 328-38.

Pollard, S. (1967). *The Development of the British Economy, 1914-1950*. London: Edward Arnold.

Richardson, H. W. (1961). The new industries between the wars. *Oxford Economic Papers*, **13**, 3, pp. 360-84.

Sebag-Montefiore, J. M. (1943). *Trade Regulations and Commercial Policy of the United Kingdom*. Cambridge: Cambridge University Press.

Statistical Office, H. M. Customs and Excise Department (1927). *Annual Statement of the Trade of the United Kingdom for the Year 1926*.

Table 1
*Protected share of British manufacturing, 1930*

| Industry | Act | Year protection began | Net output in 1930 (£ million) |
|---|---|---|---|
| Cinematographic film | Finance (No. 2) Act, 1915 | 1915[d] | 0.3 |
| Clocks and watches | Finance (No. 2) Act, 1915 | 1915[d] | 0.5 |
| Motorcars and motorcycles[a] | Finance (No. 2) Act, 1915 | 1915[d] | 53.5 |
| Musical instruments | Finance (No. 2) Act, 1915 | 1915[d] | 6.8 |
| Matches | Finance (New Duties) Act, 1916 | 1916 | 1.5 |
| Dyestuffs | Dyestuffs (Import Regulation) Act, 1920 | 1921 | 2.0 |
| Scientific instruments[b] | Safeguarding of Industries Act, 1921 | 1921 | 6.0 |
| Chemicals[c] | Safeguarding of Industries Act, 1921 | 1921 | 0.7[e] |
| Silk and artificial silk | Finance Act, 1925 | 1925 | 9.2 |
| Embroidery and lace | Finance Act, 1925 | 1925 | 2.7 |
| Cutlery | Safeguarding of Industries (Customs Duties) Act, 1925 | 1925 | 1.8 |
| Gloves | Safeguarding of Industries (Customs Duties) Act, 1925 | 1925 | 1.3 |
| Incandescent mantles | Safeguarding of Industries (Customs Duties) Act, 1925 | 1925 | 0.4 |
| Packing, wrapping, and tissue paper | Finance Act, 1926 | 1926 | 2.0[e] |
| Translucent and vitrified pottery | Finance Act, 1927 | 1927 | 1.9[e] |
| Buttons | Finance Act, 1928 | 1928 | 0.4[e,f] |
| Enamelled hollow-ware | Finance Act, 1928 | 1928 | 0.6[e] |
| Total protected | | | 91.6 |
| Total manufacturing | | | 1,065.0 |
| Protected share of sector | | | 0.086 |

Source: *Fourth Census of Production (1930)*.
Notes: a) Commercial motorcars were initially exempted from the import duty, but this exemption was ended in 1926. b) The Safeguarding of Industries Act of 1921 extended protection to a vast assortment of commodities, which are loosely generalisable as the census-defined industry of scientific instruments. c) The chemicals covered by the act and the chemicals reported in the census can only be matched on a very approximate basis. The £0.7 million net output of chemicals should be regarded as an underestimate. d) These duties were not applied during the brief period from August 1924 to July 1925. e) The *Fourth Census of Production* did not usually report the value of net output at the sub-industry level, but did report the value of gross output at the sub-industry level. Thus, these net output values are estimated assuming that the value-added share for the sub-industry was the same as the value-added share for the overarching industry. For the industry of packing, wrapping, and tissue paper, the net output of packing and wrapping is reported, but the net output for tissue paper is estimated assuming a uniform value-added share for the whole industry. f) Buttons were reported as a sub-industry of both the industries of fancy articles and needle, pin, fish-hook, and metal smallwares.

Table 2
*Labour productivity growth and protection, 1924-30*

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Protected | 1.6** | 0.6 | 1.4* | 0.7 |
| | (0.8) | (0.8) | (0.8) | (0.8) |
| New industries | | 2.8*** | | 2.7*** |
| | | (0.8) | | (0.9) |
| Constant | 1.4*** | 1.2*** | 1.1 | 1.2 |
| | (0.3) | (0.3) | (0.8) | (0.8) |
| Industry-group dummy variables | No | No | Yes | Yes |
| $R^2$ | 0.04 | 0.14 | 0.14 | 0.22 |
| Observations | 108 | 108 | 108 | 108 |

*Notes:* * indicates statistical significance at the 10% level, ** at the 5% level, and *** at the 1% level. Standard errors are reported in parentheses. All coefficients and standard errors have been rescaled by a factor of 100. The dependent variable is the average annual growth rate of labour productivity per industry. The protected industries are cutlery; motorcars and motorcycles; clocks and watches; artificial silk and silk; lace; gloves; matches; paper; china and earthenware; scientific instruments, appliances and apparatus; musical instruments; incandescent mantles; cinematographic film printing; and dyestuffs (extricated from the census-defined industry of chemicals, dyestuffs, and drugs). Since substantial portions of paper (packing, wrapping, and tissue paper) and china and earthenware (translucent and vitrified pottery) were protected, these industries are regarded as having received protection. In contrast, protected chemicals, enamelled hollow-ware, and buttons comprised a small portion, i.e. less than 10% of the gross output, of their respective industries; consequently, these industries are not regarded as having received protection. New industries are electrical engineering; motorcars and motorcycles; aircraft; lead, tin, aluminium and other non-ferrous metals; silk and artificial silk; preserved foods; chemicals and drugs; dyestuffs; petroleum refining; cement; rubber; scientific instruments, appliances, and apparatus; incandescent mantles; and cinematographic film printing.

Table 3

*British and American labour productivity growth in protected industries, 1924/5-29/30*

| Industry | Britain, 1924-30 (% p.a.) | United States, 1925-9 (% p.a.) |
|---|---|---|
| Clocks and watches | 6.4 | 5.6 |
| Motorcars and motorcycles | 3.6 | 3.9 |
| Musical instruments | 2.8 | 3.4 |
| Silk and artificial silk | 2.1 | 5.4 |
| Paper | 1.9 | 8.6 |

*Sources:* Britain: *Fourth Census of Production (1930)*; United States: *Fifteenth Census; Manufactures: 1929.*
*Notes:* The *Fifteenth Census* reports industry-disaggregated data for employment and gross output in 1929 and 1925. However, the census does not report the value of 1925 gross output in 1929 constant prices. Thus, to calculate *real* labour productivity growth, the 1925 output is deflated using the average price of a representative commodity. The representative commodity for each industry is the highest-valued commodity for which both values and quantities are reported for both 1925 and 1929. In order to match British and American industries, it is sometimes necessary to aggregate several American industries, which tended to be defined quite narrowly. The five industries above meet the following requirements. First, a price deflator is available. Second, the American industry closely matches (or can be aggregated so as to closely match) the British industry. For each British industry (italics), the corresponding American industry or industries are noted, followed by the commodity price deflator. *Clocks and watches*: clocks, clock movements, time-recording devices and time stamps; watch and clock materials and parts, except watchcases; watchcases; watches and watch movements; deflator: clock watches (non-jewelled). (The 1925 price of this commodity is not retrospectively reported in the 1929 census, but is reported in the *Biennial Census of Manufactures: 1925*.) *Motorcars and motorcycles*: motor-vehicle bodies and motor-vehicle parts; motor vehicles, not including motor cycles; motor cycles, bicycles, and parts; deflator: passenger vehicles (not including public conveyances). *Musical instruments*: musical instruments and phonographs; deflator: pianos. *Silk and artificial silk*: silk and rayon manufactures; rayon and allied products; deflator: rayon yarn. *Paper*: paper and pulp; deflator: paper and paperboards.