

# **Classical Trade Protectionism 1815–1914**

**Edited by Jean-Pierre Dormois and  
Pedro Lains**



**Routledge**  
Taylor & Francis Group

# Classical Trade Protectionism 1815–1914

*Classical Trade Protectionism 1815–1914* will bring readers up to date with recent empirical research carried out in the field.

Long-held views on modern trade policies have been challenged by the introduction of recent theoretical developments in international economics and in measurement techniques brought about in the 1960s and 1970s. One question in particular has attracted attention and has contributed to the bringing to light of a number of heretofore ignored measurement and interpretation problems: the assessment of French and British nineteenth-century trade policies.

*Classical Trade Protectionism 1815–1914* examines the theoretical and practical problems associated with the assessment and measurement of the direct impact of tariffs, prohibitions and quotas on domestic prices, output structure and competitiveness. The contributors to this volume also examine the direct and long-run consequences of protectionist measures on particular economies, utilising evidence from in-depth investigations of trade statistics as well as ‘best practice’ statistical techniques such as effective protection, elasticity of demand and revealed comparative advantage.

**Jean-Pierre Dormois** is Professor of Modern Economic History at the University of Strasbourg, France. **Pedro Lains** is Senior Research Fellow at the Institute of Social Sciences, University of Lisbon, Portugal.

## **Routledge explorations in economic history**

### **1 Economic Ideas and Government Policy**

Contributions to contemporary economic history

*Sir Alec Cairncross*

### **2 The Organization of Labour Markets**

Modernity, culture and governance in Germany, Sweden, Britain and Japan

*Bo Stråth*

### **3 Currency Convertibility**

The gold standard and beyond

*Edited by Jorge Braga de Macedo, Barry Eichengreen and Jaime Reis*

### **4 Britain's Place in the World**

A historical enquiry into import controls 1945–1960

*Alan S. Milward and George Brennan*

### **5 France and the International Economy**

From Vichy to the Treaty of Rome

*Frances M. B. Lynch*

### **6 Monetary Standards and Exchange Rates**

*M. C. Marcuzzo, L. Officer and A. Rosselli*

### **7 Production Efficiency in Domesday England, 1086**

*John McDonald*

### **8 Free Trade and its Reception 1815–1960**

Freedom and trade: volume I

*Edited by Andrew Marrison*

### **9 Conceiving Companies**

Joint-stock politics in Victorian England

*Timothy L. Alborn*

- 10 The British Industrial Decline Reconsidered**  
*Edited by Jean-Pierre Dormois and Michael Dintenfass*
- 11 The Conservatives and Industrial Efficiency, 1951–1964**  
Thirteen wasted years?  
*Nick Tiratsoo and Jim Tomlinson*
- 12 Pacific Centuries**  
Pacific and Pacific Rim economic history since the 16th century  
*Edited by Dennis O. Flynn, Lionel Frost and A. J. H. Latham*
- 13 The Premodern Chinese Economy**  
Structural equilibrium and capitalist sterility  
*Gang Deng*
- 14 The Role of Banks in Monitoring Firms**  
The case of the *Crédit Mobilier*  
*Elisabeth Paulet*
- 15 Management of the National Debt in the United Kingdom, 1900–1932**  
*Jeremy Wormell*
- 16 An Economic History of Sweden**  
*Lars Magnusson*
- 17 Freedom and Growth**  
The rise of states and markets in Europe, 1300–1750  
*S. R. Epstein*
- 18 The Mediterranean Response to Globalization Before 1950**  
*Sevket Pamuk and Jeffrey G. Williamson*
- 19 Production and Consumption in English Households 1600–1750**  
*Mark Overton, Jane Whittle, Darron Dean and Andrew Hann*
- 20 Governance, the State, Regulation and Industrial Relations**  
*Ian Clark*
- 21 Early Modern Capitalism**  
Economic and social change in Europe 1400–1800  
*Edited by Maarten Prak*
- 22 An Economic History of London, 1800–1914**  
*Michael Ball and David Sunderland*

- 23 The Origins of National Financial Systems**  
Alexander Gerschenkron reconsidered  
*Edited by Douglas J. Forsyth and Daniel Verdier*
- 24 The Russian Revolutionary Economy, 1890–1940**  
Ideas, debates and alternatives  
*Vincent Barnett*
- 25 Land Rights, Ethno Nationality and Sovereignty in History**  
*Edited by Stanley L. Engerman and Jacob Metzger*
- 26 An Economic History of Film**  
*Edited by John Sedgwick and Mike Pokorny*
- 27 The Foreign Exchange Market of London**  
Development since 1900  
*John Atkin*
- 28 Rethinking Economic Change in India**  
Labour and livelihood  
*Tirthankar Roy*
- 29 The Mechanics of Modernity in Europe and East Asia**  
The institutional origins of social change and stagnation  
*Erik Ringmar*
- 30 International Economic Integration in Historical Perspective**  
*Dennis M. P. McCarthy*
- 31 Theories of International Trade**  
Adam Klug  
*Edited by Warren Young and Michael Bordo*
- 32 Classical Trade Protectionism 1815–1914**  
*Edited by Jean-Pierre Dormois and Pedro Lains*

# **Classical Trade Protectionism 1815–1914**

**Edited by Jean-Pierre Dormois and  
Pedro Lains**

First published 2006

by Routledge

2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

Simultaneously published in the USA and Canada

by Routledge

270 Madison Ave, New York, NY 10016

*Routledge is an imprint of the Taylor & Francis Group, an informa business*

© 2006 selection and editorial matter, Jean-Pierre Dormois and  
Pedro Lains; individual chapters, the contributors

This edition published in the Taylor & Francis e-Library, 2006.

“To purchase your own copy of this or any of Taylor & Francis or Routledge’s  
collection of thousands of eBooks please go to [www.eBookstore.tandf.co.uk](http://www.eBookstore.tandf.co.uk).”

All rights reserved. No part of this book may be reprinted or  
reproduced or utilised in any form or by any electronic, mechanical,  
or other means, now known or hereafter invented, including  
photocopying and recording, or in any information storage or  
retrieval system, without permission in writing from the publishers.

*British Library Cataloguing in Publication Data*

A catalogue record for this book is available from the British Library

*Library of Congress Cataloging in Publication Data*

A catalog record for this book has been requested

ISBN10: 0-415-35226-6 (hbk)

ISBN10: 0-203-69886-X (ebk)

ISBN13: 978-0-415-35226-0 (hbk)

ISBN13: 978-0-203-69886-0 (ebk)

# Contents

<b>Introduction</b>	1
JEAN-PIERRE DORMOIS, JAMES FOREMAN-PECK AND PEDRO LAINS	
 <b>PART I</b>	
<b>Assessing the intensity of nineteenth-century protectionism</b>	11
 <b>1 The myth of free-trade Britain and fortress France: tariffs and trade in the nineteenth century</b>	13
JOHN VINCENT NYE	
 <b>2 Free trade and protection in nineteenth-century Britain and France revisited: a comment on Nye</b>	36
DOUGLAS A. IRWIN	
 <b>3 Protectionism is “special”: reply to Irwin on free trade</b>	45
JOHN VINCENT NYE	
 <b>4 Measuring protection: a cautionary tale</b>	53
KEVIN H. O’ROURKE	
 <b>5 Measuring protection in the early twentieth century</b>	67
ANTONI ESTEVADEORDAL	
 <b>6 Assessing the protectionist intensity of tariffs in nineteenth-century European trade policy</b>	99
ANTONIO TENA JUNGUITO	



**PART II**

<b>The impact and implications of tariff barriers</b>	121
<b>7 Tariffs and growth in the late nineteenth century</b>	123
KEVIN H. O'ROURKE	
<b>8 Interpreting the tariff–growth correlation of the late nineteenth century</b>	152
DOUGLAS A. IRWIN	
<b>9 The impact of late-nineteenth-century tariffs on the productivity of European industries (1870–1930)</b>	160
JEAN-PIERRE DORMOIS	
<b>10 Protection and Italian economic development: much ado about nothing</b>	193
GIOVANNI FEDERICO	
<b>11 From virtual free-trade to virtual protectionism: or, did protectionism have any part in Germany's rise to commercial power 1850–1913?</b>	219
BÉATRICE DEDINGER	
<b>12 Protectionism and Portuguese industrialisation</b>	242
PEDRO LAINS	
<b>13 Spanish protectionism during the <i>Restauración</i>, 1875–1930</b>	265
ANTONIO TENA JUNGUITO	
<b>14 The role of open economy forces in Portugal and the Balkans, 1870–1913</b>	298
PEDRO LAINS	
<b>15 A model of later-nineteenth-century European economic development</b>	318
JAMES FOREMAN-PECK	
<i>References</i>	341
<i>Index</i>	363

# Introduction

*Jean-Pierre Dormois, James Foreman-Peck  
and Pedro Lains*

Two-hundred years after Adam Smith's and David Ricardo's (as well as the other classical economists) prescription about the supposedly beneficial effects of free trade, trade policy orientation still constitutes a major bone of contention among economists, as in the public and the media. More than in any other area of human knowledge, the conviction of laymen and experts alike seems difficult to sway, grounded as it is in people's political beliefs. These, in turn, are based on, or at least linked to, a representation and an understanding of past episodes of human history – of economic history in fact. To paraphrase Keynes, "intellectuals are usually the slaves of some defunct economic historian".<sup>1</sup>

So it is with present-day globalisation – attention has been drawn to the immediate precedent: the wave of expanding trade and making of global markets between 1840 and 1914 halted for most of the twentieth century by a dreadful succession of wars, world crises and nationalist economic policies.<sup>2</sup>

In the past fifteen years, new approaches to the role of international trade in economic development have attracted renewed interest both at the theoretical and the empirical level. As a result, the once-standard policy recommendation of the promotion of import substitution, especially in developing countries, has given way to more sophisticated treatments of the available evidence, most of them stressing the complex interactions of tariffs and economic growth:<sup>3</sup> a vast majority of empirical studies for the recent decades have in fact come to strengthen the case for free trade.<sup>4</sup>

When one takes a longer-time view, however, the received wisdom is still strongly influenced by the work of historians of the heyday of import substitution. As a result, the existence of a "tariff-growth paradox" before 1950 has received wide currency. This view, still regarded as orthodox, was formulated some thirty years ago by Paul Bairoch (1930–99), perhaps the most influential economic historian in this area, whom the editors of the prestigious *Cambridge Economic History of Europe* entrusted with the chapter on trade. He stands as the leading figure of a school which claims that, far from having been the "handmaiden of growth", the second wave of

European industrialisation as well as the concomitant expansion of international trade were boosted by the very protectionist policies designed to retard and hamper them. From his seminal work, *Commerce extérieur et développement économique* (1976) onwards, he thus rebuffed those contemporary contemnors of protectionism, most notably Yves Guyot, Eugen von Böhm-Bawerk and Vilfredo Pareto.

Although some of his conclusions seemed, even at the time, highly debatable, they have served as a inescapable reference for economic and other historians ever since. This appears, in retrospect, all the more surprising since Bairoch's indicators were of the crudest sort (unweighted overall tariff rates), that his explanation was based on *post hoc propter hoc* observations, and that the observed correlations were unconditional. Furthermore, his data are not devoid of miscalculations: for Belgium – the author's native country – he relied on an index where the decimal point had obviously been misplaced, probably by error (15 per cent instead of 1.5 per cent). More importantly, he took tariff rates at their face value and made no mention of the theoretical implications of their use. No discussion was included of the reflections and the instruments already in wide currency in the mid-1960s, especially the work of Balassa, Corden and Johnson.

Bairoch focused on Europe in the crucial period 1860–1914, and assembled trade and growth statistics on a vast array of countries (eighteen). Access to the League of Nations' library in Geneva was instrumental in the compilation of data for a sample of unusually large proportions – trade data which, as practitioners can confirm, are not easy to secure in public libraries for periods prior to the First World War.

Obviously the role of European protectionism needed to be revisited in the light of current developments in theoretical and applied economics. In the present book we have attempted to gather a number of important scholarly work, either published or as yet unpublished in English, which have appeared in the past fifteen years and which shed new light on problems both of the measurement of tariff protection in this period and of the incidence of these tariffs on the economy (some of the already-published material is made available in English for the first time). Accordingly this volume is split into two Parts.

In recent times economic historians have benefited from the influx of a number of innovations in terms of new measurement devices (notably in the work of Anderson and Neary) and have been in a position to test them on old and rejuvenated trade data sets. It is both disheartening and exhilarating at the same time that the voluminous trade data collections of the nineteenth century have not been tapped more systematically. They rank among the oldest statistics collected by European states and they are susceptible to extensive, if sometime painful, processing.

Europe was at its economic zenith in the last quarter of the nineteenth century, for the leviathans of much of the twentieth century, the United

States and Russia, were largely occupied with expansion across their own continents. A European return to genuine trade protectionism was therefore to influence world, as well as European, development.

Unlike the twentieth century that favoured quotas, the principal instrument of (supposed) protectionism in the period 1870–1914 was a tax. Almost all taxes discriminate in some way because they alter prices.<sup>5</sup> In so far as prices are otherwise set in competitive markets, without significant un-priced consequences of the trades, then taxes misallocate resources and lower the value of production. But government must be financed, and therefore taxes are a necessary evil. What makes a tax protectionist is discrimination against foreign goods compared with home production. If there were no competing domestic industry, then however high the tax on a foreign product sold at home, there would be no protection. Alternatively, protection could be avoided if the customs duty on imports was matched by an equivalent excise tax on the home-made good – as with Indian cotton textiles and British textiles imported into India from 1886.

The costs of collection are another burden of taxation in addition to the price, and therefore induce distortion. Governments have always favoured taxes on long-distance trade because there have usually been only a few frontier towns or ports through which the trade was able to pass. The trade could easily be controlled and taxed at these points, in marked contrast to widely-spread internal production and commerce. Collection costs for most of history have been of far greater concern than induced price distortions.

Customs duties were therefore a generally favoured fiscal instrument. But the question remained, how far could duties be raised without “killing the goose that lays the golden egg”? By the later nineteenth century, Adam Smith’s quotation that “In the arithmetic of the customs two and two, instead of making four, make some times only one . . . with regard to . . . heavy duties”<sup>6</sup> had been taken to heart by most European governments.

Adding heavier taxes on imports could subtract from customs revenue by reducing the volume of imports proportionately more than the increase in duties (in part by encouraging smuggling). A drawback of more heavily taxing products where demand would not fall off much in response to higher prices is that these may well be necessities of life (Smith instanced salt, leather, candles and linen) and in equilibrium these would raise the cost of labour, while the process of getting to equilibrium could provoke riots and revolution as well as widespread hardship.

By contrast, taxes on luxuries – among which Smith included tobacco, beer, ale and wine, tea and sugar – had no such effect. So, for paying the expenses of the sovereign, “colonial goods” were “fiscal goods”, appropriate targets for taxation. In so far as beer and ale were drunk by the poorer classes and wine by the richer, Smith’s equality of sacrifice principle also recommended heavier taxes on wine than on beer. The equivalence of the

British beer excise and wine tariff provides one of the major bones of contention on the issue of the relative restrictiveness of French and British trade in the nineteenth century (see Chapters 1 to 3).

With this in mind, Chapter 6 scrutinises the repercussions of the inclusion or exclusion of fiscal duties (on tropical or “luxury” goods) on assessing the protectionist effect of European tariffs. Fiscal goods indeed bore the greater burden of customs duties in France (72 per cent nominal duty) and Italy (82 per cent), but not so much in Germany (36 per cent) in 1913. Is it likely that  $2 + 2 = 1$  for French and Italian fiscal goods? For a “small” country,<sup>7</sup> a partial equilibrium analysis of a tariff on colonial goods, “luxuries” with no domestic substitutes, indicates that the revenue-maximising specific duty as a proportion of the price should equal the reciprocal of (the absolute value of) the price elasticity of demand.<sup>8</sup> If the elasticity of demand for colonial goods in Italy was  $-1.25$ , then the Italian duties were optimal for revenue purposes ( $1/1.25 = 0.8$ ). If the elasticity were much greater in absolute value than  $1.25$ , then for Italy  $2 + 2 = 1$  as far as revenue was concerned. For Germany, rates were optimal if the elasticity of demand was very much higher ( $1/0.36 = -2.8$ ).

While Smith’s doctrines were widely accepted in the “long nineteenth century” and therefore may be expected to have influenced practice, economic analysis of taxation has moved on since then and so, in consequence, may our assessment. We may note that the suppliers of fiscal goods lose out from their taxation, and the more so the more elastic is consumer demand. This may provide an optimal tariff argument for a large country where colonial goods were concerned. By taxing sugar, coffee and tea, European buyers could drive down the before-tax price of these products, shifting the terms of trade in favour of Europe and against the tropical exporters.

A tax on “wage goods” may affect the trade-off between work and leisure.<sup>9</sup> “Luxuries” are likely to be complements to leisure, so by taxing them disproportionately the disincentive to work from general commodity taxation is reduced. Conversely Smith’s point about necessities could be interpreted as, for example, candles were often complements to work and so a tax on them provided a disincentive to work.

The level of taxation depends upon the amount of tax to be raised, which in turn may be affected by the costs of collection. These costs are influenced by the level of national economic development. In low-productivity economies agriculture is the principal source of income but is not especially easy to tax. Foreign trade is an easier source of revenue. Without access to an income tax, indirect taxes are bound to be higher and, apart from the accessibility, foreign merchants are likely to have less political influence on taxes than domestic producers – unless these producers use foreign supplies.

Falling collection costs with economic development, differential collection costs between taxes and jumps in the ratio of permanent government

spending to permanent national income explain the shifts between predominant taxes in US history, according to Gardner and Kimbrough (1992). Tariffs have lower collection costs than excise, the costs of which in turn are lower than income tax, and this is the sequence of US tax revenue evolution as government spending rose. Detached from the Panglossian model of government and inter-temporally optimising representative consumers, the explanation has *prima facie* plausibility.

It appears broadly to match the British experience. A guide to the relative weight of internal and external indirect tax revenue for the UK is the balance between customs and excise – bearing in mind the  $2 + 2 = 1$  principle. From the 1830s (before the much-discussed repeal of the Corn Laws), customs revenue exceeded excise revenue, accounting for more than 40 per cent of gross public income. Excise surpassed customs in the 1870s, when customs averaged around 28 per cent of income.<sup>10</sup> By 1913, under “free trade”, customs revenue was 65 per cent higher than in 1835 but total public revenue was almost four-times greater. Prime Minister Robert Peel defended the reintroduction of income tax, not simply as a means of remedying the budget deficit, but as a “juster principle of taxation” (cited in Howe, 1998: 20, n103). As perhaps the most developed economy of the period, Britain was in a position to begin shifting the tax base before others. Even so, the yield from property and income tax did not exceed the Napoleonic War peak in peacetime, other than temporarily, until the last decade of the nineteenth century.

Hence, low-income countries may have high tariffs for revenue purposes, without necessarily the high tariffs causing the low income. On the other hand, high taxation in general may crowd out productive activity and/or high tariffs discriminating against foreign goods may encourage the expansion of less-productive domestic activity and reduce the gains from trade. More openness to trade does appear to be associated with higher incomes before the First World War, even after the impact of income on trade has been controlled (Irwin and Marko, 2002)

The infant industry argument, based upon learning or economies of scale, is that high tariffs can encourage high-productivity industry, if only they are given the chance and this is one reason why manufacturing tended to acquire protection in the nineteenth century as Friedrich List (1856) argued. In Chapter 7, O’Rourke estimates the correlation between tariffs and economic growth in the late nineteenth century in three types of growth model: unconditional convergence equations, conditional convergence equations and factor accumulation models. For a panel of ten countries between 1875 and 1914, tariffs were positively correlated with growth, a result that would have thrilled List (or Paul Bairoch) but, conversely industrial tariffs seem to have been negatively correlated with relative labour productivity, taking the UK as a European standard (Chapter 9).

Where the competing industries at home and abroad consist only of a few firms, an oligopoly model provides a theoretical structure that could

support these empirical findings. A tariff in such a model damages domestic consumers as in the standard approach, but in principle they could be compensated from the profit shifted from the foreign oligopolist and the domestic economy could be better off – at the expense of foreigners. The 1879 German soda tariff did indeed help Germany by redistributing profits, but was not fundamental to the rise of the German industry after 1880 and the decline of British industry (as shown by Krause and Puffert, 2000), and this conclusion can safely be extended to the other more successful branches of German industry as Dedinger shows in Chapter 10. Lower German input costs and the adoption of a new process (instead of the Leblanc process) were much more important. The German tariff reduction in 1873 reduced German welfare for the same redistributive reason as the 1879 hike enhanced it.

Yet the positive correlation between growth and tariffs further investigated by Estevadeordal in Chapter 5 is unlikely to reflect a causal relation in general; most industries were not oligopolies. Moreover, for O'Rourke's sample, protectionist or inward-oriented trade strategies were not obviously successful. Several individual country experiences in the late nineteenth century are not consistent with the view that import substitution promoted growth (Chapter 8). First, the two most rapidly expanding high-tariff countries of the period, Argentina and Canada, grew because capital imports helped to stimulate export-led growth in agricultural staples products, not because of protectionist trade policies. Second, most land-abundant countries (such as Argentina and Canada) imposed high tariffs primarily to raise government revenue, and such duties are structured differently from protective tariffs. That two labour-scarce, land-abundant countries both grew rapidly and tended to impose high-revenue tariffs renders suspect any inference that tariffs were the cause of their dynamic economic growth in the later nineteenth and early twentieth centuries.

A similar positive (contingent) correlation of tariffs with growth might be expected if the neoclassical model provided some explanation of international growth patterns. Then poor countries would have grown faster than rich, and since poor countries had higher tariffs than rich, on average high tariffs would have been associated with high growth.

If the land-abundant economies are excluded from the sample, and low-income European countries added, a negative simple correlation emerges between income and tariffs. In Figure I.1, the two outliers on the bottom right are the UK in 1890 and 1910. The two on the top left are Russia and Portugal in 1890, and the three points below them are the same countries in 1910 plus Greece (which had raised her tariff rate by proportionately more than her GNP per head since 1890). Even with these seven data points removed, there is still a negative correlation between income and the measure of the tariff rate. The association might simply reflect that for poor countries tariff collection costs are lower than

those for other taxes, and hence for such economies tariffs are a major source of government revenue. However, the negative association remains, even when the influence of a number of other determinants of income, such as illiteracy, coal production, and commitment of the monetary system to a metallic standard, are controlled. Of particular interest in this respect are the chapters devoted to Portugal (Chapter 12) and the Balkan countries (Chapter 14).

The average tariff of Figure I.1 is measured as the ratio of tariff revenue to import value. As indicated above, a high tariff rate may not indicate a desire to protect, but simply that this is the cheapest way to finance the state. Yet the tax rates may still have been protectionist. More evidence of the desire to protect is “the scientific tariff”, intended to allow cheap raw materials in but to exclude foreign manufactures. This then allows the expansion of domestic manufacturing, seen as the key to economic development. List’s infant industry argument appeals to learning by doing and economies of scale that would allow protected industries eventually to grow large enough and efficient enough to compete with foreigners. As several country studies gathered here portend to show, this was the case for none of the trade policies adopted, by among others, France, Italy, Germany or Spain. Even relatively free-trade Belgium or Switzerland enforced tariffs which, in their structure, bear some resemblance to those decisively protectionist countries: taxation of agricultural necessities and food, tropical goods and semi-finished textile and metal goods.

As long as domestic firms import raw materials that are untaxed, their “effective protection” is higher than the nominal tariff on the foreign goods with which they compete in the home market. They will raise prices on their value added by proportionately more, the smaller is their value added relative to the total value. This does assume, contrary to the infant industry argument, that prices are always raised by the height of the tariff.

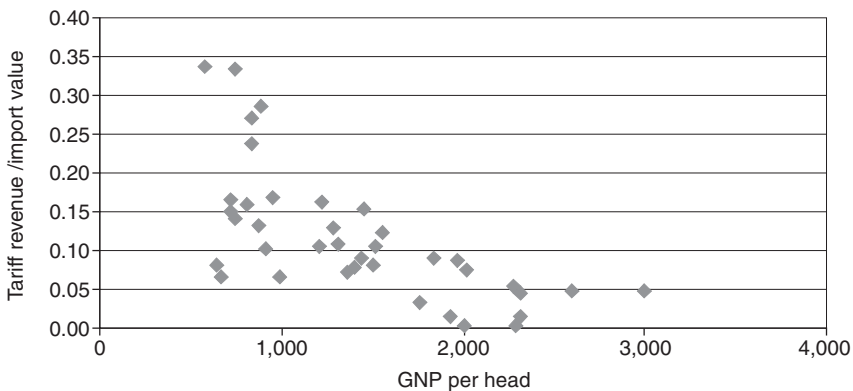


Figure I.1 Average tariff and GNP in Europe, 1890 and 1910.



A competitive domestic industry that learned from experience how to bring down costs would not raise prices above these lower costs, because any firm that attempted to do so would be undercut by competitors. In addition, a monopolistic firm or a firm with market power interested in maximising profits will raise its price by less than the amount of the tariff because it is aware of the custom lost consequently. Effective protection rates therefore depend on market power and also on cost conditions. So long as industries are subject to constant returns to scale and are perfectly competitive, however, these qualifications can be ignored.

Why the shift to protection? Federico examines (in Chapter 10) the various hypotheses laid out by political scientists in the light of the Italian case, and his analysis can safely be extended to most other European countries. With the extension of the franchise, elections and perceived workers' interests became as important for protection as lobbying, if not more so. The British election of 1906 was explicitly fought on the protection issue – though the position of trade unions after the Taff Vale case<sup>11</sup> was another vital point of concern. In the German election of 1877, as in the Italian election of 1887 and the French election of 1889, protectionism was a major issue; unlike the British, apparently a majority of voters favoured tariffs. Falling grain prices frightened the big farmers' lobbies and under the influence of depression, industrialists in Continental countries formed influential pressure groups which sealed an "alliance of wheat (or rye) and iron".

Another model by Adam Klug (2001) of the politics of protection assumes voters are motivated by the way in which trade policy would affect their incomes. With workers largely immobile between sectors, all factors employed in a sector see their economic fortunes as tied to that sector. This author attempts to explain voting proportions by district with the employment in various activities in that district and with the previous electoral result. This last variable identifies the effect of tradition, so allowing a test of whether the employment variables account for switches in party allegiance at the election.

Workers in successful export industries tended to favour free trade, and those in industries threatened by foreign competition were more inclined to vote for protection. To explain Britain's continued adherence to free trade and Germany's rejection of it with this model, it is necessary to suppose that the trade performance of the British was more successful than that of the Continental economies, which runs contrary to historiographic tradition. Alternatively an appeal must be made to the more conventional food prices explanation. Britain was more highly urbanised and industrialised than any other European country. Protection in Britain was identified with higher food prices that would harm the majority of workers whereas, in the rest of Europe, the proportion employed in the food supplying sector, agriculture, was much larger. Thus agricultural interests might be irrelevant in his model but it is likely that this stems from the

level of aggregation; when using constituency-level data, agricultural employment may have seemed less dispersed and more influential.<sup>12</sup> Behind this lies the enduring attraction of protectionist measures as the ideal vote-catcher, the illusion as Vilfredo Pareto put it, “that everybody could receive something without anyone having to pay” (Pareto, 1984).

## Notes

- 1 J. M. Keynes, *The General Theory of Employment, Interest and Money*, chapter 24, V (London, Macmillan, 1973), p. 383.
- 2 Measures of outward orientation for the world’s most important trading partners recovered its pre-1914 level only in 1980, first signalled by Maddison (1982), p. 114.
- 3 Krueger, 1997.
- 4 Dollar, 1992; see Irwin in Chapter 8.
- 5 A fixed tax per person does not alter relative prices but the opprobrium attached to poll taxes suggests not surprisingly that the distributive consequences of taxation matter more in politics than efficient resource allocation. Otherwise, the wider the tax base, the smaller the distortion. So a value added tax at a constant rate on all goods leaves the rate of substitution between these goods unchanged relative to the “no tax” state. However, it does alter the substitution possibilities between work and leisure, unless accompanied by an income tax at the same rate.
- 6 Adam Smith, *The Wealth of Nations*, Book V, chapter II, part II, article IV.
- 7 Here a small country is one that cannot influence the prices of goods imported by varying the volume bought.
- 8 If  $t$  is the tax in, say, money units per quantity unity,  $M$  the quantity of imports of colonial goods in perfectly elastic supply and  $p$  the price in the same units, then the objective is to maximise  $t.M(t)$   $0 = M + t(\partial M/\partial t)$ ,  $t/p = 1/e$ , where  $e$  is the absolute value of the price elasticity of demand for imports.
- 9 Ramsey taxes are proportional to the sum of the reciprocals of the elasticities of demand and supply. The formula takes into account that the deadweight loss increases with the tax rate as well as the  $2 + 2 = 1$  eventual revenue effect, and asserts that the marginal excess burden of the tax must be the same for all commodities. Commodities with low elasticities of demand or supply have a lower marginal deadweight loss per marginal unit of revenue raised (with independent demands) and so should face higher marginal tax rates.
- 10 Though this overtaking was helped by revenue for most assessed taxes being transferred from land and assessed taxes to Excise from 1871.
- 11 A 1901 court decision on a Cardiff railway yard stipulated that trade unions could be sued for the misbehaviour of their members, putting their funds at risk from employers losing money because of a strike.
- 12 At another level the explanation of the shift to protection is that the committed free trader, Britain, did not sufficiently use its economic bargaining power to offset protectionist pressure in other countries. During the years 1848–71 Britain had maintained an open trading system. Even later she negotiated “most favoured nation” treaties with Portugal (1882), Turkey (1883), and Spain (1886). But, although the Foreign Office put up options for a similar treaty with Germany three times, economic sanctions were allowed to lie dormant after 1878 when German policy moved (see O’Brien, 2002: 20).



## **Part I**

# **Assessing the intensity of nineteenth-century protectionism**