WILEY

Review

Author(s): C. F. Bickerdike

Review by: C. F. Bickerdike

Source: *The Economic Journal*, Vol. 17, No. 65 (Mar., 1907), pp. 98-102

Published by: Wiley on behalf of the Royal Economic Society

Stable URL: <http://www.jstor.org/stable/2220786>

Accessed: 27-06-2016 05:06 UTC

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at
<http://about.jstor.org/terms>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Royal Economic Society, *Wiley* are collaborating with JSTOR to digitize, preserve and extend access to
The Economic Journal

articles for which canal transport is supposed to be particularly suitable come mostly from hilly neighbourhoods and high levels whence railway trucks run easily. Coal mines and quarries are not frequent in the Fens. Anything more ludicrous than the idea of constructing branch canals to most of the collieries and quarries which have railway sidings can scarcely be conceived.

EDWIN CANNAN

Protective and Preferential Import Duties. By A. C. PIGOU.
(London : Macmillan and Co.)

THIS book, though small, must be reckoned one of the most brilliant contributions to the discussion of the Fiscal Question. It brings together the substance of two articles contributed to the *Edinburgh Review* in October, 1904, and January, 1906, and the author's "Riddle of the Tariff," published in 1903, arranged as a systematic whole. The Fiscal Question, as the author of this book more than once insists, involves much more than economic theory, and it is a tenable view that the purely economic problems are not the most important. Nevertheless, it is Mr. Pigou's discussion of theoretical points with which it is most appropriate to deal in the *ECONOMIC JOURNAL*, and it is no disparagement of his treatment of the more controversial political side of the question if we say that it is in his treatment of problems of economic theory that we look for the most valuable part of his work.

In the first chapter we have a short statement of the infant industry argument and its modern extensions, and of the well-known "dumping" theory, the conclusion of which is summed up (p. 22) thus :—

"From these considerations it appears that, though circumstances may exist in which Protection would ultimately benefit the National Dividend, there is no reason to suppose that such circumstances do exist in England at the present time. Since, therefore, the argument of our first section proves that Protection must immediately injure the dividend, we conclude that it is likely to injure it on the whole. I pass, therefore, to the different and more difficult question whether the collection of a given revenue by duties of a protective character is likely to injure the dividend more than the collection of an equal revenue in some other way."

This way of putting the problem seems open to some criticisms. The argument of the first section is that each individual is likely to make the best bargain when not interfered with.

"The National Dividend is, however, the sum of the private dividends of the members of the nation. Hence it follows that the dividend of the whole community is, *prima facie*, larger when exchange is free than when exchange is not free" (p. 8).

But is there no general rule that each individual in making his own best bargain in international trade to some extent prejudices the position of his fellow-countrymen, and that the maximum national advantage is not found in unrestricted individual freedom? If this be so, and if tariffs based on the usual protective principles are a kind of restriction which is beneficial, it would seem that a certain amount of revenue would be incidentally raised by a tariff designed primarily to maximise the advantage of international trade. Mr. Pigou's way of stating the problem—to raise a given revenue by means of either a protective or a non-protective tax—seems to ignore the possibility of a combination of the two methods if the protective tariff, not primarily designed for revenue, did not yield enough.

Some reasons have been advanced by the present writer in the preceding number of the *ECONOMIC JOURNAL* in support of the theoretical case for restriction, and the position there taken up has a strong resemblance to that of Mr. Pigou in this book when he deals with the comparative merits of protective and non-protective duties as a means of raising a given revenue. But there is some degree of difference in regard to the comparative importance of the indirect influence of an import duty on the terms of interchange in foreign trade generally, and that of the "direct gain and loss in respect of the taxed article itself." According to Mr. Pigou, the latter is "the chief element to be considered" (p. 25). He seems to minimise unduly the indirect effect.

This is a point of some importance in connection with the comparative merits of protective and non-protective taxes. The former, as Mr. Pigou recognises on p. 25, has a greater indirect influence than the latter, and its advantage is not to be found simply in the fact that a certain proportion of the revenue raised can be described as falling on the foreigner in the sense ordinarily meant (p. 31, first three lines, seems inconsistent with p. 25). The more effectively protective a tax is, the less is the revenue derived from a tax of given height, and in the extreme case the tax would exclude the particular import altogether. The tendency to increase the National Dividend, however, is greater (for taxes less than a certain height); the more effectively it protects, or more strictly, the more elastic our demand for the imported

article. The advantage is not, therefore, to be regarded as simply a certain proportion of the revenue.

The relative importance of direct and indirect effects may be seen in the formula which was the basis of the writer's article already referred to. It is derived as follows:—

Imagine this country to have a currency peculiar to itself. Foreigners bring goods here, sell them for our money, the Government levying a tax—whether from buyers or sellers is immaterial. With the money received the foreigners purchase our goods and take them abroad for sale in their own country.

Take first the case of a general tax. We can then take one commodity only for imports and one for exports. There is thus obtained an expression¹ for the rate at which advantage increases with the increase of a small tax, from which the following inferences can be drawn.

(1) The expression is positive, unless both demands are inelastic in a certain degree (Cp. ECONOMIC JOURNAL, December 1906, p. 532). Advantage therefore varies directly as the tax.

(2) The expression is larger, the larger the elasticity of the home demand for goods from the foreigner (unless the curve of foreign demand is steeper than a rectangular hyperbola.) When the elasticity of the home demand is infinite, the value of the expression is higher than for any other value of the elasticity.

(3) Foreign demand plays just as much part in the expression as foreign supply, though the tax is on imports (exactly the

¹ Let the equations of supply and demand be—

Home demand for import.

$$y = f_1(x)$$

Home supply for export.

$$y = F_2(x)$$

Foreign supply for export.

$$y = F_1^1(x)$$

Foreign demand for import.

$$y = f_2(x)$$

Our country imposes a tax p per cent *ad valorem*. Let $r = \frac{100}{100 + p}$.

Let α_1 and α_2 be the quantities imported and exported after the tax is imposed. We have

$$(1) r\alpha_1 f_1(\alpha_1) = \alpha_2 F_2^1(\alpha_2)$$

$$(2) \frac{rf_1(\alpha_1)}{F_1^1(\alpha_1)} = \frac{F_2^1(\alpha_2)}{f_2(\alpha_2)} = \text{ratio of exchange of moneys.}$$

Net advantage of trade u is

$$u = \int_0^{\alpha_1} f_1(x) dx - \int_0^{\alpha_2} F_2^1(x) dx$$

The rate at which advantage is increasing with a small tax is $-\frac{du}{dr}$ when $r=1$

$$= \frac{\frac{1}{\eta\delta} - \frac{1}{\eta\sigma}}{\left(1 - \frac{1}{\eta\sigma}\right)\left(1 - \frac{1}{es}\right) - \left(1 - \frac{1}{\eta\delta}\right)\left(1 - \frac{1}{ed}\right)}$$

where es and ed are the elasticities of home supply and demand, $\eta\sigma$ and $\eta\delta$ of foreign.

same expression is derived in the case of export tax). The larger the elasticity of foreign demand, the greater is the importance of the magnitude of the home demand, and conversely. In fact, we might say that Protectionists correctly appreciate the influences affecting the denominator of the expression which indicates the (variation of) advantage resulting from the duty, and the sign of it, whilst Free-traders perceive that the numerator is generally rather small.

With a tax on one of many commodities, the indirect influence can be shown to be generally of no less importance than the direct effect, by the equal prominence of foreign demand and foreign supply. If we take, for simplicity, n imports of equal value, having the same elasticity of supply and demand, and similarly n exports, the expression for the rate at which advantage is increasing when one import is taxed is identical with the above, and just one n^{th} of what it would be if all were taxed.

This formula shows only the tendency of a very small tax. No doubt, if a large revenue were required and heavy taxes needed, the advantage of the protective tax would disappear. But, as has been remarked, it is not necessary to have the one kind exclusively of the other. A few words may be added here on the difficult question of the height to which, in theory, import taxes can be raised in order to maximise advantage.

If we assume curves of constant elasticity type,¹ the maximum advantage rate, it may be shown, is independent of the elasticities of home demand and supply.²

Rather strong assumptions have to be made as to the elasticity of foreign supply and demand if the rate of the tax affording maximum advantage is to come below 10 per cent.

Little room is left for saying anything about the questions raised in other chapters of this book. In connection with the question of internal distribution of wealth, two remarks may be added in supplement of Mr. Pigou's discussion—(1) In considering the problem generally, apart from the particular circumstances of England, we must remember that the community stand to gain more at the expense of rent-owners in the exporting

¹ Cp. Marshall, *Principles of Economics*, Mathematical Note iii.

² With one commodity on each side, the maximum advantage rate, p per cent. is given by

$$\frac{100}{100+p} = \frac{1 - \frac{1}{\eta\delta}}{1 - \frac{1}{\eta\sigma}}$$

trades than they stand to lose to rent-owners in protected industries, since exports are diminished more than imports are increased. (2) A point of some importance in England is that the tendency of a protective tax to lower the value of money means a transference of wealth from the "rentier" class to the community.

The second part of the book, dealing with preferential tariffs, contains some very penetrating criticism of a particular scheme. The general question whether a mutually advantageous scheme might be devised is not dealt with.

This review has been occupied almost entirely with points on which the writer has felt a certain amount of dissent from Mr. Pigou's position. There are many others on which no difference arises. There is displayed throughout singular impartiality and power of clear analysis. The examination of what may be called the special pleas put forward on behalf of Tariff Reform (the supposed changing character of exports, dumping, &c.) is particularly lucid. The mathematical notes on pp. 27-31 and p. 113 are important contributions to the theory of taxation and bounties; and the attempt, in Part ii., chap. i., to estimate the effects of a proposed Preferential scheme, though necessarily speculative, is the best of the kind that has yet been made.

C. F. BICKERDIKE

The Industrial Organisation of an Indian Province. By T. MORISON. (London: Murray. Pp. 327.)

WHEN Mr. Morison was Principal of the Mohammedan Anglo-Oriental College at Aligarh, he used to teach European economics to Indian students: now he combines that task with the equally difficult task of teaching Indian economics to European students. A generation ago readers might have assumed that a book written on such subjects for such readers would resemble a book on the theory and practice of painting and music intended only for the use of men born blind or deaf. But recent economics have tended to bridge over the gap between non-competitive custom, which is supposed to dominate India, and non-customary competition, which is supposed to be the differentia of Europe; and Mr. Morison has carried this tendency a stage still further in his able, interesting, and judicious book.

In contrasting Indian and European conditions he is treading more or less in a beaten track; but the moral which he draws is by no means hackneyed. He tells us how in the United Provinces of Agra and Oudh—to which he confines himself—agricul-