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Always Protectionist? Latin American Tariffs from Independence to Great Depression*

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Abstract. This article reports a fact that has not been well appreciated: tariffs in Latin America were the world's highest long before the Great Depression. This is a surprising fact, given that Latin America is believed to have exploited globalisation forces better than most regions before the 1920s, and given that the 1930s have always been viewed as the critical decade when Latin American policy became so anti-global. The explanation does not lie with imagined output gains from protection in these young republics, but rather with state revenue needs, strategic responses to trading partner tariffs and a need to compensate globalisation's losers.

Introduction

From Independence to 1914 the tariff policies adopted by governments in Latin America made it the world's most protectionist region by a wide margin. During World War I Latin American protectionism collapsed virtually overnight when wartime inflation reduced specific duties to much smaller percentages of import values. After the war Latin American tariff rates rose quickly to their pre-war levels, but by the late 1920s high tariffs were becoming increasingly common throughout the world. Most important, Latin American governments did not switch from liberal to protectionist policies during the Great Depression or during the decade thereafter. Latin America had already been highly protectionist for more than a century.

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For many Latin Americanists, and others interested in such issues, these assertions may appear to contradict settled conventional wisdom.[1] They will seem less startling, however, to economic historians of Latin America. William Glade summarised a broad consensus in the field when he observed in the authoritative *Cambridge History of Latin America*, that 'a fair number of [Latin American] tariffs had become protectionist' by the end of the nineteenth century, 'as free trade was by no means universally accepted in Latin American policy making circles even during the high tide of liberalism.'[2] And in the very next chapter Rosemary Thorp reminded her readers 'how wrong it is to see 1929 as too much of a turning point …'[3] Moreover, economic historians of all the major Latin American countries have repeatedly called attention to the high tariff rates prevailing throughout the nineteenth and early twentieth centuries.[4]

This article provides data on the tariff rates that prevailed in the major Latin America economies from independence through the Great Depression. Using comparable evidence from other world regions, we demonstrate that Latin America was the *most protectionist* region in the world (except for the United States in the immediate post-Civil War era) from at least 1865 up to World War I. Latin America could not have led the world down the path to protectionist de-linking from the global economy during the 1930s, because protectionism had been woven into the political fabric of Latin America many decades earlier. Thus, the main goal of our article is to explore a number of hypotheses that might help to explain

[1] To cite the widely used text on the *Economics of Development* by Malcolm Gillis et al. (4th ed., New York, 1996), p. 502, 'In the developing world, import substitution was first explored in Latin America when their primary export markets were severely disrupted, first by the Great Depression of the 1930s and subsequently by the scarcity of commercial shipping during World War II.'

[2] William Glade, 'Economy, 1870–1914,' in Leslie Bethell (ed.), *Latin America: Economy and Society, 1870–1930* (New York, 1989), pp. 45–6.

[3] Rosemary Thorp, 'Economy, 1914–1929' in *ibid.*, p. 81. See also the excellent 'Introduction' to Enrique Cárdenas, José Antonio Ocampo and Rosemary Thorp (eds.), *An Economic History of Twentieth-Century Latin America* (*Vol. I – The Export Age: The Latin American Economies in the Late Nineteenth and Early Twentieth Centuries*) (Oxford, 2000), pp. 1–31.

[4] On Argentina, see Carlos Díaz Alejandro, *Essays on the Economic History of the Argentine Republic* (New Haven, 1970), p. 294; for Brazil, see João Manoel Cardoso de Mello and Maria da Conceição Tavares, 'The Capitalist Export Economy of Brazil, 1884–1930' in Roberto Cortes Conde and Shane J. Hunt (eds.), *The Latin American Economies: Growth and the Export Sector, 1880–1930* (New York, 1985), pp. 99–117; for Colombia, see Jorge Orlando Melo, 'Las vicisitudes del modelo liberal (1850–1899)' in José Antonio Ocampo (ed.), *Historia económica de Colombia* (4th ed., Bogotá, 1994), pp. 149–64; on Mexico, see Edward Beatty, *Institutions and Investment: The Political Basis of Industrialization Before 1911* (Stanford, 2001), ch. 2, and Graciela Márquez, 'Tariff Protection in Mexico, 1892–1909: Ad Valorem Tariff Rates and Sources of Variation,' in John H. Coatsworth and Alan M. Taylor (eds.), *Latin America and the World Economy Since 1800* (Cambridge, MA, 1998), pp. 407–42.

Latin America's extreme protectionism in the century from independence to 1929.

The first explanatory hypothesis we examine once seemed the most promising, namely, that Latin American governments pursued protectionist policies because they learned through trial and error that high tariffs promote economic growth. We reject this hypothesis and argue instead that high tariffs in the first decades after independence served the revenue maximising goals of weak governments confronting both internal and external security threats. Toward the end of the century, however, stable governments facing fewer threats kept tariffs high, but increasingly manipulated tariff structures to protect domestic industries. In World War I, we observe that the collapse of protection resulted mainly from the effects of inflation on tariff rates in countries that relied on specific duties. Most of these observations and others reported below were subjected to regression analysis reported in detail elsewhere but summarised here. We conclude with some suggestions for further research on trade and trade policy in Latin America over the past two centuries.

Latin American protectionism before 1940

Among the explicit policy measures of openness available, the average tariff rate is by far the most homogenous protection measure and the easiest to collect across countries and over time.[5] It is also the most effective for the era after the collapse of the colonial monopolies in the 1820s and prior to the re-introduction of non-tariff barriers (though in different forms) in the 1930s. Independence in the 1820s freed the new Latin American republics from the Spanish and Portuguese commercial monopolies and other non-tariff barriers to trade. Prior to independence, imports had to stop in Spanish or Portuguese ports, bear the cost of reloading onto Spanish or Portuguese vessels, and pay port charges and taxes. Because of these restrictions and imposts, Spain and Portugal never imposed high tariffs in their colonies. Thus, the newly independent governments of Latin America inherited a regime that restricted imports, but imposed fairly low tariffs. In Mexico, for example, the ratio of tariff revenues to imports

[5] The average tariff rate is measured here as customs revenues (import duties only) as a share of total import values. There is a well-developed trade literature that debates the measurement of openness. See, for example, J. D. Sachs and A. Warner, 'Economic Reform and the Process of Global Integration,' *Brookings Papers on Economic Activity*, vol. I (Washington, DC, 1995). That literature makes it clear that trade shares are poor measures of openness since these can be the result of domestic demand, foreign supply or a move towards free trade.

averaged only nine per cent during the seven years for which there are data between 1796 and 1808.[6]

Shortly after independence, the Latin American governments began raising tariffs. In Brazil the ratio of import duties to imports rose from 15 per cent (constrained by the 1810 treaty with Britain) to nearly 30 per cent by mid-century.[7] Mexico's first tariff law in 1821 imposed a 25 per cent *ad valorem* tariff on all imports and prohibited only nine items. Liberal federalists, who seized power in 1823, raised rates and multiplied prohibitions. The ratio of tariff revenues to imports in liberal Mexico in the 1820s averaged 36 per cent for the decade, then rose to 45 per cent under conservative rule in the 1840s and peaked at 46 per cent under liberal rule in the 1870s and 1880s.[8] Argentine tariff policies followed the Brazil/Mexico trajectory after independence. The average nominal tariff rate fell to 21 per cent in 1822, but rose to 31 per cent with a new tariff law 1836; multiple prohibitions were introduced in 1841, though rates fell back again in 1854.[9] Peru not only imposed high tariffs but also revived non-tariff barriers to protect domestic producers and traders, until rising guano revenues pushed the government to embrace 'free' trade for more than two decades beginning in 1852.[10] Colombia initially adopted a 'moderate' tariff regime with duties set at their colonial levels of approximately 20 per cent, but rates oscillated higher thereafter, rising sharply when trade revenues fell off in 1830–33 and again in 1847, each time followed by modest declines. The 'Liberal' Revolution of 1849 to 1852 raised tariff rates twice. By mid century, average rates were almost 30%.[11] But it was not so much high tariff rates as the region's formidable geography that made Colombia's foreign trade sector the smallest in

[6] Export data are from Miguel Lerdo de Tejada, *Comercio exterior de México desde la Conquista hasta hoy* (Mexico, 1967); government revenues are found in Herbert Klein and John TePaske, *Ingresos y egresos de la Real Hacienda de Nueva España* (2 vols., Mexico, 1986). Lerdo's import data refer to trade through Veracruz, the colony's main port; the figure in the text thus uses only Veracruz customs revenue. Data on both imports and revenues are available only for 1796–1800, 1805, and 1808; in these years, import revenues averaged nine per cent of the value of imports.

[7] Stephen Haber and Herbert Klein, 'Economic Consequences of Brazilian Independence' in Stephen Haber (ed.), *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800–1914* (Stanford, 1997), pp. 252–4.

[8] Beatty, *Institutions and Investment*, Table 4, p. 53. See also Sandra Kunst Ficker, 'Institutional Change and Foreign Trade in Mexico, 1870–1911' in Jeffrey L. Bortz and Stephen H. Haber (eds.), *The Mexican Economy, 1870–1930* (Stanford, 2002), pp. 163–77.

[9] Carlos Newland, 'Puramente animal: Exportaciones y crecimiento en Argentina, 1810–1870,' unpublished ms., 1996.

[10] See Paul Gootenberg, *Between Silver and Guano: Commercial Policy and the State in Post-Independence Peru* (Princeton, 1989).

[11] José Antonio Ocampo and Santiago Montenegro, *Crisis mundial, protección e industrialización: ensayos de historia económica colombiana* (Bogotá, 1984) report average tariff rates of 28.7% in 1855/6–57/8. The rates on cotton textiles were quite a bit higher.

the western hemisphere. Chile took over the moderate tariff rates inherited from the colonial regime and, except for relatively brief episodes, maintained average nominal rates in the 20 to 25 per cent range for most of the nineteenth century.[12] Cuba, whose tariffs were set in Madrid, followed a similar trajectory.[13]

After 1865 the tariff and fiscal revenue data are sufficiently abundant to allow systematic comparison across eight major Latin American economies (Argentina, Brazil, Chile, Colombia, Cuba, Mexico, Peru, and Uruguay) and between them and 27 others around the world: the United States; three members of the European industrial core (France, Germany, United Kingdom); three non-Latin European offshoots (Australia, Canada, New Zealand); ten from the European periphery (Austria-Hungary, Denmark, Greece, Italy, Norway, Portugal, Russia, Serbia, Spain, Sweden); and ten from Asia and the Mideast (Burma, Ceylon, China, Egypt, India, Indonesia, Japan, the Philippines, Siam, Turkey).[14]

Figure 1 plots average world tariffs before World War II (unweighted and weighted by export shares in world markets), and Figure 2 plots it for some regions.[15] There are six regions plotted there: USA, European core, European periphery, European non-Latin offshoots, Asia and Latin America, the country members of which have already been identified above. The two figures deserve four main observations.

First, Figure 1 documents a protectionist drift world-wide between 1865 and World War I – a globalisation backlash if you will – registering a slow

[12] J. Diaz and G. Wagner, 'Importaciones, aranceles y otros instrumentos de política comercial: antecedentes: siglos XIX y XX,' *Documento de Trabajo del Instituto de Economía*, no. 223 (Santiago, 2002).

[13] Julio Le Riverend, *Economic History of Cuba* (Havana, 1967), chap. 19.

[14] This article is part of a series. In another, the present authors explore the quantitative evidence and the post-1870 period in Latin America much more extensively. See John H. Coatsworth and Jeffrey G. Williamson, 'The Roots of Latin American Protectionism: Looking Before the Great Depression,' *NBER Working Paper 8999*, National Bureau of Economic Research, Cambridge, MA (June 2002). In addition, Williamson has by himself and with others used the 35-country sample to explore outside of Latin America many of the issues raised in this paper; Jeffrey G. Williamson, 'Was It Stolper-Samuelson, Infant Industry or Something Else? World Tariffs 1789–1938' *NBER Working Paper 9656*, National Bureau of Economic Research, Cambridge, Mass. (April 2003); Luis Bértola and Williamson, 'Globalization in Latin America Before 1940,' *NBER Working Paper 9687*, National Bureau of Economic Research, Cambridge, Mass. (May 2003), and Chris Blattman, Michael Clemens and Williamson, 'Who Protected and Why? Tariffs the World Around 1870–1937,' paper presented to the RIN Conference, Punta del Este, Uruguay (December 16–17, 2002).

[15] Like Figure 1, we have also calculated (but do not report) weighted tariff averages for the regions in Figure 2, where weights are the country's total export share in regional exports or its GDP share. However, we prefer to treat countries as independent policy units regardless of size. Figures 1–5 are taken from Coatsworth and Williamson, 'The Roots,' and Figure 6 is from Bértola and Williamson, 'Globalisation'.

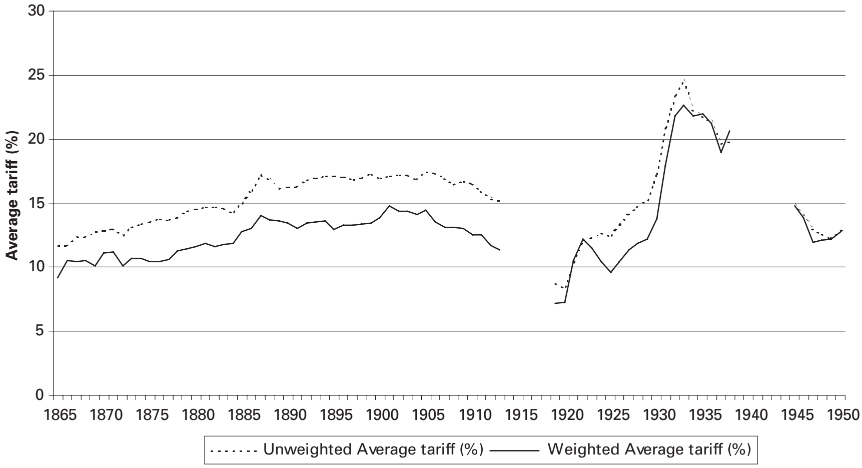

Fig. 1. *Average World Tariffs Before World War II.*

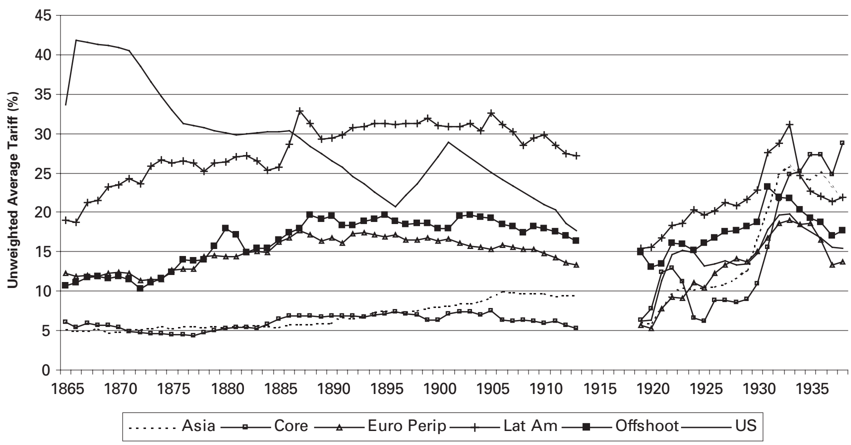

Fig. 2. *Unweighted Average of Regional Tariffs Before World War II.*

retreat from the liberal and pro-global trade positions in mid-century. The interwar surge to world protection is, of course, better known.

Second, note the enormous variance in levels of protection between world regions in Figure 2. The richer new world European offshoots had average levels of protection more than twice that of the European core around the turn of the last century. When the USA is shifted to the rich European offshoot group, the ratio of tariffs between European offshoot and core jumps to more than three times. To take another example, in 1925 the European periphery had tariffs 2.4 times higher than those in the European

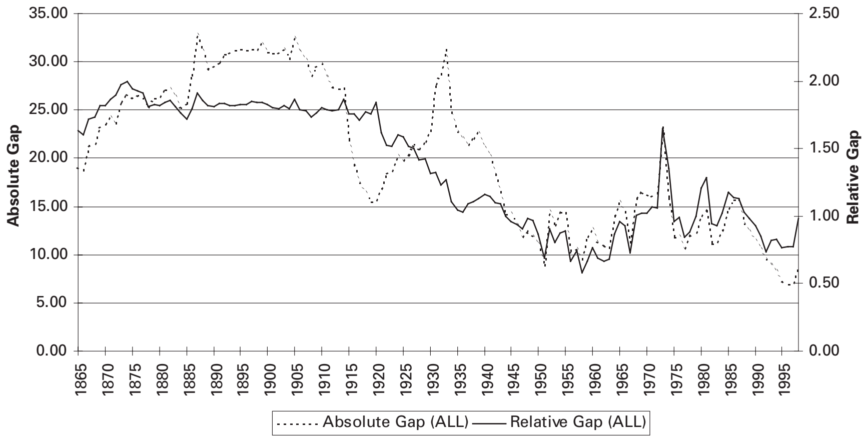

Fig. 3. *Gap Between Latin American Tariffs and World Average.*

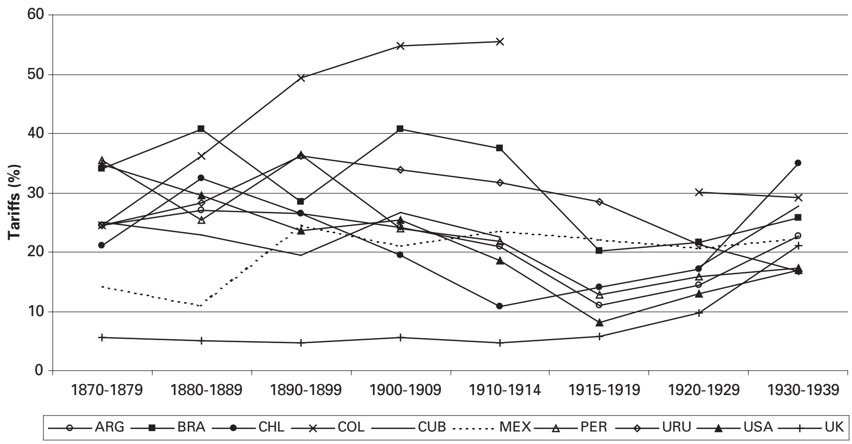

Fig. 4. *Own Tariffs in Latin America Before World War II.*

part of the industrial core. To take yet another example, in 1885 the poor but independent parts of Latin America (Brazil, Colombia, Mexico and Peru) had tariffs 4.6 times higher than those in the poor and dependent parts of Asia (Burma, Ceylon, China, Egypt, India, Indonesia and the Philippines). The gap between the Latin American average tariff rates and those of the rest of the world are plotted in Figure 3.

Third, there was also great variance *within* regions. Figure 4 compares the eight Latin American cases. In 1905 tariffs in Uruguay (the most protectionist land-abundant and labour-scarce country in our Latin American sample) were about two and a half times those in Canada (the least protectionist land-abundant and labour-scarce country). In the same year, tariffs in Brazil and Colombia (the most protectionist Latin American countries) were almost ten times those in China and India (the least protectionist in Asia). The same high-low range appeared among the industrial core countries (the USA five times the UK) and the European periphery (Russia six times Austria-Hungary). Thus, explaining differences between countries before 1940 is at least as challenging as explaining changes in tariff policy over the eight decades after 1865, perhaps more so. And this observation applies with special force to Latin America where the range around World War I was from a little more than 10 per cent in Chile to about 55 per cent in Colombia.

Finally, note the *really* big fact that motivates this article: the Great Depression and the de-linking import substitution strategies that eventually arose to deal with it had little or no impact on average tariff rates in Latin America. Nineteenth-century Latin America, whether our poor four (Brazil, Colombia, Mexico, Peru), the rich three in the southern cone (Argentina, Chile, Uruguay), or even Cuba, already had *by far* the highest tariffs in the world (Figure 2). With the exception of the United States, Latin American tariffs were the highest in the world by 1865. At the apogee of the *belle époque*, Latin American tariffs were at their peak. To repeat, tariffs were higher at the end of the *belle époque* than in the Great Depression. Furthermore, the rise in Latin America's tariffs from the late 1860s to the turn of the century was much steeper than was true of Europe, including France and Germany about which so much tariff history has been written.

Apparently, the famous export-led growth spurt in Latin America was consistent with extremely high tariffs (even though the region might have done even better without them). Latin American tariffs were still the world's highest in the 1920s, although the gap between Latin America and the rest had shrunk considerably (Figure 3). Oddly enough, it was not until the 1930s (except for briefly in World War I) that the rest of the world (the European Core and Asia) finally surpassed Latin America in securing the distinction of being the most protectionist. By the 1950s, when ISI policies were flourishing, Latin American tariffs were actually *lower* than those in Asia and the European periphery.[16] Thus, whatever explanations are offered for the Latin American commitment to protection, we must search for its origin *well* before the Great Depression.

There are a number of surprises in these tariff data that have not been noticed by historians who have concentrated on one epoch, one region, or one country. This article stresses the Latin American surprise: Latin America

[16] This finding – higher levels of protection in Asia than in Latin America in the 1950s and 1960s – is confirmed by Alan Taylor, even when he employs more comprehensive measures of protection that include non-tariff barriers, in 'On the Costs of Inward-Looking Development: Price Distortions, Growth, and Divergence in Latin America,' *Journal of Economic History*, vol. 58 (1998), Table 2, p. 7.

had the highest tariffs in the world as early as 1865, a position it held until the 1930s when Europe and others took over this dubious distinction. The traditional literature written by European economic historians has made much of the tariff backlash on the continent after the 1870s.[17] Yet, this heavily-researched continental move to protection is minor when compared with the rise in tariff rates over the same period in our four poor Latin American countries (up 6.9 percentage points to 34 per cent), and this for a region which is said to have exploited the pre-1914 globalisation boom so well.

In the interwar decades, tariffs took two big leaps upward, and these took place world wide. The first leap was in the 1920s, which might be interpreted as a post-war policy effort to return to pre-war levels. It might also have been due to post-war deflation. Inflations and deflations influenced tariff rates in the 1910s, the 1920s and other times, an effect to which we return later in this paper, and one which we label the specific-duty-inflation effect. The second interwar leap in tariff rates was, of course, in the 1930s, with aggressive beggar-my-neighbour policies reinforced by the specific-duty-inflation effect. Except for two that had the highest pre-war tariffs, Colombia and Uruguay, tariffs rose everywhere in Latin America. But note again that for most Latin American countries, tariff rates rose to levels in the late 1930s that were no higher than they had been in the *belle époque* (Figure 4).[18]

Protection and growth

Did protection help or hinder economic growth? Latin Americans began debating this issue even before they achieved independence from Spain and Portugal in the 1820s. The first known case of governmental support for infant industry occurred in Mexico in 1825 when the new congress passed a bill to encourage the development of a modern paper manufacturing industry. The bill granted a seven-year exemption from internal excise taxes (*alcabalas*) and a permanent exemption of import duties on rags to any enterprise that would begin producing paper within the next two years. The bill was passed in response to a request from Manuel Zozaya, who had returned home from his duties as Mexico's ambassador to the United States with

[17] See C. P. Kindleberger, 'Group Behavior and International Trade,' *Journal of Political Economy*, vol. 59 (1951), pp. 30–46; P. Bairoch, 'European Trade Policy, 1815–1914,' in P. Mathias and S. Pollard (eds.), *The Cambridge History of Europe*, vol. III (Cambridge, 1989); Kevin H. O'Rourke and Jeffrey G. Williamson, *Globalization and History* (Cambridge, MA, 1999).

[18] Of course, quotas, exchange rate management, and other non-tariff policy instruments served to augment the protectionist impact of tariff barriers far more in the 1930s than in the *belle époque* when non-tariff barriers were far less common.

machinery to set up the country's first paper mill in the Mexico City suburb of San Angel. By the time the bill passed congress, President Guadalupe Victoria had already ordered that all Mexican government documents be printed on paper produced at the San Angel plant. State governments in Jalisco and Puebla went further, offering 'to loan or invest public funds' to help start similar ventures. The use of tariff protection, along with other inducements, to stimulate new industries or protect industrial infants became commonplace in several of the larger countries by the 1830s. In Mexico, an industrial development bank, the Banco de Avío, used customs revenues to purchase equipment for cotton spinning mills as well as modern paper factories and iron foundries, and loaned entrepreneurs the funds to buy the machinery at cost.[19]

But did these nineteenth-century experiments with industrial protection in Mexico and elsewhere in Latin America make economic sense? Was there anything in the experience of the region that could have persuaded policy makers that high levels of protection actually served to promote economic growth?

The late twentieth century evidence on this question is unambiguous.[20] Since World War II, at least, the more open economies – however openness is measured – have tended to grow faster. The nineteenth century evidence tells a different story, however. Over thirty years ago, Paul Bairoch argued that protectionist countries grew *faster* in the nineteenth century, not slower

[19] See R. A. Potash, *Mexican Government and Industrial Development in the Early Republic: The Banco de Avío* (Amherst, MA, 1983), chap. 1.

[20] Four kinds of studies have reached this conclusion. The first were those that employed classic partial-equilibrium calculations of deadweight losses, such as those in the series of volumes in the series, J. Bhagwati and A. O. Krueger (eds.), *Foreign Trade Regimes and Economic Development* (New York, 1973–1976). This work was criticised on grounds that protection is not allowed a chance to lower long-run cost curves, as in the traditional infant-industry case, or to foster industrialisation and thus growth, as in those modern growth models where industry is the carrier of technological change and capital deepening. Secondly, some studies showed a correlation between trade openness and growth, as in Peter H. Lindert and Jeffrey G. Williamson, 'Does Globalization Make the World More Unequal?,' in Michael Bordo, Alan M. Taylor, and Jeffrey G. Williamson (eds.), *Globalization in Historical Perspective* (Chicago, 2003), Table 5.3, p. 251. This work is vulnerable to the criticism that the effect of trade policies alone cannot be isolated since other policies usually change at the same time. Third, there are country event studies, where the focus is on periods when trade policy regimes change dramatically enough to see their effect on growth. See, for example, Anne Krueger's analysis of trade opening moments in South Korea around 1960, Brazil and Colombia around 1965, and Tunisia around 1970 in 'The Effects of Trade Strategies on Growth,' *Finance and Development* 20 (1983), pp. 6–8, and 'Trade Policies in Developing Countries,' in R. Jones and P. Kenan (eds.), *Handbook of International Economics*, vol. 1 (Amsterdam, 1984). Fourth, macro-econometric analysis has shown that free trade policies have had a positive effect on growth in the late twentieth century, with many other relevant influences held constant. The most famous of these is the 1995 study by Sachs and Warner, 'Economic Reform'.

as every economist has found for the late twentieth century.[21] Bairoch's sample was mainly from the European industrial core. He only looked at pre-1914 experience and his analysis did not control for factors other than protectionism that might have accounted for faster growth. He simply compared growth rates of major European countries during protectionist and free trade eras. More recently, Kevin O'Rourke got the Bairoch finding again, this time using macro-econometric conditional analysis on a ten country sample drawn from the pre-1914 Atlantic economy.[22] In short, these two scholars were not able to find *any* evidence before World War I supporting the openness-fosters-growth hypothesis.

These pioneering historical studies suggest that the tariff-growth relationship changed fundamentally at some point between the start of World War I and the end of World War II: before the switch, protection was associated with growth; after the switch, free trade was associated with growth. Did Latin America follow this pattern, displaying the tariff-growth 'paradox' before World War II and switching to a new regime afterwards? Or did this occur only in the industrial core? Recent work by Michael Clemens and one of the present authors[23] has confirmed that protection *was* associated with fast growth in the industrial core before World War II, but was *not* associated with faster growth in the European or Latin American periphery, nor was it associated with fast growth in interwar Asia. Most important, before World War I protection in Latin America was associated significantly and powerfully with *slower* growth.

The moral of the story is while Latin American policy makers may have been aware of the pro-protectionist infant-industry argument[24] offered for Germany by Frederich List and for federalist United States by Alexander Hamilton, we have found absolutely no evidence that would have supported such arguments for Latin America. For the post 1865 era, the data allow for

[21] P. Bairoch, 'Free Trade and European Economic Development in the 19th Century,' *European Economic Review* 3 (1972), pp. 211–45.

[22] Kevin H. O'Rourke, 'Tariffs and Growth in the Late 19th Century,' *Economic Journal* 110 (2000), pp. 456–83.

[23] M. A. Clemens and Jeffrey G. Williamson, 'A Tariff-Growth Paradox? Protection's Impact the World Around 1875–1997,' *NBER Working Paper 8459*, National Bureau of Economic Research, Cambridge, MA (September 2001).

[24] Late nineteenth-century Latin American policy makers were certainly so aware. See Bulmer-Thomas, *The Economic History of Latin American Since Independence* (Cambridge, 1994), p. 140. However, it is important to stress that the use of protection specifically and consciously to foster industry does not appear to occur until well after the 1860s: e.g. Argentina with the 1876 tariff; Mexico by the early 1890s; Chile with its new tariff in 1897; Brazil in the 1890s; and Colombia in the early 1900s (influenced by the Mexican experience). True, Mexico saw some precocious efforts in the late 1830s and 1840s to promote modern industry, but these lapsed with renewed local and international warfare. Thus, the qualitative evidence suggests that domestic industry protection becomes a motivation for Latin American tariffs only quite late in the nineteenth century.

econometric tests that add further confirmation. Thus, we must look elsewhere for plausible explanations of the exceptionally high tariffs in Latin America long before the Great Depression.

War, Insurrection and Revenue Tariffs

In young, recently independent countries with little experience with tax collection, few bureaucratic resources to implement it efficiently, and limited access to foreign capital markets, customs revenues are an easy-to-collect source of fiscal income essential to support central government expenditures on defense and civil administration. This was certainly true of the newly-independent United States and of the Latin American countries in the first half of the nineteenth century,[25] although the USA had more success in gaining access to European capital markets. The average share of customs duties in total revenues across eleven Latin American republics was 57.8 per cent between 1820 and 1890.[26] Customs revenues were even more important for federal governments (65.6 per cent), since local and state governments are typically reluctant to give up their limited tax weapons. Furthermore, customs revenues are especially important for land-abundant countries with federal governments since low population and tax-payer density make other forms of tax collection inefficient. Add to this a huge revenue demand in fighting wars and we get the high United States civil war tariffs in the early 1860s and the high (and rising) tariffs in a newly independent Latin America that experienced almost continuous war and civil strife between the 1820s and the 1870s.

Mares, for example, reports 10 major wars between 1825 and 1879, but limits his data to conflicts that produced at least 1,000 battlefield deaths.[27] Centeno has counted 33 major international and civil wars between 1819 and 1880, but his data excludes Cuba altogether as well as numerous small and medium-scale internal conflicts and a number of costly international wars.[28] Of the eight countries for which we have data on levels of protection, all fought at least two major wars between independence and 1880. Only Brazil and Chile (after 1830) avoided violent military coups. All of the eight cases experienced episodes of massive and prolonged civil strife. In six countries, internal civil wars raged more or less continuously for decades after independence.

[25] In the words of Bulmer-Thomas, the tariff 'was the main source of government income in all [Latin] countries and virtually the only source in a few republics,' *ibid.*

[26] M. A. Centeno, 'Blood and Debt: War and Taxation in Nineteenth-Century Latin America,' *American Journal of Sociology*, vol. 102 (1997), pp. 1565–605, Table 1.

[27] David Mares, *Violent Peace: Militarized Interstate Bargaining in Latin America* (New York, 2001), pp. 32–40.

[28] M. A. Centeno, 'Blood and Debt,' pp. 1570–3.

The universal preoccupation with national defence and internal security pushed the newly independent Latin American countries toward revenue-maximising tariffs. Military expenditures quickly rose to consume over 70 and often more than 90 per cent of all revenues.[29] Weak governments, under attack from within and without, abandoned internal taxes that required an extensive and loyal bureaucracy and concentrated tax collection efforts instead on a few ports and mines. The ratio of tariff revenues to imports, and thus levels of protection, rose in every country for which there are data as did the customs revenues as a percentage of national government revenues.

Rising import duties helped finance Brazil's costly wars with Uruguay (1825–28), Argentina (1851–52), and Paraguay (1865–70) as well as the suppression of frequent regional and separatist revolts, slave insurrections, and a massive social and racial upheaval in the Amazon region.[30] Between 1821 and 1867, Mexico suffered foreign invasions by Spain (1829), the United States (1846–48), and France (1862–67), the secession of Texas (1835), 13 major regional revolts, and at least 60 peasant rebellions and indigenous 'caste' wars.[31] Argentina followed a similar pattern, as international wars and blockades compounded the effects of internal conflicts. Until 1865, the province and city of Buenos Aires functioned as an independent state, frequently at war with one or more of the interior provinces. Despite the dominance of the Buenos Aires elite composed of merchants and export producers, military expenditures forced governments to use high tariff rates to maximise revenues.[32]

Peru's post-independence protectionism was driven in part by the artisans and merchants of Lima, more exposed to competition than their counterparts in the interior, but internal and international conflict drove rates even higher. Peru experienced two episodes of autocratic liberalism associated with the short-lived rule of Simón Bolívar (1823–26) and the equally brief forced integration into the Peru-Bolivia Confederation (1835–39) imposed by an invading Bolivian army commanded by General Andrés Santa Cruz. Despite these episodes, however, Peru's frequent civil wars and the parlous

[29] *Ibid.*, Table 2, pp. 1574–5.

[30] On Brazilian tariffs, see N. H. Leff, *Underdevelopment and Development in Brazil* (*Vol. II – Reassessing the Obstacles to Economic Underdevelopment*) (London, 1982); pp. 74, 84. On post-independence war and violence, see Emilia Viotti da Costa, *The Brazilian Empire: Myths and Histories* (Chicago, 1985), chs. 1, 3 and 6. For an example of widespread internal conflict, see D. Cleary, '"Lost Altogether to the Civilized World": Race and the Cabanagem in Northern Brazil, 1750–1850,' *Comparative Studies in Society and History*, vol. 401 (1998), pp. 109–35.

[31] John H. Coatsworth, 'Patterns of Rural Rebellion in Latin America: Mexico in Comparative Perspective,' in F. Katz (ed.), *Riot, Rebellion, and Revolution: Rural Social Conflict in Mexico* (Princeton, 1988), pp. 21–62.

[32] See Jeremy Adelman, *Republic of Capital: Buenos Aires and the Legal Transformation of the Atlantic World* (Stanford, 1999), chap. 5.

state of public finance pushed its rulers toward tariffs as high as the traffic would bear. In contrast with the general Latin American pattern of persistent and continuous protectionism right up to the *belle époque*, however, Peru made a sudden, precocious, but temporary shift to free trade in 1852 as income from guano exports accelerated, boosting the country's capacity to import dramatically.[33] This liberal trend was also a force elsewhere in Latin America as the region's export prices boomed, but these liberal forces were overwhelmed by more powerful and offsetting protectionist habits.

In Colombia, with a population barely over a million in 1825, the death toll from civil conflict between 1820 and 1879 is estimated at nearly 35,000. Internal military conflicts occurred in 163 (22 per cent) of the 720 months in these six decades.[34] At the opposite extreme, relatively peaceful Chile departed from its moderate tariff regime only during major wars with Bolivia and Peru (1838–39, 1879–83), while Cuban tariffs were not directly affected by the independence wars of 1868–78, 1878–79, and 1895–98.

International and internal warfare thus appears to have played a major role in pushing the newly independent states away from the moderate tariff rates of the colonial era, as well as the free trade leadership emerging in Britain, toward tariffs designed to maximise fiscal revenues. Producers accustomed to the protection offered by the Spanish commercial monopoly supported the introduction of higher rates to compensate for the loss of the non-tariff barrier it represented. In some cases, local interest groups managed to secure tariff rates (or prohibitions) designed to protect them from increased external competition, but the fiscal imperatives of the Latin America's endemic military conflicts swamped all other preoccupations. Most Latin American governments between 1820 and 1870 were not aiming to protect specific producers or sectors, but to keep troops in the field against foreign or domestic enemies.

Tariff rates that maximise revenue are not always high, however. Were the newly independent Latin American nations searching for some optimal tariff? Were these tariffs really all that the market could bear? Maybe, maybe not, but as Douglas Irwin has pointed out for the United States case, the revenue-maximising tariff hinges crucially on the price elasticity of import demand.[35] In the 1850s and 1860s, tariffs fell a bit in Latin America before they started their long run rise to the turn of the century.

[33] Paul Gootenberg, *Imagining Development: Economic Ideas in Peru's Fictitious Prosperity of Guano, 1840–1880* (Berkeley, 1993).

[34] Frank Safford and Marco Palacios, *Colombia: Fragmented Land, Divided Society* (New York, 2002), chaps. 8, 10, and 11.

[35] D. A. Irwin, 'Higher Tariffs, Lower Revenues? Analyzing the Fiscal Aspects of the Great Tariff Debate of 1888,' *NBER Working Paper 6239*, National Bureau of Economic Research, Cambridge, MA (October 1997), pp. 8–12.

Bulmer-Thomas (1994: 141) thinks that 'these changes were due … to the growing awareness that a tariff cut could increase revenues if the import price elasticity was greater than one [and as exports] expanded, the volume of imports (the tax base) started to rise sharply in some republics, making possible a cut in the average tariff rate of protection (the tax rate).'[36] On the other hand, Irwin estimated the price elasticity to have been about −2.6 for the USA between 1869 and 1913.[37] Since the import mix was similar for the USA and Latin America, suppose the price elasticity for the latter was about −3. Under those conditions, the average tariff in Latin America would have maximised revenues at 50 per cent, a very high rate indeed.[38]

Additional evidence that revenue considerations affected tariff rates comes from late in the century, long after export booms had begun in most of the region. We have shown elsewhere that Latin American governments altered tariff rates in ways consistent with the hypothesis that they were pursuing revenue targets, by lowering tariffs during world primary product booms when export shares were high and rising, and raising them during world primary product slumps.[39]

Protection during the belle époque *boom*

Relative international peace and political stability contributed to the export-led growth that seized Latin America from the 1870s to the 1920s. In these circumstances, the governments of the region should have found it possible to begin lowering their extraordinarily high average tariffs. But as the data have shown, tariff rates actually rose significantly to the 1890s, and fell only slightly from that peak to World War I. We argue that political stability and the onset of economic growth structured interest group pressures in ways that favoured a shift from revenue maximising protectionism to industrial protectionism. Governments were able to worry less about protecting themselves and could turn to appeasing powerful civilian interest groups. They did not, however, embrace free trade or anything remotely resembling it. Latin American tariffs in the late nineteenth century never fell back to pre-independence levels, or even to 1860 levels, even after the export-led boom

[36] Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 141.

[37] Irwin, 'Higher Tariffs, Lower Revenues?,' p. 14.

[38] We should note that for the *ante bellum* United States, Irwin also reports that the optimal export tax would have been about 50 per cent at a time when US cotton was king in world markets. See D. A. Irwin, 'The Optimal Tax on Antebellum U.S. Cotton Exports,' *NBER Working Paper 8689*, National Bureau of Economic Research, Cambridge, Mass. (December 2001). In simple trade models, an export tax and an import tariff can be equivalent.

[39] Coatsworth and Williamson, 'The Roots of Latin American Protectionism.'

filled treasuries with new revenues that reduced debt service to manageable dimensions.

Ronald Rogowski has used the Stolper-Samuelson theorem to suggest a political economy explanation for the extraordinarily high tariffs of the *belle époque*.[40] Though their economies certainly varied in labor-scarcity, every Latin American country faced relative capital scarcity and relative land abundance. As the Stolper-Samuelson theorem has it, 'protection benefits (and liberalisation of trade harms) owners of factors in which, relative to the rest of the world, that society is *poorly* endowed.'[41] According to this model, Latin American capitalists should have been looking to form protectionist coalitions as soon as *belle époque* peace and growth began to threaten them with freer trade. Curiously, Rogowski argued that these coalitions failed to materialise. In contrast to the United States, Canada, New Zealand and other 'frontier' regions, he wrote,

> In Latin America … the landowners won: Pushing aside or capturing the military *caudillos* who had previously dominated postcolonial politics, farmers, ranchers, and miners pursued a liberalism and free trade that maximised their returns from the growing world market in primary products. The notoriously weak capitalists of South and Central America, the region's inarticulate and, often, racially oppressed workers, and – perhaps not least – the powerful influence of Great Britain as a principal trading partner, all contributed to the political monopoly of the land-owning class in this period. Only when trade was interrupted by World War I and the depression of the 1930s … did the suppressed conflict between city and countryside fully manifest itself.[42]

The Rogowski argument is plausible, but wrong. Four of the five Latin American agricultural exporters examined here (Argentina, Brazil, Colombia, and Uruguay) expanded export production in the late nineteenth century by putting new lands to the plough or modernising and extending pastoral production (cattle and wool) for export. In backward economies with high land-labour ratios, Rogowski argued that expanding trade should produce assertive free trading landed interests pitted against defensive populist alliances of capitalists and workers. In all four of these frontier nations, however, tariff rates were substantially higher than in other world regions. Either Latin America's export producing landowners had less political clout or weaker free trade preferences than Rogowski thought. Or both. Free-trading mineral export interests had no more success, despite the size and significance of their investments. In the case of the three mineral exporters (Mexico, Chile and Peru), mining interests could have allied themselves to powerful regional agricultural interests to reduce protection. Yet, this did not happen. In the five remaining cases, agricultural exporters

[40] R. Rogowski, *Commerce and Coalitions: How Trade Affects Domestic Political Alignments* (Princeton, 1989). [41] *Ibid.*, p. 3. [42] *Ibid.*, p. 47.

held the key to national prosperity and for that reason alone should have found it relatively easy to forge free trade coalitions with other interests. Again, this did not happen.

Belle époque protection was not, however, the outcome of democratic or populist alliances against Latin America's powerful landed oligarchies. Growth and stability after 1870 did not produce democratic inclusion. Most Latin American countries limited the franchise to a small minority of adult men until well into the twentieth century. Literacy and wealth requirements, in addition to lack of secrecy in balloting, excluded most potential voters in virtually every country.[43] Non-voters found ways to intrude themselves and their interests into political life, but except for Argentina (after 1912), independent Cuba, post-revolutionary Mexico (after 1917), and Uruguay, restrictions on the adult male franchise did not fall until after 1930.

The political economy of Latin American protectionism between the 1890s and 1930 rested on foundations that favored the protectionist interests of urban capitalists, contrary to Rogowski but just as the Stolper-Samuelson model predicts.[44] That foundation included at least four building blocks. The first might be labelled weak landed elites. Contrary to much of the historiography of the past century, Latin America's landed elites never resembled the powerful aristocracies of Europe, and, with few exceptions, never managed to dominate national politics and economic policymaking. The only landowners that mattered in nineteenth-century Latin America politics were those for whom land represented but one asset in a much broader portfolio. Moreover, landowning free traders might have had their enthusiasm 'tempered by the knowledge that government revenue had to be raised somehow, and one obvious alternative to the tariff – a tax on land – was abhorrent to the powerful *latifundistas*.'[45]

The second building block in the protectionist foundation is the fact that national political power, even in federalist systems, gravitated toward capital cities. Landowners who wanted national-level clout had to live there or pay others to represent them. Capitalists (merchants, bankers, bond traders, industrialists and their friends, some of whom also owned rural estates) lived in cities and, with independence, exerted disproportionate lobbying influence on policy and politicians. The third building block is offered by the onset of economic growth which pulled in large scale immigration beginning in the 1870s and raised the number and influence of

[43] S. Engerman and K. Sokoloff, 'The Evolution of Suffrage in the New World: A Preliminary Examination,' paper presented to the 2001 Cliometrics Conference, Tucson, Ariz. (18–20 May 2001).

[44] As well as artisans: 'For the artisan sector the tariff had a protective function, and artisans fought hard to retain it.' Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 140.

[45] *Ibid.*

non-elite urban groups, including artisans, middle classes, and eventually workers. These groups were making themselves heard, often violently, by the turn of the century.[46] They may have been oppressed, but no Latin American government could afford to ignore or discount them.[47] Finally, though workers and their organisations were seldom explicitly protectionist before the 1930s, they were politically disposable and virtually never allied to landed interests.

Thus, growth and stability in the late nineteenth century did tend to produce oligarchic governments in which urban capitalists – many linked to external trade and finance, while also investing in new industries – played a dominant role. The transition from revenue-maximising wartime finance with its (perhaps) unintentional protection of domestic industry to deliberate protection of domestic industry occurred in Mexico in the 1890s, a quarter century after the restoration of the republic in 1867 had ended the last major civil and international war. The economy recovered and grew rapidly, boosted by railroad construction that boomed in the 1880s. Between 1890 and the Revolution of 1910, average tariff rates soared as the Mexican government adjusted its tariff policies in a deliberate attempt to maintain and even increase effective protection of domestic industries, both those that had long enjoyed protection (like textiles and tobacco) as well as the 'nuevas industrias' just starting up.[48]

The architects of Mexico's new policies of targeted protection for infant industries were a small group of '*científicos*', educated men whose fortunes originated mainly in foreign trade and real estate, but whose interests had included risky investments in supplying arms and loans to liberal governments and politicians and then branched out into banking, industry, and agriculture. Led by Finance Minister José Yves Limantour, this group acquired considerable autonomy during the last two decades of the presidency of General Porfirio Díaz (1877–1911). For most of that time, Congress routinely ceded power over tariff policy to the executive branch, which increasingly targeted coverage to protect import competing industries. The Mexican government imposed new or increased duties on 'wheat, canned beef, bottled and unbottled beer, tobacco, leather and footwear, all woven fibre products, paper, glass bottles, both cement and bricks, caustic sodas, dynamite, soap, crude petroleum, copper bars and sheets, pig iron, iron sheets and plates, steel bars and rods, steel sheets and plates, steel rails, structural iron and steel, cut nails, wire, pipes and fittings,

46 D. Collier and R. B. Collier, *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America* (Princeton, 1991), chap. 3.

47 T. Skidmore, 'A Case of Conspicuous Neglect? The Study of Urban Labor Movements and Elite Responses in Latin America,' unpublished ms., 1978.

48 Beatty, *Institutions and Investment*, ch. 6.

and machinery.'[49] The beneficiaries of the new protectionism were not numerous. As Haber has pointed out, a small clique of 'no more than 25' individuals accounted for most of the industrial investment in Mexico during this era.[50] The Mexican Revolution (1910–17) undermined the power and property rights of previously powerful landowners and forced Mexican mining and smelting interests to sell out to foreign, mainly United States companies. In the industrial sector, however, protectionism got a boost from the progressive incorporation of workers' unions into the governing coalition, a process facilitated by government-brokered industry pacts made feasible by corresponding restrictions on imports.[51]

Chile's high tariff regime at the mid-century faced few complaints except from northern mining and industrial interests that agitated for even *higher* tariffs. Moderately protective tariffs produced revenues for the War of the Pacific against Bolivia and Peru (1879–83), but – as in the pre-1870 decades – they did not specifically target industrial promotion. Chilean protection advanced notably with the tariff law of 1897, adopted explicitly to promote industry, though rates on imported consumer goods and meat were later reduced. Not until the tariff reforms of 1928 did Chile adopt import substituting industrialisation as a major policy goal.[52]

Peru switched to low tariffs in the guano era, as we mentioned above,[53] but highland industries, mostly artisan, survived behind high transport costs since railroads took many more decades to reach the main highland cities. Tariffs began to rise after the late 1860s, then escalated during war with Chile. After the war, Peru's military defeat was compounded by economic and financial collapse. Tariff rates shot up in the 1880s and 1890s to compensate for lost revenue and then remained high enough to help foster a substantial industrial take-off.[54]

In short, capitalists secured explicitly protectionist tariffs for existing and new industries beginning in the 1890s. They did so against weak opposition and in close collaboration with modernising political elites. They did not yet need or even conceive of the kind of populist coalitions that emerged in the

[49] *Ibid.*, p. 59.

[50] Stephen H. Haber, *Industry and Underdevelopment: The Industrialization of Mexico, 1890–1940* (Stanford, 1989), pp. 82, 90.

[51] A. Gomez-Galvarriato, 'The Evolution of Prices and Real Wages in Mexico from the Porfiriato to the Revolution,' in Coatsworth and Taylor (eds.), *Latin America and the World Economy*, pp. 347–78.

[52] J. F. Przeworski, *The Decline of the Copper Industry in Chile and the Entrance of North American Capital, 1870–1916* (New York, 1983); M. Zeitlin, *The Civil Wars in Chile, or the Bourgeois Revolutions that Never Were* (Princeton, 1984).

[53] Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 146.

[54] See Rosemary Thorp and Geoffrey Bertram, *Growth and Policy in an Open Economy* (New York, 1978), pp. 29–31, 118–31.

interwar decades (except in Uruguay, where they followed a particularly effective and visionary national leader). To maintain and extend industrial protection after World War I, and especially after the Great Depression hit, capitalists not only managed to retain or restore the high tariffs of the *belle époque*, but to make effective and profitable use of dramatic extensions of state intervention, including myriad non-tariff barriers, regulations, tax exemptions, subsidies, credit facilities, nationalised transport and energy providers – the familiar Leviathan of the ISI era.

Protectionist strategies and policies in the belle époque

The *belle époque* shift to industrial protectionism did not mean that the Latin American governments lost interest in maintaining or even increasing revenues from tariffs. Revenue imperatives continued to exert a dominating influence on tariff policies, but the quantitative evidence does suggest that policy making responded to new conditions and opportunities. We looked for evidence that Latin American governments were also trying to shift their countries' terms of trade, worried about shifts in relative prices of manufactured imports, or adjusted tariff rates in response to inflation or deflation as well as changes in transport costs or exchange rates. We also looked at whether larger countries or those with better access to external capital markets differed from others.

A well-developed theoretical literature on strategic trade policy[55] predicts that nations have an incentive to inflate their own terms of trade (but thereby to lower global welfare) with tariff policy – a classic prisoner's dilemma. In as much as favourable terms of trade translate into better economic performance, we might expect a country's own tariffs to depend at least in part upon the country's external tariff environment. Thus, Figure 5 plots a principal-trading-partners'-tariff index for the same regions considered earlier. It is calculated like this: first, we identify the major trading partners for each country (up to five); second, we calculate exports going to each major trading partner as a share of total country exports going to all major trading partners; third, we use these shares as weights by which to construct the average tariff faced by each country. Finally, we construct an unweighted average for each region.

Figure 5 tells us that in the two decades before World War I, every region except the industrial core faced lower tariff rates in their main export markets than they themselves erected against competitors in their own markets. The

[55] Exemplified by A. Dixit, 'Strategic Aspects of Trade Policy,' in T. F. Bewley (ed.), *Advances in Economic Theory: Fifth World Congress* (New York, 1987), and recently surveyed in K. Bagwell and R. W. Staiger, *The Economics of the World Trading System* (Cambridge, MA, 2002).

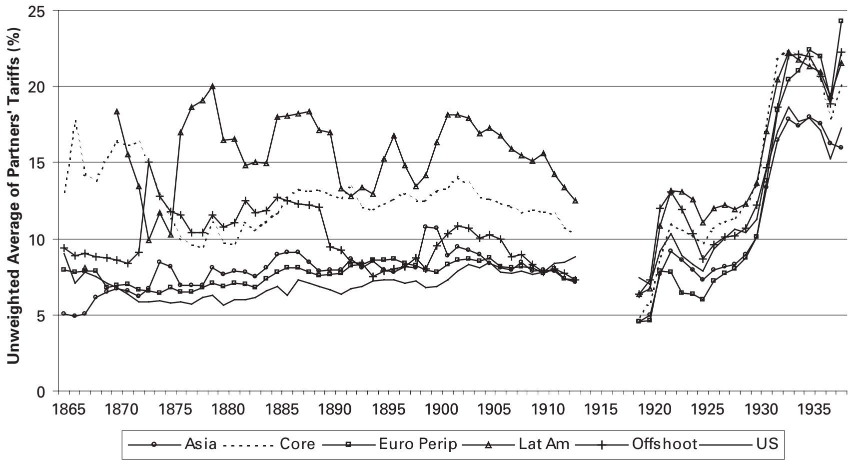

Fig. 5. *Unweighted Regional Average of Principal Trading Partners' Tariffs.*

explanation, of course, is that the main export markets were located in the core, where tariffs were much lower. Thus, the periphery faced lower tariffs than did the core (for the European periphery this was true throughout, but for the rest of the periphery it was true only up to just before 1900, when the USA replaced Britain as a major export market for them). During the inter-war, every region faced similar and high tariff rates in export markets, but those rates were rising very steeply outside the core as the core itself made the biggest policy switch – compared with the other four regions – from free trade to protection.

Figure 5 also tells us that Latin America faced *far* higher tariffs than anyone else since they traded with heavily protected countries like the USA. Indeed, if trade with the USA is removed from the partner tariff index over the seven decades before the late 1920s, partner tariffs facing Latin America become almost exactly the same as partner tariffs facing the rest of the world. What the United States was doing with tariff policy must have mattered a great deal to Latin America.

If Latin Americans feared that globalisation might inhibit industrialisation or even induce local de-industrialisation, they would also have paid close attention to the competitive position of manufacturing at home relative to that abroad. The best indicator of foreign manufacturing's competitiveness would be its ability to drive down the relative price of manufactures in world markets through productivity advance. Thus, de-industrialisation fears ought to have been manifested by a rise in Latin American tariff rates when the relative price of manufactures fell in world markets. Figure 6 suggests that there was, however, very little to fear after the 1890s since, relative to the price of Latin America's key primary-product exports,

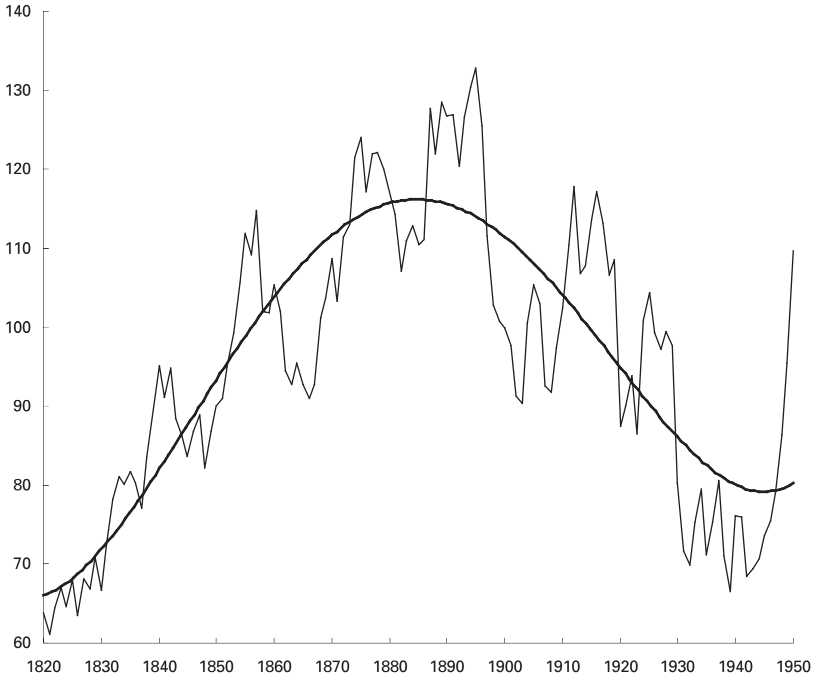

Fig. 6. *Latin America's Terms of Trade 1820–1950.*

the price of manufactures *rose* in world markets. Another way of saying the same thing is that the price of Latin American primary products fell in world markets relative to manufactures, that their terms of trade deteriorated.[56]

The fall in the relative price of Latin American exports put upward pressure on tariff rates, helping to account for the observed 'globalisation backlash' during the Latin America *belle époque* as well as during the interwar years. Yet the backlash in Latin America was not driven by fear that the penetration of lower-priced foreign imports would destroy domestic industry, but rather by a fall of export prices that eroded government revenue. Revenue goals continued to be a central force explaining high Latin American tariff rates long after the 1870s.

Inflations and deflations can also have a powerful influence on average tariff rates, as we noted above. Import duties were typically *specific* until

[56] Figure 6 is consistent, of course, with the initial findings of the great terms of trade debate launched by Prebisch and Singer a half century ago. Furthermore, and although we do not show it in Figure 6, all of that average downward trend is for six Latin American countries – Brazil, Chile, Colombia, Cuba, Mexico and Peru and none of it is for Argentina and Uruguay. Note that the downward slide appears to start in the mid 1890s, and that it was preceded by a huge 70-year improvement in the terms of trade.

modern times,[57] quoted as pesos per bale, yen per yard, or dollars per bag. Under specific duties abrupt changes in price levels would change import values in the denominator, but not the legislated duty in the numerator, thus producing big equivalent *ad valorem* or percentage rate changes. *Ad valorem* rates are more common today, so that equivalent tariff rates are less affected by inflation and deflation. The impact of inflations during the two world wars was quite spectacular, and it had nothing to do with tariff policy. Tariff rates in all four regions fell sharply between 1914 and 1919, and again between 1939 and 1947 (Figure 1). Part of the rise in tariffs immediately after World War I was also due to post-war deflation and the partial attainment of pre-war price levels. The price deflation after 1929 was even more spectacular, and it too served to raise tariff rates at least on duties that were still specific (import values now declining). The process repeats during the World War II inflations, but, in contrast, there is no sign of resumption of the very high rates attained in the 1930s.

This argument assumes, of course, that changing the legislated tariff structure is politically expensive, and thus is only infrequently changed by new legislation. We are not the first to notice this specific-duty-inflation-deflation effect. Douglas Irwin made the same point in accounting for US tariff experience between the Civil War and the Great Depression where 'roughly two-thirds of dutiable US imports were subject to specific or compound duties'.[58] Although the share fell across the twentieth century, it was still half by the mid-1960s. This point has also been made by others,[59] but, as far as we know, it has not been explored at a global level nor has an explanation been offered in the literature for its popularity in low-income nations. That is unfortunate since specific duties seem to be much more common in poor and non-industrial countries. Why? The answer might be that weak governments in poor countries have more difficulty controlling customs officers. Honest and competent customs inspectors are needed to implement *ad valorem* tariffs where import valuation is so crucial. Legislators often imposed specific duties to minimise the 'theft' of state tariff revenues by dishonest or even illiterate customs agents. This explanation for the use of specific duties also suggests that the specific-duty-inflation-deflation effect should diminish over time as literate and better-trained customs inspectors became more abundant in Latin America. There is another possible explanation for the use of specific duties in non-industrial economies. These

[57] They were also specific in nineteenth-century Latin America. See Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 141.

[58] D. A. Irwin, 'Changes in U.S. Tariffs: The Role of Import Prices and Commercial Policies?' *American Economic Review*, vol. 88 (September 1998), p. 1017.

[59] M. J. Crucini, 'Sources of Variation in Real Tariff Rates: The United States, 1900–1914,' *American Economic Review*, vol. 84 (June 1994), pp. 732–43.

economies export primary products, and the prices of such commodities exhibit far greater instability over world booms and busts than do industrial products. If a government wants to stabilise its tariff revenues in this unstable environment, specific duties do the job far better than *ad valorem* duties. Much to our surprise, however, a quantitative test found that the specific-duty effect was far more important in Latin America *after* 1913 than before. Nor did we find that the specific-duty effect was stronger in inflation-prone regions like Latin America. Actually, the effect was smaller in Latin America than in the USA.

Whatever the arguments for protection, high transport costs on imports are just as effective as high tariffs. When transport costs fall dramatically, the winds of competition thus created give a powerful incentive to import-competing industries to lobby for more protection. Since there certainly *was* a nineteenth century transport revolution,[60] clearly there must have been plenty of incentive for manufacturing interests in the periphery to lobby for protection as the natural barriers afforded by transport costs melted away. This connection was confirmed long ago for the invasion of grains into Europe from Russia and the New World.[61] But what about Latin America and the 'invasion' of European manufactures?

There are three reasons to doubt that the tariff-overseas transport costs trade-off prevailed with the same power in Latin America as in Europe. First, while overseas freight rates along the northward routes to Europe from the west and east coasts of Latin America followed world trends by collapsing after the 1840s, they fell much less along the southward leg.[62] The northward leg was for the bulky Latin American staple exports – like wheat and guano, the high-volume low-value primary-products the trade of which gained so much by the transport revolution. The southward leg was for Latin American imports – like textiles and machines, the high-value low-volume manufactures the trade of which gained much less from the transport revolution. Second, overseas freight costs were a much smaller share of the CIF price of traded manufacturers than was true of traded primary-products. Thus, even under the high transport costs in the 1860s, freight costs on manufactures (general cargoes) were a very small share of delivered price.[63] Third, transport costs into the Latin American interior were much more important protective barriers for local manufacturers than overseas transport costs. Belford Hinton Wilson, a close observer of early-mid 19th century Latin America, reported in 1842 the costs of moving a ton of goods from England to the following capital cities (in pounds sterling): Buenos Aires and

[60] K. H. O'Rourke and J. G. Williamson, *Globalization and History* (Cambridge, MA, 1999), ch. 3.

[61] *Ibid.*, chap. 6.

[62] J. Stemmer, 'Freight Rates in the Trade between Europe and South America,' *Journal of Latin American Studies*, vol. 21 (February 1989), pp. 22–59.

[63] *Ibid.*, p. 25.

Montevideo 2; Lima 5.12; Santiago 6.58; Caracas 7.76; Mexico City 17.9; Quito 21.3; Sucre or Chuquisaca 25.56; and Bogotá 52.9.[64] The variance is huge, with the costs to interior capital cities nine to twenty-seven times that of seaports.

Thus, transport revolutions along the sea lanes connecting Latin America to Europe had far less to do with tariff rates than did investment in railroads at home.[65] Where railroads integrated the Latin American interior with the world economy, import competing industries lobbied for protection from these new winds of competition.[66]

Exchange rate policies also affected tariff rates. Latin American governments worked to improve the competitive position of import-competing industries long before the 1930s. If governments chose to go on the gold standard or to peg to a core currency, they got more stable real exchange rates in return. Thus, as Márquez has shown for Mexico, currency depreciation due to the fall in silver prices from the 1880s increased protection so much that it permitted some reductions in tariff rates without altering effective protection.[67] Adopting the gold standard instantly restored importance to tariff rates as the main source of protection. Gold standard countries tended, as a result, to have higher tariffs.

Two other factors appear to have shaped Latin American tariff policies in the *belle époque*. First, big countries, as measured by population size, had lower tariff rates, a result consistent with the view that big domestic markets were more friendly to foreign imports since local firms would have found it easier to carve out regional and product niches. Producers in countries with relatively small markets – like Chile, Cuba and Uruguay in our sample – would have found it harder to hide in spatial niches, thus lobbying for higher tariffs. Central American countries, with tiny markets, offered no place to hide at all. Generally, since Latin America was 'balkanised' into many small countries at independence, high tariffs would have emerged in the region on that score alone.

Second, Latin America countries which were successful in getting external finance would have had less reason to use high tariffs to augment revenues for short run expenditure needs. Clemens and Williamson have explored this

64 C. W. Brading, 'Un análisis comparativo del costo de la vida en diversas capitales de hispanoamérica,' *Boletín Histórico de la Fundacíon John Boulton*, vol. 20 (March 1969), pp. 243–4.

65 Apparently, Bulmer-Thomas disagrees. While he stresses international transport costs by sea, he does not mention railways and the penetration of interior markets. See Bulmer-Thomas, *The Economic History of Latin America Since Independence*, p. 143.

66 But see Beatty, *Institutions and Investment*, pp. 66–8, who points out that railroads reduced the cost of inputs as well as competing imports.

67 See Graciela Márquez Colín, 'The Political Economy of Mexican Protectionism, 1868–1911' (unpublished PhD dissertation, Harvard University, 2002), ch. 2.

idea using data on British capital exports before World War I.[68] While their data do not cover all sources of capital nor all years, they found that more foreign capital was associated with lower tariffs, a result consistent with revenue motivation. Latin America was not able to exploit world capital markets during the half century of post-independence instability, a circumstance that may also have contributed to reliance on high tariffs in the region at the start of the *belle époque*.

Were the determinants of tariffs different after the belle époque*?*

One would think that the determinants of tariff rates might change over time. For example, Márquez documented that after 1887 the increase in internal tax collections and better access to international credit markets made it possible to redirect Mexican tariff policy towards promoting industrial growth.[69] Similarly, tariffs throughout Latin America recovered to moderately high levels after World War I, but the determinants of tariff policy were different then, too. How were they different?

Governments continued to make consistent use of tariffs to reach revenue targets, but some important differences in tariff determinants became apparent after 1913. First, it became more common for Latin American countries to adjust their tariffs to trends in partner tariffs. The rise of strategic tariff policy-making in Latin America during the years when the global economy was disintegrating is certainly consistent with the traditional literature. Second, and much to our surprise, the association of export booms with lower tariffs and export slumps with higher tariffs was entirely a post-1913 phenomenon. Third, federalist regimes tended to impose lower tariffs before 1913, but not afterwards. In the chaos of the post-independence era, national governments were weak, and often deliberately starved for resources. Export-led economic growth disproportionately strengthened national as opposed to state governments, discernibly reversing the earlier pattern by 1913. Finally, the impact of inflation on tariff rates was much more powerful after 1913 than before, and being on the Gold Standard served to raise tariffs much more (and more significantly) after 1913 than before.

Conclusions

This article began by uncovering a fact that has not been well appreciated beyond a small groups of economic historians of Latin America: tariffs in

[68] Michael Clemens and Jeffrey G. Williamson, 'Wealth Bias in the First Global Capital Market Boom, 1870–1913,' *Economic Journal* (April 2004).
[69] Márquez Colín, 'The Political Economy of Mexican Protectionism,' chap. 4.

this region were far higher than anywhere else from at least the 1860s to World War I, long before the Great Depression. Indeed, tariff rates in Latin America were actually on the rise in the decades before 1914, a period that has been called the first globalisation boom for the world economy and the *belle époque* for Latin America.

The article asks a political economy question: why were tariffs so high in the century *before* the Great Depression? True, high tariffs will distort a domestic economy and perhaps even suppress its growth performance *regardless* of the motivation for their height. But why so high?

This high-tariff fact seems all the more surprising because Latin America is widely believed to have embraced free trade versions of nineteenth century liberalism and thus to have exploited globalisation forces better than most during the so-called export-led pre-1914 *belle époque*. Thus, standard histories of Latin America tend to accept the view that the Great Depression was *the* critical turning point when the region turned towards protection and de-linked from the world economy for the first time. Standard histories are wrong. The region had very high tariffs for a century before the 1930s. High tariffs often favoured domestic import-competing producers (like manufacturing), and thus they must have taken some of the steam out of the export-led boom during the *belle époque*. But was it protection and de-industrialisation-from-globalisation fears that motivated those high tariffs?

The article shows that the explanation for high tariffs in Latin America since independence almost two centuries ago cannot lie with any perceived GDP per capita gains from protection, since such gains were never present in Latin America. On the contrary, those who had the highest tariff rates in Latin America grew the most slowly, and those who had the lowest tariff rates grew fastest. The article argues instead that high tariffs initially served to maximise revenues for the weak post independence governments. Towards the end of the century, governments began to add explicit industrial protection to their objectives, but revenue goals remained dominant. Those high tariffs were also the result of de-industrialisation fears, compensation for globalisation-induced injuries in import competing sectors, strategic policy responses to trading partners' tariffs, and of other political economy struggles.

The bottom line is that tariff formation in Latin America was complex, and that *all* the forces suggested by the new literature on the political economy of tariffs were present. But revenue needs were always the key to those exceptionally high tariffs, and this motivation had its roots in the exceptional levels of military conflict in the region for a half century or more when the rest of the world was enjoying *Pax Britannica*.

While we conclude by showing exactly how *belle époque* tariff determination differed from the period after World War I, we do not address whether the same pro-protection motivations exist today. Surely, that should be the next item on any agenda that seeks to explore the political economy of protection in Latin America. Even if initially generated by conditions and motivations long since erased by time, high tariffs in the distant past have persisted in many countries right into the twenty-first century.