

'Protectionist but globalised?'

Latin American custom duties and trade during the pre-1914 belle époque'

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Abstract

While it is true that Latin American republics had no rival on maximising revenues from custom collection during the belle époque, this paper shows that Latin American countries were also generous importers, only behind the larger commercial countries of Western Europe in terms of imports per capita. Latin American citizens were much more linked to international trade than citizens of most regions of the world. Their relation to the world economy was tighter both via their imports and their exports relative to their population and income levels. This paper comes to show that there is no contradiction between the high custom collection by the Latin American republics and their high level of interaction with the global economy in the pre-1914 belle époque, although large country differences can be observed when descending from the regional to the national level.

JEL codes: F1, N77

Keywords: first globalisation, imports, exports, custom duties, protectionism, Latin America.

[♦]Earlier versions of this manuscript were presented at the BETA-workshop in Strasbourg and also at "Lives and Livelihoods: Economic and Demographic Change in Modern Latin America", a workshop at the College of Management and Economics, University of Guelph, Canada. Thanks to the organisers of both events, Claude Diebolt and Kris Inwood, and to the participants for useful comments. Special thanks to Antonio Tena for sharing his knowledge of the topic and unpublished materials. Financial support provided by the 'Juan de la Cierva' research fellowship associated to the research project 'Imports and economic modernisation in Latin America 1870-1960' (BEC2003-00190). All mistakes are solely mine.

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Recent evidence seems to demonstrate that Latin America was the most protectionist region in the world from at least 1865 up to World War I.¹ This is a surprising fact, given that Latin America is believed to have exploited globalisation forces better than most regions before the 1920s. Even when it is recognised that high tariffs mostly responded to the revenue needs of the Latin American governments, the implicit assumption is that 'high tariffs still must have had a powerful protective effect'.² This adds to the perplexity for most of us 'who have always been taught to view the Great Depression as the critical turning point when the region is said to have turned towards protection and de-linked from the world economy for the first time'.³

This paper comes to show that there is no contradiction between the high custom collection by the Latin American republics and their high level of interaction with the global economy in the pre-1914 belle époque, although large country differences can be observed when descending from the regional to the national level.

The data provided by the United Kingdom *Statistical Abstract for the Principal and Other Foreign Countries*, allows investigating this matter in detail from 1890 to 1912. Since the Latin American republics made for a large share of the independent countries of the world in the pre-1914 years, data of trade is available for 23 Latin American countries with custom

¹Coatsworth, J. H. and J.G. Williamson. 2004. "Always Protectionist? Latin American Tariffs from Independence to Great Depression." *Journal of Latin American Studies*, 36, pp. 205-32.

² Bértola, L. and J.G. WILLIAMSON. 2006. "Globalization in Latin America Before 1940," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press. p.13

³ Coatsworth, J. H. and J.G. Williamson. 2002. "The roots of Latin American Protectionism: Looking before the Great Depression." *NBER Working Papers*, 8999.

data provided for about half of them. The full set of data includes total value of imports and exports of merchandise into and from over 80 countries plus, data on total custom duties collected in 30 of those. With these data is possible to construct the average tariff rate, measured as custom revenues as a share of total import values.

The data collected for this paper corroborates the fact that the Latin American republics had no rival on maximising revenues from custom collection. In addition, the cross-country comparisons show that countries with higher average tariff rates tended to be the ones with the most favourable trade balances. Here again, Latin America had no rival, exhibiting export surpluses for almost every one of the republics for almost the whole period. Logic indicates that may be the expected result of effective protection on the import side. Yet, such explanation would imply these countries would show very little imports in contrast with nations with lower tariffs. It was not always the case. Despite their relatively bulky custom collections, a large group of leading Latin American countries were generous importers, only behind the larger commercial countries of Western Europe in terms of imports per capita. Since in parallel these countries had considerable trade surpluses, the immediate implication is that the levels of exports per capita of Latin America were also among the largest in the world. Thus this paper shows it is possible to reconcile high custom duties with a strong participation in the global economy.

The paper is organised in the following manner. The first section of the paper provides the background to the export-led 'belle époque' by using the data set assembled here in order to corroborate some commonplaces, qualify few others, and more crucially place Latin American exports within the international context. The second section reassess the evidence regarding the collection of custom duties in Latin America, both in terms of average tariff rate and custom collections per capita and compare those with the ones found in the other independent countries of the time. It highlights the crucial importance of custom duties for the Latin American governments. The third section shows that large custom collection was matched with relatively large amounts of imports per capita in Latin America, but also that it was not so in other countries imposing high tariffs (Russian Empire, the United States, Portugal, Greece, Philippines, etc). Some tentative explanations are outlined for these results to hold: the possibility of a differential price-elasticity of demand for imports in Latin America, the inadequacy of using average tariff rates as indicator of protection and finally

the problems associated with the data reported as customs collections. The conclusions summarise the main findings of the paper.

What it is clear from the results of this paper is that Latin American citizens were much more linked to international trade than citizens of Southern and Eastern Europe, Asia, the Russian Empire or the United States. In per capita terms, their relation to the world economy was tighter both via their imports and their exports. More crucially, Latin American governments depended on revenues generated by international trade as no other independent government of the time. Consequently, it comes as no surprise that when the international markets were shaken from 1914 onwards, no other citizens were more hurt than the Latin American ones.

1. The linkage through exports in the ‘belle époque’

During the phase of the first era of globalisation, 1870-1913 Latin America was the single major world region that did not worsen its position relative to the United States, hence improving vis-à-vis the rest of the world.⁴ By then, Latin America and the Caribbean had overcome some of the most important limitations in order to start off the process of economic modernisation.⁵ The economic policy associated with such performance was primarily concerned with a strong export performance.⁶ Governments knew, or thought they knew, what to do to promote the exports - modest export taxes, infrastructures and foreign investments.⁷ As a result, Latin American countries commanded the world markets of several primary products by the eve of World War I: Brazil contributed to more than 70 per cent of world coffee production; Mexico more than 30 per cent of the world's silver output; Bolivia to more than 20 per cent of world tin production; a small country such Ecuador generated

⁴ Prados de la Escosura, L. 2006. "The economic consequences of independence in Latin America," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press, pp. 463-504.:p. 501

⁵ Skidmore, T.E. and P.H. Smith. 1996. *Modern Latin America*. New York: Oxford Univ. Press.

⁶ Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America since Independence*. Cambridge: Cambridge University Press.: p.49

⁷ Useful overviews of the export-led belle époque are: Thorp, Rosemary. 1989. "Economy, 1914-1929," in *Latin America Economy and Society 1870-1930*. L Bethell ed. Cambridge, pp. 57-82.; the relevant chapter in Thorp, Rosemary. 1998. *Progress, Poverty and Exclusion. An Economic History of Latin America in the 20th Century*. New York: Inter-American Development Bank.; Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America since Independence*. Cambridge: Cambridge University Press. and the brand new. Salvucci, R. 2006. "Export-led Industrialisation," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press, pp. 249-92.

more than 15 percent of cacao world exports, and Cuban sugar production represented 25 percent of world sugar cane output and much higher proportion of sugar-cane exports.⁸

While there is no much new to say about the increasing level of exports of the Latin American economies prior to 1914, it is worth using the data set assembled here in order to corroborate some commonplaces, qualify few others, and more crucially place Latin America within the international context. The data provided by the United Kingdom *Statistical Abstract for the Principal and Other Foreign Countries* includes, among other information, total value of imports and exports of merchandise for 23 Latin American countries with different degree of detail from 1890 to 1912, expressed in the currency of each country and in English currency.⁹ The later is used throughout the paper.¹⁰

Figure 1 plots the total exports of the region by country and provides some first insights into the period.¹¹ Firstly, the trend for the overall region is clearly upwards, as expected, but not dramatic. In the second place it is already visible the great diversity of the continent, too often spoken off as a single homogeneous entity. The larger exporters of the region, Argentina and Brazil, have been for long the main characters of the Latin American portraits of the belle-époque. Not in vain their growing exports to the world generally doubled the

⁸ Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America since Independence*. Cambridge: Cambridge University Press.

⁹ The *Abstract* was first published in the 1875 covering data back to 1860. Subsequent annual editions provided increasing amount of data and detail. Prior to 1890 much of the detail of the Latin American countries was not recorded. For most graphs and tables of this section, 19 republics are represented (namely Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Uruguay and Venezuela) leaving out 4 Dutch and French colonial territories for which trade figures are also available (Curacao -Dutch West Indies-, Surinam -Dutch Guiana-, French Guiana, Martinique and Guadalupe) but for which populations are not available at this time. The British territories in the area are listed in a separate sister volume dealing with the British possessions and are excluded in this paper. Haiti and Dominican Republic are entirely missing from the *Abstract* data.

¹⁰ Both the OxLAD. "Oxford Latin American Economic History Database (OxLAD)". Latin American Centre at the Oxford University. and Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America since Independence*. Cambridge: Cambridge University Press. provide data of total exports and imports for Latin America. Their figures are mostly based on the data collection by, Mitchell, B.R. . 1993. *International Historical Statistics - The Americas, 1750-1993*. Basingstoke: McMillan. which was produced in the national currencies. Yet, as Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America since Independence*. Cambridge: Cambridge University Press. recognises, in order to make them comparable 'this requires knowledge of the relevant exchange rates which -for the 19th century- was not always simple to acquire' (p.412). But in fact Mitchell says 'certain gaps have been filled from the British *Statistical Abstract for Foreign Countries (1872-1912)*' (p. xv). So using the *Abstract* shall be equivalent to using Mitchell, with the plus of avoiding the hazards of the exchange rates making comparisons far easier.

¹¹ Special imports and exports (for home consumption) are normally listed and are the ones used in this paper. When only general imports and exports were reported, these were used. The value of imports and exports referred to merchandise only, excluding trade of gold and silver bullion for which a different table was provided in the *Abstract*.

total amounts exported by the immediate followers, namely Chile, Mexico and Cuba. Of these three, the fastest growth corresponded to Mexico, which according to these series, started the period far behind Chile but achieved its very same levels by the eve of the Mexican Revolution. Uruguay appears as a fairly stable exporter, not growing much but keeping its position as the fifth larger exporter of the region. Venezuela is the only country of the large exporters that seems to lose ground. With the available data (only 1890-1894 then interpolated to the next data offered in 1904), Venezuela went from being among the large exporters in 1890 to be left behind by Peru, the impressive export growth of Puerto Rico, Bolivia and Colombia. All of which exhibited clear growth trends in their total exports prior to World War I.

[FIGURE1: TOTAL EXPORTS IN LATIN AMERICA 1890-1912]

Even the smaller countries participated increasingly in the world markets over the period. Ecuador, Guatemala, Costa Rica and Salvador doubled their total exports over the first decade of the 20th century. Finally, among those counting their exports in thousands of pounds rather than millions, Nicaragua, Paraguay, Panama and the Dutch and French possessions the growth trend flatten out, except for Panama and Curaçao (Dutch West Indies).

The differences in the total amounts exported reflect the different endowments of the Latin American republics but overall, the different population sizes of the countries.¹² While Brazil and Mexico counted populations of over ten million people, the average Latin American republic started the period with populations between 1 and 4 million people. Furthermore, Central America and few others, including some large exporters such as Uruguay, counted their populations in hundred of thousands not millions. Therefore, the evolution of the exports per capita is more telling than the total figures. These are shown in Figure 2.

[FIGURE 2: EXPORTS PER CAPITA IN LATIN AMERICA 1890-1912]

¹² Latin American populations borrowed from the database behind. Yañez, C., M.d.M. Rubio, and A. Carreras. 2006. "Economic modernisation in Latin America and the Caribbean between 1890 and 1925: A view from the energy consumption," in *2006 Cliometrics Conference*. Binghamton, NY.

The evolution of the Latin American exports per capita alters considerably the ranking of countries and insists in the discrepant trends across the region. To start with, with these series the Uruguayans were the Latin American citizens getting the most per capita out of the international markets by the end of the 19th century.¹³ Nevertheless, the stagnation mentioned above also shows up in the per capita exports of Uruguay throughout the period. This allowed the immediate followers, Argentineans first and Cubans later on, to catch up and surpass the Uruguayan levels. In fact, these three were the only ones able to extract over 5 pounds sterling per capita from exports in the 19th century, but while the former two doubled their exports per capita, Uruguay kept the level. Once started the 20th century, Chile joined this privileged group, and so did Puerto Rico coming from much lower initial levels led by the U.S. investments in sugar after 1898. Costa Rica was the last one of the group of countries ahead of the rest of the region in exports per capita. A common feature of the advanced group is the fact that export growth appear to have been much more important for the first decade of the 20th century than over the last decade of the 19th century.

At a much lower level was the rest of the region, exporting less than half the amounts per capita of the last of the advanced group. Venezuela and Paraguay, for which only partial data are available, seem to have lost ground over the period, only to recover it from 1905. Brazil doubled its exports per capita over the first decade of the 20th century, but still by 1912 it barely achieved a level of exports per capita equivalent to those of Chile back in 1890. Equally, Bolivia almost doubled its exports per capita, thanks to the rise of tin exports, matching the growth and levels of Brazil but just getting above 3 pounds sterling per capita by 1912. Mexico, one of the larger exporters over all, turns out as a small exporter in per capita terms, 2 pounds by 1912. But in exchange, it is the only country in which exports per capita grew from the beginning of the period.

Central America concentrates few of the most diverse histories. Ranging between 1 and 2 pounds per capita of exports all through, the countries that started from the lower levels of the sub-region, Ecuador and El Salvador, steadily grew. In the mean time, the initially larger

¹³ The absence of Cuba in the data set for the 1890s may question this statement. Yet on the view of the trends presented here it is difficult to envision Cuba having greater exports per capita than Uruguay by 1890.

exporters per capita of Central America, Guatemala and Nicaragua remained pretty flat, while Honduras levels kept falling.

Finally, the Colombian case is highly interesting as it reflects the loss of its wealthiest province –Panama, independent from 1903. While the former province’s exports per capita spurred upwards, Colombia was left with the lowest level of exports per capita of the region. Thus Colombians were the Latin American citizens obtaining the less absolute profit from participating in the international markets.

[TABLE 1: LATIN AMERICAN EXPORT CONCENTRATION CIRCA 1913]

It stands clear from this description that the national experiences of exports varied considerably from fast growth (Puerto Rico, Bolivia), to steady growth (Argentina, Chile, Cuba, El Salvador, Ecuador, Peru), passing by stagnation (Uruguay, Guatemala, Nicaragua) and pure decline (Honduras). The different resource endowments may have played a role on the evolution of exports as it may have done the choice of trade partners, but it does not seem to have a clear connection with independent behaviours. As shown in Table 1, most of Latin America had counted eggs in very few baskets. Whether the specialisation was on packed meat or silver, bananas or nitrate, the fact is that only one, at most two commodities made most of the exports of each country, and these were generally destined to one or two markets at most. Bértola and Williamson accrued the differences on the levels of exports per capita to the specialisation of the countries.¹⁴ Settler economies, they say, doubled exports per capita of tropical economies. Yet taken one by one, the position of Cuba (a tropical country in their account), Chile (classified as highland country), the challenge of Puerto Rico (another tropical) and the permanence of Costa Rica (yet another one) question their explanation. Either the trade partners seem to explain neither levels nor trends pre-1914; the larger exporters per capita had each different main partner at the end of the period: Uruguay-France, Argentina-United Kingdom, Cuba-United States. As pointed by Salvucci the agenda

¹⁴ Bértola, L. and J.G. WILLIAMSON. 2006. "Globalization in Latin America Before 1940," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press. p.29

is open for new questions and novel explanations, shifting the research agenda to the configuration of domestic policies, politics and institutions.¹⁵

A far more interesting question than the intra-regional evolution of exports is whether Latin American citizens grasped more, less or equal benefits per capita from exports than other regions of the world at this time of globalization. The United Kingdom *Statistical Abstract for the Principal and Other Foreign Countries* allows investigating this matter in detail from 1890 to 1912. The full set of data includes total value of imports and exports of merchandise into and from over 80 countries and colonies, excluding British colonies and dominions. Unfortunately the lack of population data for the French and German colonies erases all of Africa and most of Asia from the per capita comparisons.¹⁶ Nevertheless, since the Latin American republics made for a large share of the independent countries of the world in the pre-1914 years, it is particularly relevant to compare their level of exports per capita with that of other independent countries rather than colonies or dominions which exports levels may have been linked to their metropolis.¹⁷

[FIGURE 3: EXPORT PER CAPITA COMPARISON, WORLD REGIONS, 1890-1912]

In Figure 3, Latin American countries are split in three groups according to their levels of exports per capita by 1912, and placed side by side with the exports per capita of over 25 countries grouped in six regions of the world: Western Europe (Belgium, France, the German Empire, the Netherlands, Switzerland and the United Kingdom); Southern Europe (Greece,

¹⁵ Salvucci, R. 2006. "Export-led Industrialisation," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press, pp. 249-92.

¹⁶ As mentioned earlier Latin American populations were borrowed from the database behind. Yañez, C., M.d.M. Rubio, and A. Carreras. 2006. "Economic modernisation in Latin America and the Caribbean between 1890 and 1925: A view from the energy consumption," in *2006 Cliometrics Conference*. Binghamton, NY. The populations of Russian Empire, German Empire, Austro-Hungary, Bulgaria, Serbia, Rumania and Egypt are the ones of the. UNITED KINGDOM: HIS MAJESTY'S STATIONERY OFFICE. (various years). *Statistical Abstract for the Principal and Other Foreign Countries*. London. The rest of countries' population data are from Maddison, A. 2003. "The World Economy: Historical Statistics.". OECD Development Centre: Paris..

¹⁷ Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America since Independence*. Cambridge: Cambridge University Press., Table 3.5, compares Latin American exports per head circa 1850, 1870, 1890 and 1912 with those of New Zealand, Australia, Canada and the USA. The first three all belonging to the British Empire and their trade listed on the *Statistical Abstract for the several Colonial and Other Possessions of the United Kingdom* for a reason; The last one betting on its own internal market. They do not make a fair group for comparison with Latin American republics.

Italy, Portugal and Spain); Eastern Europe (Austro-Hungary, Bulgaria, Rumania, Servia); Scandinavia (Denmark, Finland, Norway, Sweden); Middle and Far East (China, Japan, Netherlands West Indies, the Philippines, Egypt and Persia); and a special group for the Russian Empire and the United states called 'Big Shots'. The data for individual countries are shown rather than using averages (whether weighted or un-weighted), given the spread in levels and the divergence in trends observed above.

Figure 3 reveals that in fact only the most commercial countries of Western Europe exported more per capita than the leading exporting nations of Latin America. In a world where the upper end of exports per capita was led by the Netherlands alone, doubling the levels of the second and third ones, Belgium and Switzerland, this should come as not surprise. Surprising is that the champion of free trade, the United Kingdom, exported per capita in levels equivalent to those of Uruguay, Argentina and Cuba. And equally interesting is that the small open economies of Scandinavia exported per capita slightly less than the leading Latin American exporters, including Chile, Costa Rica and Puerto Rico.

The levels of exports per capita of the second Latin American group, all the way from Brazil to El Salvador, were slightly superior to most countries of Southern and Eastern Europe. Even Latin American citizens obtaining the less profit from participating in the international markets, the Colombians, were getting more than the Asian citizens, by far the less exposed to global markets.

In general, Figure 3 supports the view that the average Latin American citizen was getting more out of the international markets than the inhabitants of any other region, outside Western Europe, before 1914. Furthermore, if we are to believe Maddison's data on income per capita for the few Latin American countries that it exists in this period, the linkage to world markets became even stronger.¹⁸ Latin American countries, at equivalent incomes per capita, systematically had larger exports per capita than other countries. Thus it follows that the importance of exports relative to income must have been far more important for Latin American countries than for any other region of the world, except possibly the Low Countries. See Figure 4.

¹⁸ Maddison, A. 2003. "The World Economy: Historical Statistics.". OECD Development Centre: Paris.

[FIGURE 4: EXPORTS vs. INCOME PER CAPITA, WORLD REGIONS 1890-1912]

This first insight only tells us that Latin Americans were able to sell in the world markets at least as much as everyone else, and in some cases much more, relative to their population sizes and incomes. It does not tell us whether they were net winners in their relation with the international markets. Yet, trade balances also favoured Latin America through out this period regardless the amount of exports per capita as shown in Figure 5. In fact, except for Honduras and Paraguay, Latin American countries all had systematic positive trade balances for the two decades before World War I. This may help to explain why it was during this period that most Latin American countries got on or returned to the gold standard, but Paraguay remained on inconvertible paper regime.¹⁹ None of the other regions of the sample managed systematic positive trade balances, except for the United States and the Russian Empire.

[FIGURE 5: TRADE BALANCES COMPARISON, WORLD REGIONS, 1890-1912]

From this look at the export side of Latin American trade over the last two decades of the first era of globalization tells us that Latin Americans were able to sell in the world markets at least as much as everyone else, and in some cases much more, relative to their population sizes and incomes. From the results of this section it derives that Latin American citizens were much more linked through their exports to international trade than citizens of Southern and Eastern Europe, Asia, the Russian Empire or the United States. And furthermore, Latin Americans were net winners in the exchange with world markets, selling to the world markets in excess of what they imported, for the twenty years before 1914. Yet, if Latin America, the United States and the Russian Empire had no rival exhibiting trade surpluses the question is whether this was the result of effective protection on the import side. This is

¹⁹ Salvucci, R. 2006. "Export-led Industrialisation," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press, pp. 249-92., Table 7.3 offers the institutional arrangements and monetary regimes under which Latin America operated between 1870 and 1930.

explored in the issuing sections. After exploring the custom collection, the levels of imports will be analysed.

2. Latin American custom duties during the pre-1914 ‘belle époque’

Data on total custom duties collected is much more scant in the *Abstract* than data in total trade.²⁰ Data on custom collection for 1890 is provided for 30 countries expanding the list up to 43 by 1912. Of those, 8 are Latin American at the earliest date (Argentina, Chile, Costa Rica, Mexico, Paraguay, Uruguay and Venezuela) becoming 10 by 1912 (adding Colombia, Cuba and Peru, but losing Paraguayan data). But before looking into the levels, let's make clear the crucial role played by custom revenues for Latin American governments.

[TABLE 2: CUSTOM REVENUE OVER CENTRAL GOVERNMENT REVENUES, LatAm]

One should remind that in ‘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’.²¹ That was certainly the case of Latin America. Table 2 shows the crucial importance that custom revenues had as fiscal source of income. For the six Latin American countries which data are available custom duties represented between half and three quarters of total government revenues, reaching almost 90 percent in the case of Chile by 1910.²² It is expected that other countries in the region would have levels of reliance on custom duties of no less than 50 per cent on average.

The relevance of custom revenues for Latin American governments shall serve as background for the analysis of the levels of average tariff rate -custom revenues as a share of total import values- as well as duty collection per capita in Latin America.

²⁰ While according to the *Abstract* all efforts were made in order to assure the custom collection reflected those duties imposed on imports only, it also recognised that it was not always possible to distinguish from other custom collection (namely exports). Thus for now, we will refer to the figures as ‘custom collection’ assuming for the most part refer to those levied on imports, but not giving it for granted.

²¹ Coatsworth, J. H. and J.G. Williamson. 2004. "Always Protectionist? Latin American Tariffs from Independence to Great Depression." *Journal of Latin American Studies*, 36, pp. 205-32.: p.216

²² Mitchell, B.R. . 2003. *International Historical Statistics - The Americas, 1750-2000*. Basingstoke: McMillan.

[FIG 6: CUSTOM COLLECTION (% OVER IMPORTS), LATIN AMERICAN COUNTRIES 1890-1912]

Figure 6 shows the custom collection in as percentage over imports for the 10 Latin American countries which data are available in the *Abstract*. The spread is wide. While Chile started and ended the period below 20 per cent, Argentina, Mexico, Peru and Cuba basically remained in levels between 20 and 30 percent but few others such as Brazil, Colombia or Venezuela reached levels above 50 per cent. At the same time, Costa Rica wandered up and down more ostensibly than any other country in the region. By contrast, Uruguay remained within the boundaries of the 30 to 40 per cent levels fairly stable.

So, clearly, if we were to take the average tariff rate as indicator of protectionism, it could be safely said that Chile was the less protectionist country of Latin America by the eve of World War I –despite its reliance on custom duties for government income-, while Colombia was the most protectionist. It is also worth mentioning here that the time trend observed of the average tariff rate in Latin America comes out slightly declining as we approach the end of the first globalisation era.²³

[FIG. 7: CUSTOM COLLECTION PER CAPITA, LATIN AMERICAN COUNTRIES, 1890-1912]

The degree of success of the Latin American governments capturing revenues from international trade is better reflected in the amount of custom duties collected relative to their population size –for it reflected the potential tax base, while the expenditure would also relate to the population to be served. Remember that high tariffs do not guarantee large custom collections, either absolute or in per capita terms. Here no other government seized more per capita from taxing international trade than the Uruguayan one. Over two pounds sterling per capita collected from custom duties for the entire period. The Argentine and Cuba achieved similar levels towards at the eve of World War I, but a much lower average

²³ Coatsworth, J. H. and J.G. Williamson. 2002. "The roots of Latin American Protectionism: Looking before the Great Depression." *NBER Working Papers*, 8999. p.32 insist that 'tariffs rates in Latin America were even on the rise in the decades before 1914', for a period extending from 1870. Also: Coatsworth, J. H. and J.G. Williamson. 2004. "Always Protectionist? Latin American Tariffs from Independence to Great Depression." *Journal of Latin American Studies*, 36, pp. 205-32., p.5 assert that 'the rise in Latin America's tariffs from the 1860s to the turn of the century was much steeper than was true of Europe'.

tariff rate as seen above. Despite the wide differences in their average tariff rate, Costa Rica, Chile and Brazil managed within half and one pound per habitant collected at customs. Finally Venezuela, Colombia, Peru and Mexico all obtained less than half a pound per capita from taxing international trade. Observe that the Colombian government obtained relatively little per capita from custom collection despite having the highest average tariff of the region. Something very similar can be said of Brazil. As mentioned above, not necessarily the highest average tariff rate implied the largest collection per capita. In truth some of the highest collectors in per capita terms had not very high average tariff rates, say Cuba, Argentina, Costa Rica and Chile. This would indicate that optimal tariffs (that which maximise income for the collector) were not in place in some countries such as Brazil or Colombia, but might have been close to achievement in other parts of Latin America. The fit of the time trend reflects a certain tendency towards increasing duty collection per capita by the first decade of the 20th century, or at most a flat trend, the opposite trend to the declining trend observed in the average tariff rate.

Thus here as with exports, Colombia was getting less than any other Latin American country from its relations with the world markets. It had the lower exports per capita of the region and its government obtained less per capita than any other in the region from custom collection. At the other end, the countries whose citizens were already well linked to world markets through exports – Uruguay, Argentina and Cuba- were also the ones whose governments were capturing more revenues from international trade measured per habitant.

[FIG.8: COLLECTION (% OVER IMPORTS), WORLD REGIONS, 1890-1912]

How do Latin American custom collections contrast with the rest of the world? The answer is plotted in Figures 8 and 9. In Figure 8 it is easy to check that no other group of countries match the high average tariff rates of Brazil, Colombia and Venezuela. Nevertheless, individual countries may have punctual levels close to these countries. For instance by the change of the century the levels of the Russian Empire were close to the 40 per cent levels, but never above. Even the Latin American countries with the lower average tariff rates come up as highly ‘protectionist’ in contrast with Asia, Eastern Europe, Scandinavia and overall

Western Europe. Yet, the latter two groups had the lower average tariff rates of the whole world.

After all, Latin America diversity forces us to look more closely at the country level. High average tariff rates are of course found in the United States, but also in Portugal, Greece, the Philippines and the Russian Empire. These match, and in occasions surpass, the levels of Chile, Argentina, Mexico and Cuba. Thus Latin American countries are not that alone in the business of high 'protection'.

[FIG. 9: COLLECTION PER CAPITA, WORLD REGIONS, 1890-1912]

Figure 9 corroborates the fact that the Latin American republics had no rival capturing revenues from custom collection. No region achieved the collection of duties per capita of Uruguay, Argentina, Cuba or Costa Rica. In no other region was the foreign trade fiscalised over 1 pound sterling per capita, with the only exception of Norway towards the end of the period. Even the governments collecting less per capita in Latin America, still were able to grasp more from duties than most regions in the world. There are several reflections to this effect. First, when interacting with the world economy, Latin American citizens contributed to their government income more than any other citizens in the world. Second, Latin American governments were champions obtaining custom duties relative to their population size. Finally, Latin American nations depended on the fiscal revenues generated by international trade as no other independent government of the time.

3. But they buy (despite duties!): Latin America imports over the 'belle époque'

Could this bulky custom collection be the explanation behind the export surpluses observed in the previous section? The cross-country comparisons shown in Figure 10 do not give a conclusive answer. Countries with lower average tariffs rates concentrate most of the trade deficits (Western Europe, Scandinavia and parts of Asia and the Middle East), while countries with higher average tariff rates tended to be the ones with the most favourable trade

balances, but not always. Latin America, The United States, the Russian Empire and part of Southern Europe had, as we have seen, average tariffs rates above 20 per cent. The first three all exhibited clear trade surpluses but not the Southern European nations. This could be taken as an indication that high tariffs must have had a powerful protective effect in Latin America, the United States and the Russian Empire. Such explanation would actually require these countries to have smaller levels of imports per capita in contrast with nations with lower tariffs.

[FIG.10: TRADE BALANCE vs AVERAGE TARIFF RATE, 1890-1912]

Lets have a look at the imports per capita of the 19 Latin American republics for which data are available in the *Abstract*. These are shown in Figure 11. Despite the relatively bulky custom the faced, Latin American citizens imported in increasing amounts, at least very clearly so from 1900. Here more clearly than before, the regional divide appears neatly. The larger importers of the region in per capita terms were the usual suspects: Cuba, Argentine, Uruguay, Chile, Puerto Rico and Costa Rica. They all imported, by the end of the period between 5 and 10 pounds per capita. After a gap of over two pounds per capita, the second group of importers was led by Brazil, Paraguay, Bolivia and towards the end of the period Mexico and Peru. Central American countries had an interesting behaviour with Nicaragua, Ecuador and Guatemala being at the top of this second group of importers by 1900 but loosing positions towards the end of the period. There were also countries importing very little per capita relative to the large and medium importers of the region. El Salvador, Honduras, Venezuela and over all Colombia imported in relatively small amounts (less than a tenth of the larger importers). At this stage, the position of Colombia is not a surprise any longer. For every one of the indicators Colombians come out as the Latin American citizens less linked to the world economy, and at the same time were the ones facing the highest average tariff rates. Yet, even the small and highly 'protected' increased their imports per capita in the run up to World War I.

[FIG.11: IMPORTS PER CAPITA IN LATIN AMERICA OVER THE 'BELLE ÈPOQUE']

Not only did the Latin American republics import in increasing amounts, they also imported in similar, at time larger, amounts than other parts of the world in per capita terms. Figure 12 contrast the Latin American imports per capita with those of other independent countries of the time. The Latin American countries are grouped according to their import levels in large, medium and small importers. Latin America's top importers in per capita terms were importing in amounts similar to those of the Scandinavian countries –always thought of as open economies-. In fact, only the most commercial nations of Western Europe –the Netherlands, Belgium, Switzerland, the United Kingdom and Demark- imported more per capita than Cuba, Uruguay or Argentina.

[FIGURE 12: IMPORTS PER CAPITA COMPARISON, WORLD REGIONS, 1890-1912]

If we look at the medium size importers, they imported at levels equivalent to those of Southern and Eastern Europe. Even the small importers among the Latin American nations, including Colombia, imported more than the Russian Empire (who were indeed applying high average tariff rates too) and the Asian nations of the sample. Observe that Latin American countries were in general importing more per capita than nations with much lower average tariff rates, but also imported more than nations with equally high average tariff rates such as the Russian Empire, Portugal, the Philippines or Greece. Given this evidence, it is not possible to say that Latin America was de-linked from the international economy, despite the high custom collection. Latin American citizens were buying from the world markets in reasonably large amounts.

[TABLE 3: EXPORTS, IMPORTS AND CUSTOM COLLECTIONS PER CAPITA, WORLD COMPARISON AT THREE DATES 1890, 1901, 1910]

A closer look at the figures can be obtained from Table 3 for years 1890, 1901 and 1910. Ranked according to their imports per capita in those years, it is clear that Uruguay, the Argentine and Cuba were top world importers right behind the most open economies of the time, despite facing average tariff rates ten times higher than the European countries

immediately above and below their levels. Table 3 also insists in the wide differences across Latin America, which in terms of per capita imports, were at least as wide as the observed among the European of the core and the periphery, and possibly wider. It is true, however that if we draw a line at the level of the US imports per capita, knowing that they were a closed economy, then a large number of Latin American countries will appear as closed economies given their low level of imports per capita. Yet the income per capita of the US was the highest of the world at this time, thus the comparison of import per capita without looking at income levels is futile. Income per capita is plotted against import per capita in Figure 13.

[FIGURE 13: IMPORTS VS INCOME PER CAPITA, WORLD REGIONS, 1890-1912]

Relative to their income, Latin Americans were still importing in large amounts. Take for instance Brazil, a medium importer per capita within Latin America. Relative to its income per capita, Brazil was importing per capita much more than countries having equivalent income. Or in other words, Brazil imports per capita were at the level of countries that had a much higher income per capita. Thus relative to its income the Brazilian were spending more in the international markets than many other nations. The same can be said, of the other Latin American nations for which income data are available: they imported at the levels appropriate for the income levels they had, and some times imported above the expected level. If high tariffs had a powerful protective effect one should observe lower imports per capita not only relative to other countries, but also relative to the income level of the countries. This is no much evidence of reduced imports in Latin America in either case. For some reason, despite the high custom collection Latin American countries continue to import.

[FIGURE 14: AVERAGE TARIFF RATE vs IMPORTS PER CAPITA, LATAM. 1890-1912]

[FIGURE 15: DUTIES PER CAPITA vs IMPORTS PER CAPITA, LATAM. 1890-1912]

The fact that high average tariff rates and high custom collections were compatible with high imports per capita in Latin America over the 'belle époque' is evident from Figures 14 and

15. The former plots average tariff rates versus imports per capita, the later custom duties collection per capita versus imports per capita again. In Latin America high average tariff rates come hand in hand with high imports per capita, while in Western Europe high average tariff rates produce lower import per capita. At the same time the same or larger imports per capita are compatible with much higher custom duties collection per capita in Latin America, but not elsewhere. Custom tariffs do not appear to have a protective effect in Latin America. This paradox calls for further investigation, possibly beyond the scope of this one paper. Nevertheless some tentative explanations can be outlined for these results to hold: the possibility of a differential price-elasticity of demand for imports in Latin America, the inadequacy of using average tariff rates as indicator of protection and finally the possible problems associated with the data reported as customs collections.

First, price-elasticity of demand determines how protective a tariff actually is. If the demand for imports is very elastic, thus it reacts quickly and in large amounts to a change in prices, a small increase in the tariff would reduce the amounts imported meaningfully. On the contrary, if the products imported were relatively price-inelastic, thus people continue to demand them regardless of a price increase then, an increase in the import tariff will not reduce imports. Therefore, the proportion of low elasticity of demand products –and the intensity of such inelasticity- in the imports basket of any given country will be crucial for the determining the impact of the import tariff . Therefore, one could very well face the paradox presented above assuming that the Latin American imports were more price-inelastic than the demand for imports in other countries so that Latin American citizens continued to import much needed or wanted goods despite the high tariffs.²⁴ If so was the case, then average import tariff cannot be considered protective for inelasticity works both ways. As much as the quantity imported did not diminish at higher prices (due to tariffs), smaller tariffs would not produce higher demand for these goods. Furthermore, the changing nature of the import basket across time and countries will result in very different impacts of tariffs on the amounts imported across time and place. Evidence regarding price elasticity of the demand for imports in Latin America is lacking and research on this area should quickly be up in the agenda of economic historians.

²⁴ Income distribution may also play an important role in this regard given that the income elasticity of the demand for imports will determine the type of products to be imported.

Even if one could question the differential price-inelasticity of Latin American imports, the average tariff rate has itself been questioned as a good measure of protection. From the average tariff rate one can not say whether what is being taxed are luxurious goods paying incredibly high amounts to enter the country, while most things enter paying relatively little or non duty or whether a uniform tariff is applied throughout to all imports. These two tariff rules would have very different impact on the actual imports but may turn out to show very similar average tariff rates depending of the amounts imported, the size of the tax, and the price elasticity of the products imported. Thus the pledge for separate cross country industrial, primary and fiscal product tariff average made by some scholars within the European context would also be advisable before further assessment of the Latin American tariff.²⁵

Last but not least, the possible problems associated with the data reported as customs collections must also be considered. From a European perspective custom collection is directly identified to duties levied on imports. Elsewhere in the world such assumption is no so clear. Even when the heading of the corresponding table in the *Abstract* says 'Total Amount of import duties collected in each of the respective countries' the footnotes to the earlier years explain that it was not always possible to distinguish import from other custom collection (namely exports). Thus far in the paper we have always referred to the figures as 'custom collection' assuming for the most part refer to those levied on imports, but it cannot be given for granted. Several hints indicate that one should be cautious before the possibility that custom duties in Latin America included not only import but also export duties charged on minerals and cash-crops exported. For instance, given that custom collection was so crucial for Latin American countries, taxing exports was the obvious second best to taxing imports. They indeed taxed exports by 1929 Chilean custom duties were half imports half export duties according to Bulmer-Thomas data. Section one above explains that moderate export taxes were among the policies implemented among the Latin American countries. It also reports that Latin American nations commanded many commodity markets, and thus could well be rolling on to the world markets the price increases due to export taxes. The continuous revision of the data by correlative *Abstracts* and the notes to the figures provided

²⁵ Tena, A. 2001. "Measuring Protection over time. Revenue and Protective Tariffs in 19th Century Commercial Policy History." *Working Paper 01-65 Economic History and Institutions Series. Universidad Carlos III de Madrid.*

also hint at the common the inclusion of export duties along with import duties. Even if export duties were not included for all countries in Latin America (and elsewhere outside Europe) and even when their importance may be small (2 to 10 per cent of all custom collected), it would suffice to drop the average tariff rates to more standard levels.

Conclusion

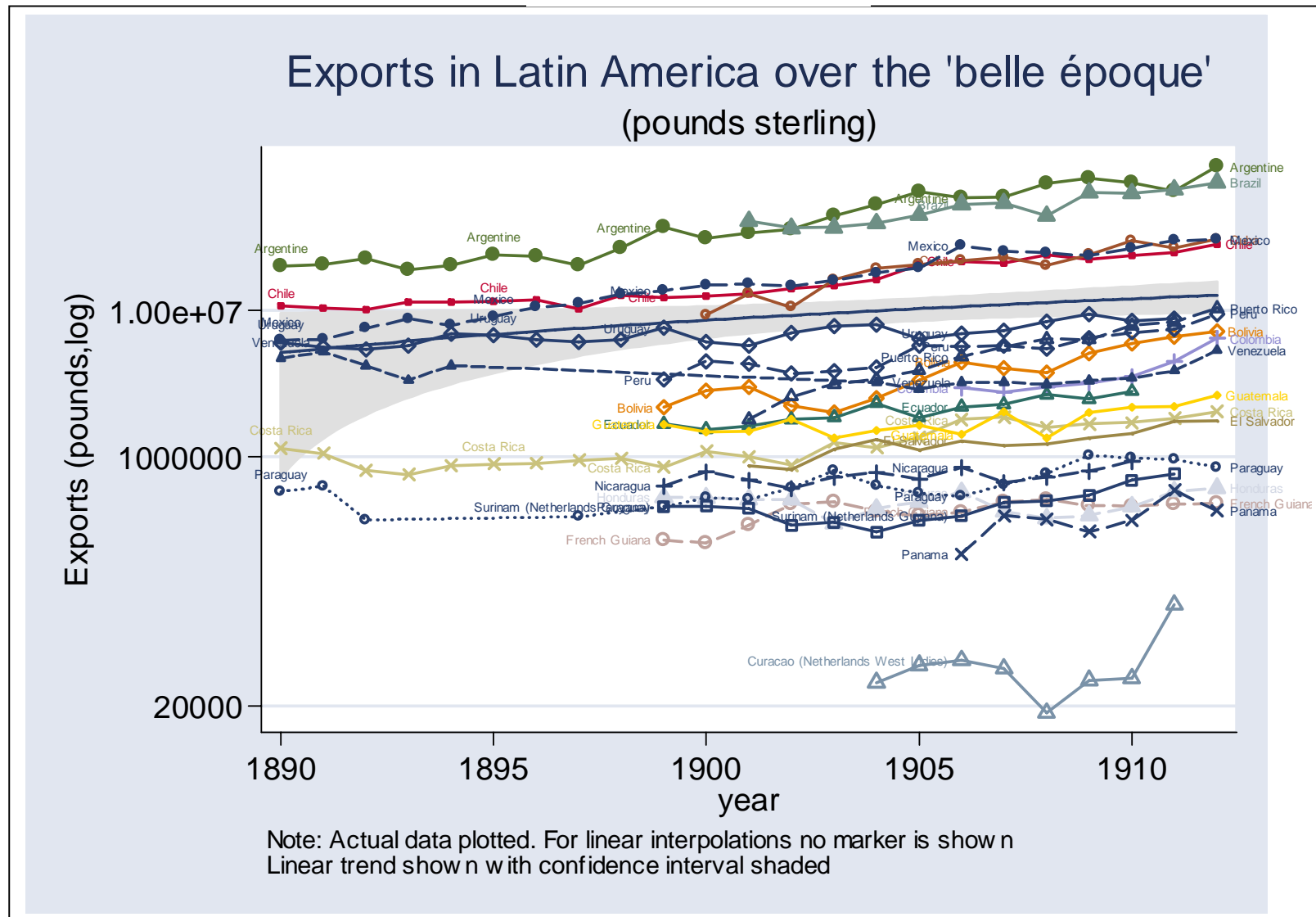
Whatever the explanation for the paradox might turn out to be, this paper comes to show that there is no contradiction between the high custom collection by the Latin American republics and their high level of interaction with the global economy in the pre-1914 belle époque. The links to the world economy were strong through their exports and significantly through a large level of imports per capita, although large country differences can be observed when descending from the regional to the national level. Tariffs did not have the assumed powerful protective effect in the pre-1913 period in Latin America. The explanation of why this was the case should be the next step in the agenda, particularly since further insights about the relationship between globalization (or protectionism) and economic growth are at stake. The good reputation of protectionism in the pre-1913 era may be a fallacy if actually protection as such did not exist, but simply an excellent ability by governments to capture rents out of the interaction of their citizens with the world economy.

What it is clear from the results of this paper is that Latin American citizens were much more linked to international trade than citizens of Southern and Eastern Europe, Asia, the Russian Empire or the United States. In per capita terms, their relation to the world economy was tighter both via their imports and their exports, relative to their population size and their income. More crucially, Latin American governments depended on revenues generated by international trade as no other independent government of the time. Consequently, it comes as no surprise that when the international markets were shaken from 1914 onwards, no other citizens were more hurt than the Latin American ones. The belle époque remains as linked to the international markets for Latin America as ever.

References:

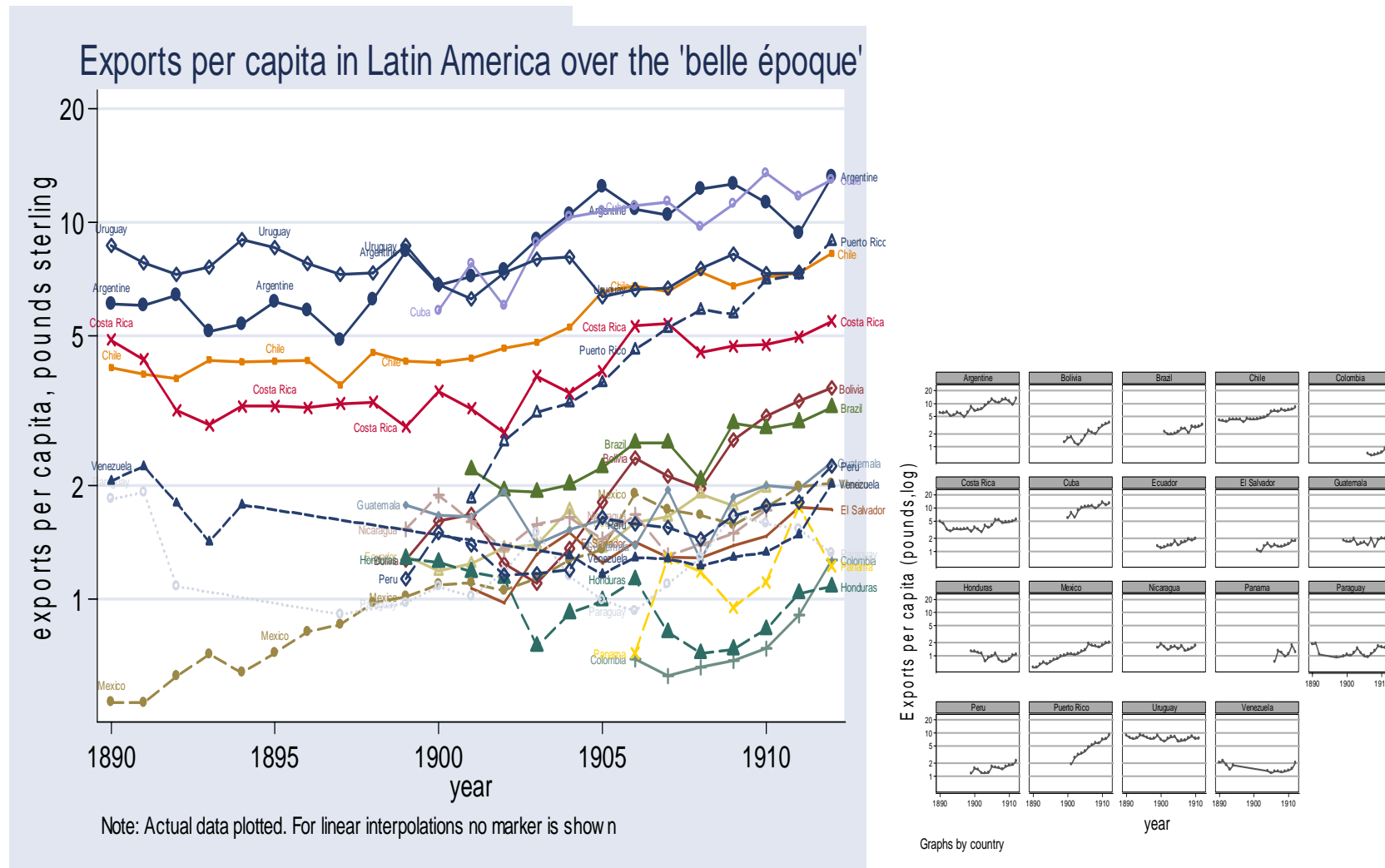
- Bértola, L. and J.G. WILLIAMSON. 2006. "Globalization in Latin America Before 1940," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press.
- Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America since Independence*. Cambridge: Cambridge University Press.
- Coatsworth, J. H. and J.G. Williamson. 2002. "The roots of Latin American Protectionism: Looking before the Great Depression." *NBER Working Papers*, 8999.
- Coatsworth, J. H. and J.G. Williamson. 2004. "Always Protectionist? Latin American Tariffs from Independence to Great Depression." *Journal of Latin American Studies*, 36, pp. 205-32.
- Maddison, A. 2003. "The World Economy: Historical Statistics." OECD Development Centre: Paris.
- Mitchell, B.R. . 1993. *International Historical Statistics - The Americas, 1750-1993*. Basingstoke: McMillan.
- Mitchell, B.R. . 2003. *International Historical Statistics - The Americas, 1750-2000*. Basingstoke: McMillan.
- OxLAD. "Oxford Latin American Economic History Database (OxLAD)". Latin American Centre at the Oxford University.
- Prados de la Escosura, L. 2006. "The economic consequences of independence in Latin America," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press, pp. 463-504.
- Salvucci, R. 2006. "Export-led Industrialisation," in *The Cambridge Economic History of Latin America*. V Bulmer-Thomas, J. H. Coatsworth and Roberto Cortés Conde eds. Cambridge: Cambridge University Press, pp. 249-92.
- Skidmore, T.E. and P.H. Smith. 1996. *Modern Latin America*. New York: Oxford Univ. Press.
- Tena, A. 2001. "Measuring Protection over time. Revenue and Protective Tariffs in 19th Century Commercial Policy History." *Working Paper 01-65 Economic History and Institutions Series*. Universidad Carlos III de Madrid.
- Thorp, Rosemary. 1989. "Economy, 1914-1929," in *Latin America Economy and Society 1870-1930*. L Bethell ed. Cambridge, pp. 57-82.
- Thorp, Rosemary. 1998. *Progress, Poverty and Exclusion. An Economic History of Latin America in the 20th Century*. New York: Inter-American Development Bank.
- UNITED KINGDOM: HIS MAJESTY'S STATIONERY OFFICE. (various years). *Statistical Abstract for the Principal and Other Foreign Countries*. London.
- Yañez, C., M.d.M. Rubio, and A. Carreras. 2006. "Economic modernisation in Latin America and the Caribbean between 1890 and 1925: A view from the energy consumption," in *2006 Cliometrics Conference*. Binghamton, NY.

FIGURE 1



Sources: elaborated from data by the *UK Statistical Abstract*

FIGURE 2



Sources: elaborated from data by the *UK Statistical Abstract*. For population figures see text.

TABLE 1

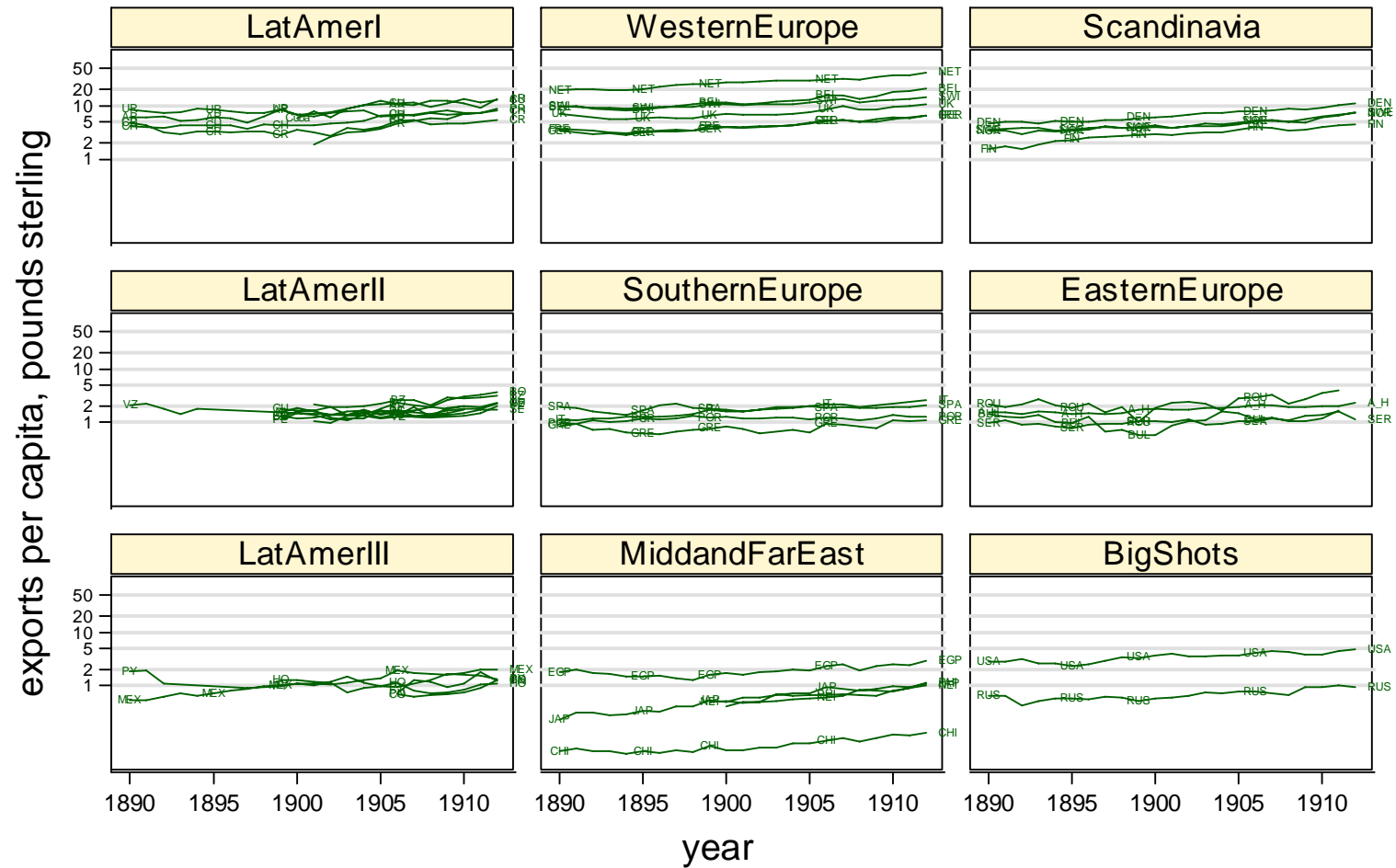
Export concentration ration circa 1913

Country	First product	%	Second product	%	% of main two products	frist country destination	second country of destination	%	% to main two destinations	
Argentina	maize	23%	wheat	21%	43%	UK	25%	Germany	11%	36%
Bolivia	Tin	72%	silver	4%	77%	UK	74%	Germany	12%	87%
Brasil	coffee	62%	Rubber	16%	78%	USA	36%	Germany	14%	50%
Chile	nitrates	71%	copper	7%	78%	USA	40%	Germany	20%	60%
Colombia	coffee	37%	gold	20%	58%	USA	45%	UK	14%	58%
Costa Rica	bananas	51%	coffee	35%	86%	USA	49%	UK	42%	91%
Cuba	sugar	72%	tobacco	20%	92%	USA	84%	UK	8%	91%
Ecuador	cacao	64%	coffee	5%	70%	France	35%	USA	30%	65%
El Salvador	coffee	80%	precious mettals	16%	96%	USA	30%	Germany	23%	53%
Guatemala	coffee	85%	bananas	6%	91%	Germany	53%	USA	27%	80%
Honduras	bananas	50%	precious mettals	26%	76%	USA	86%	Germany	5%	91%
Mexico	silver	30%	copper	10%	41%	USA	75%	UK	15%	91%
Nicaragua	coffee	65%	precious mettals	14%	79%	USA	35%	Germany	25%	60%
Panamá	bananas	65%	coconuts	7%	72%	USA	94%	Germany	4%	98%
Paraguay	yerba mate	32%	tobacco	16%	48%	Germany	22%			22%
Perú	copper	22%	sugar	15%	37%	UK	33%	USA	28%	62%
Puerto Rico	sugar	47%	coffee	19%	66%	USA	86%	Cuba	7%	93%
Uruguay	wool	42%	meat	24%	66%	France	17%	Germany	16%	33%
Venezuela	coffee	52%	cacao	21%	73%	USA	32%	France	29%	62%

Sources: Bulmer-Thomas(2003) for commodities; own elaboration from *Abstract* data for countries of destination
All data on countries of destination belong to 1912 except for Ecuador which correspond to 1910

FIGURE 3

Exports per capita comparison, world regions 1890-1912

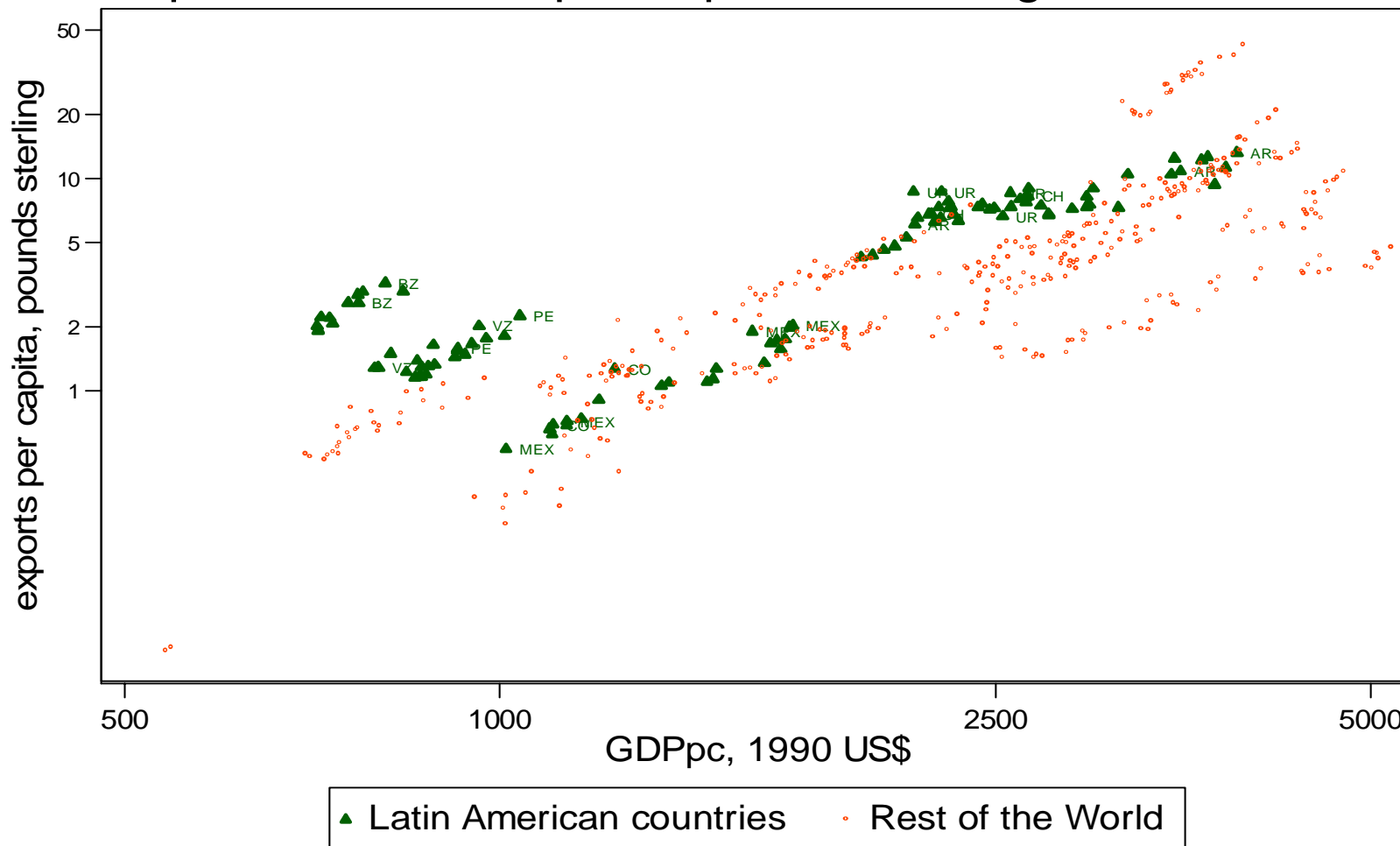


Graphs by group

Sources: elaborated from data by the *UK Statistical Abstract*. For population figures see text.

FIGURE 4

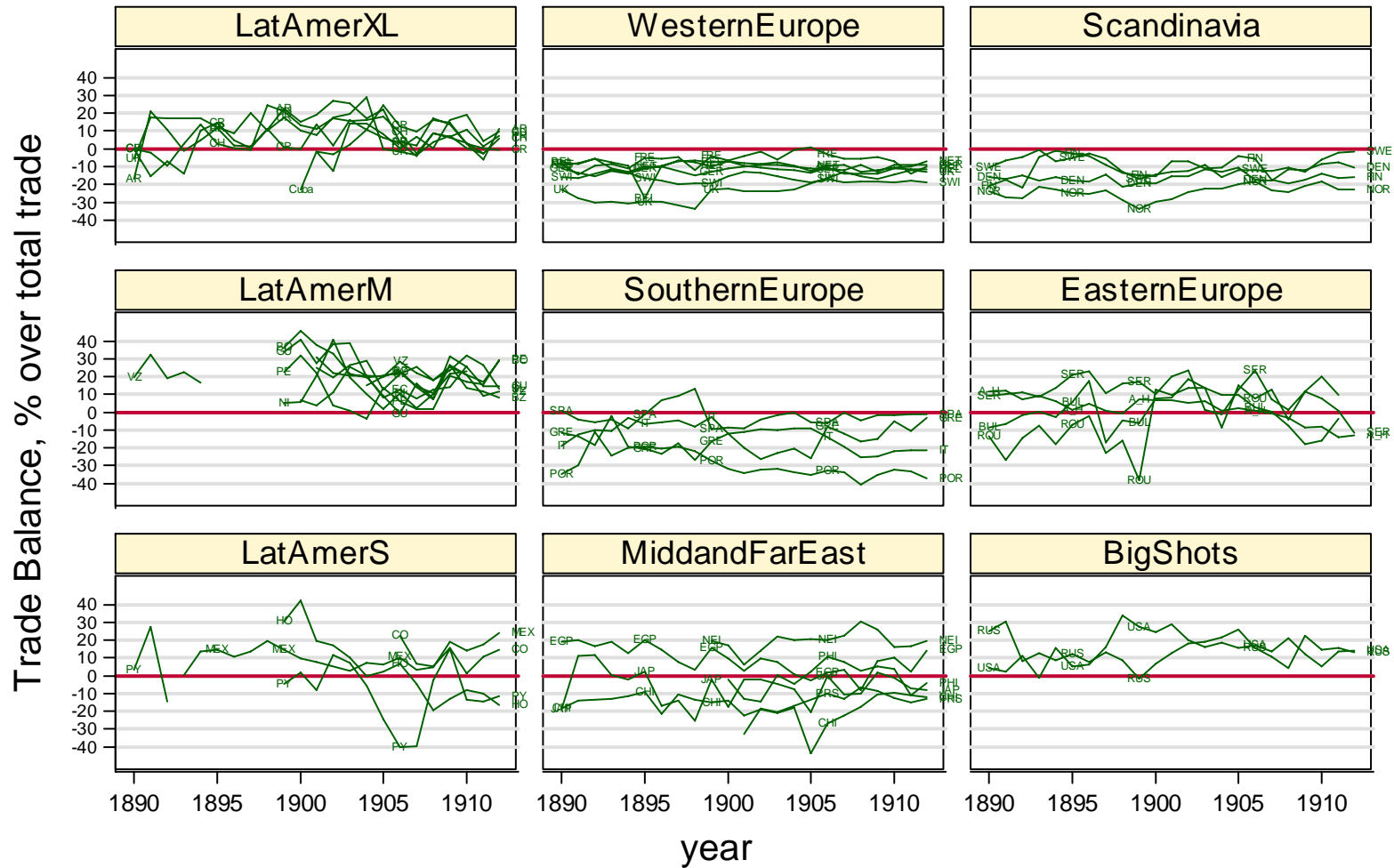
Exports vs income per capita, world regions 1890-1912



Sources: elaborated from data by the *UK Statistical Abstract*. For population figures see text. GDP figures from Maddison (2002)

FIGURE 5

Trade Balances comparison, world regions 1890-1912



Graph Sources: elaborated from data by the *UK Statistical Abstract*

TABLE 2

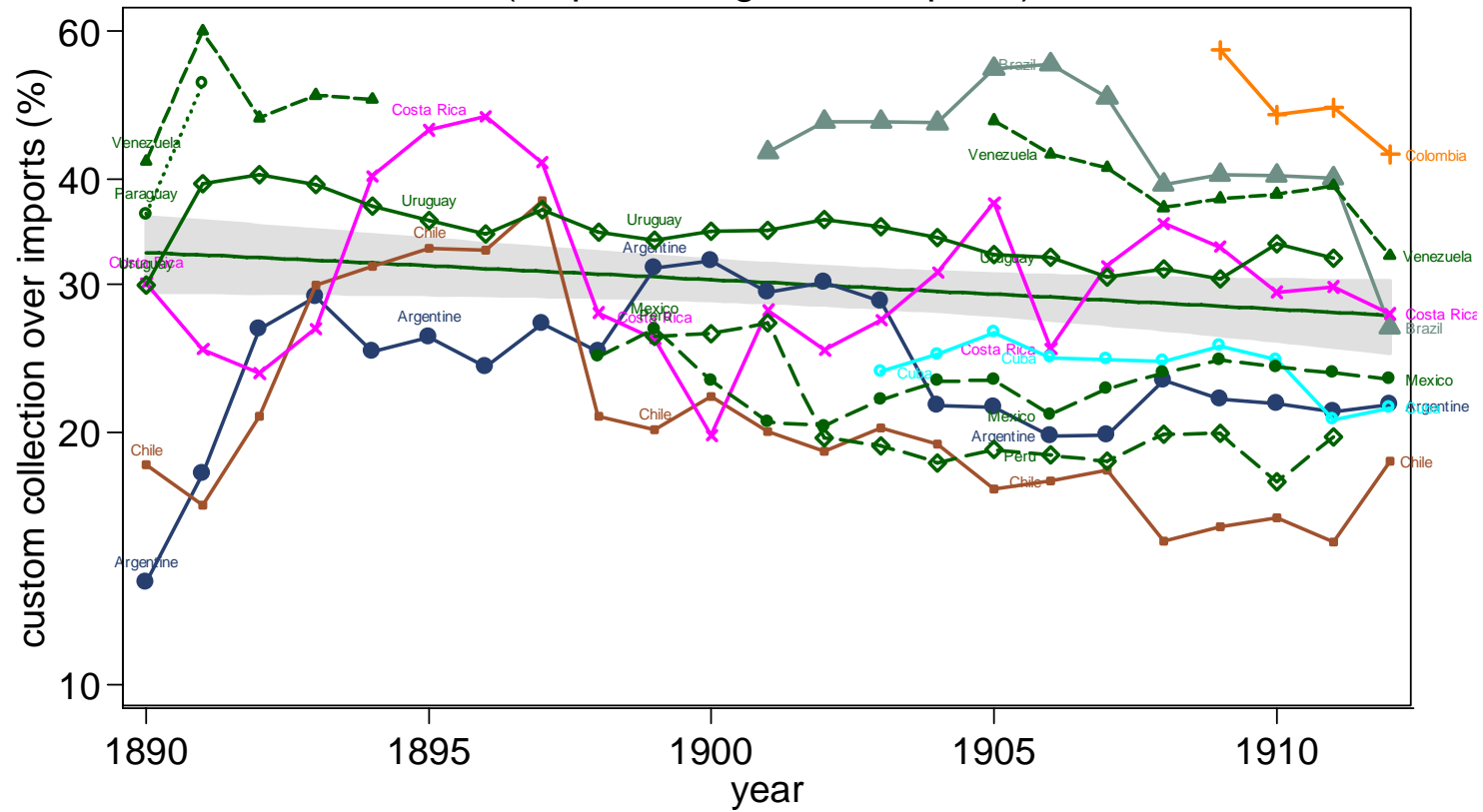
Custom revenue over central government revenues

	1895	1900	1910
Argentina	54%	48%	56%
Brazil	na	54%	54%
Chile	74%	72%	89%
Mexico			
Peru	na	57%	46%
Uruguay	67%	49%	60%
Venezuela	75%	na	na
USA	47%	41%	48%

Sources: Michell, B.R.(2003)

FIGURE 6

Custom collection in Latin America over the 'belle époque' (as percentage over imports)

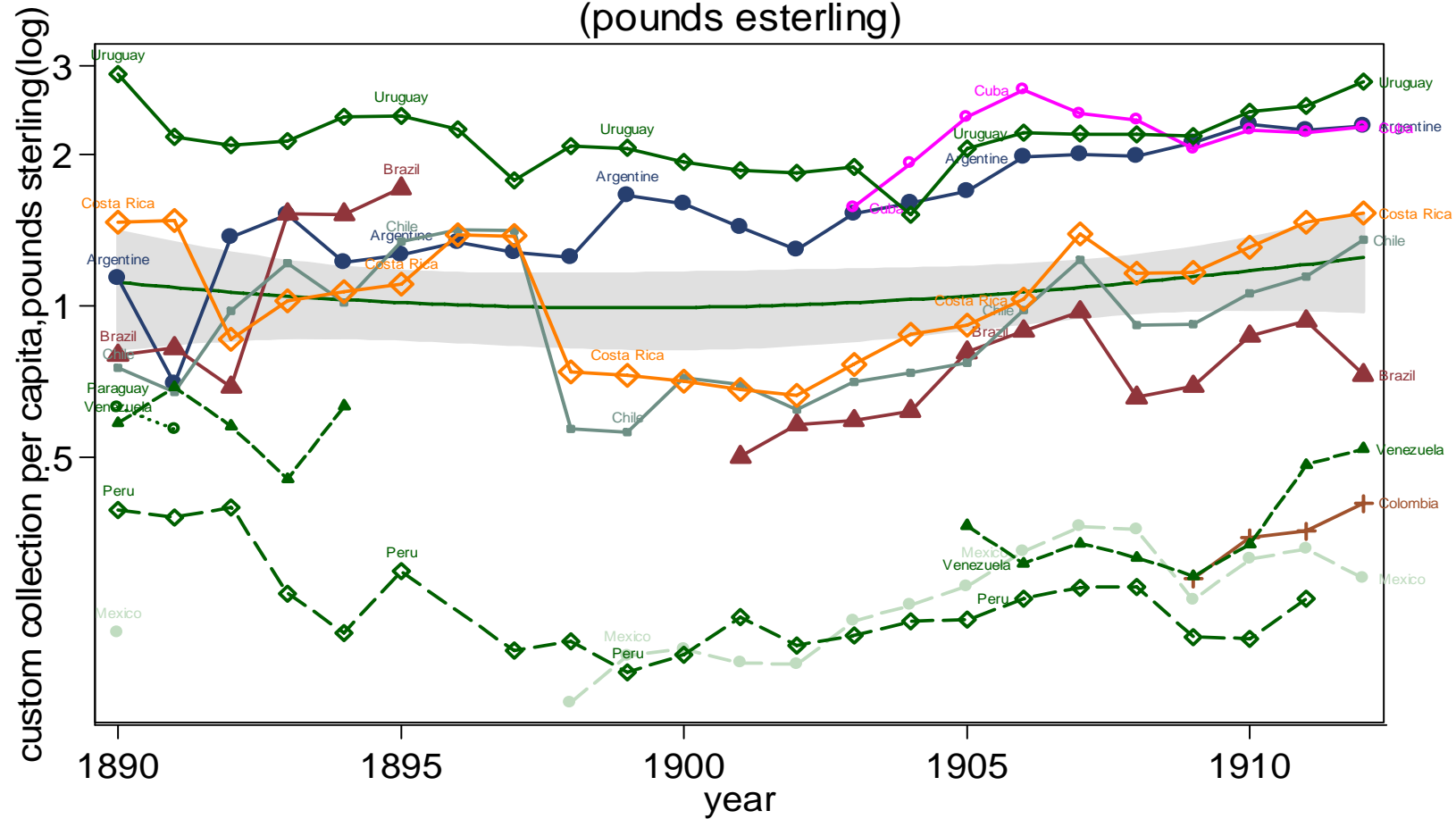


Note: Actual data plotted
Time trend shown with confidence interval shaded

Sources: elaborated from data by the *UK Statistical Abstract*

FIGURE 7

Custom collection per capita in Latin America over the 'belle époque'
(pounds esterling)

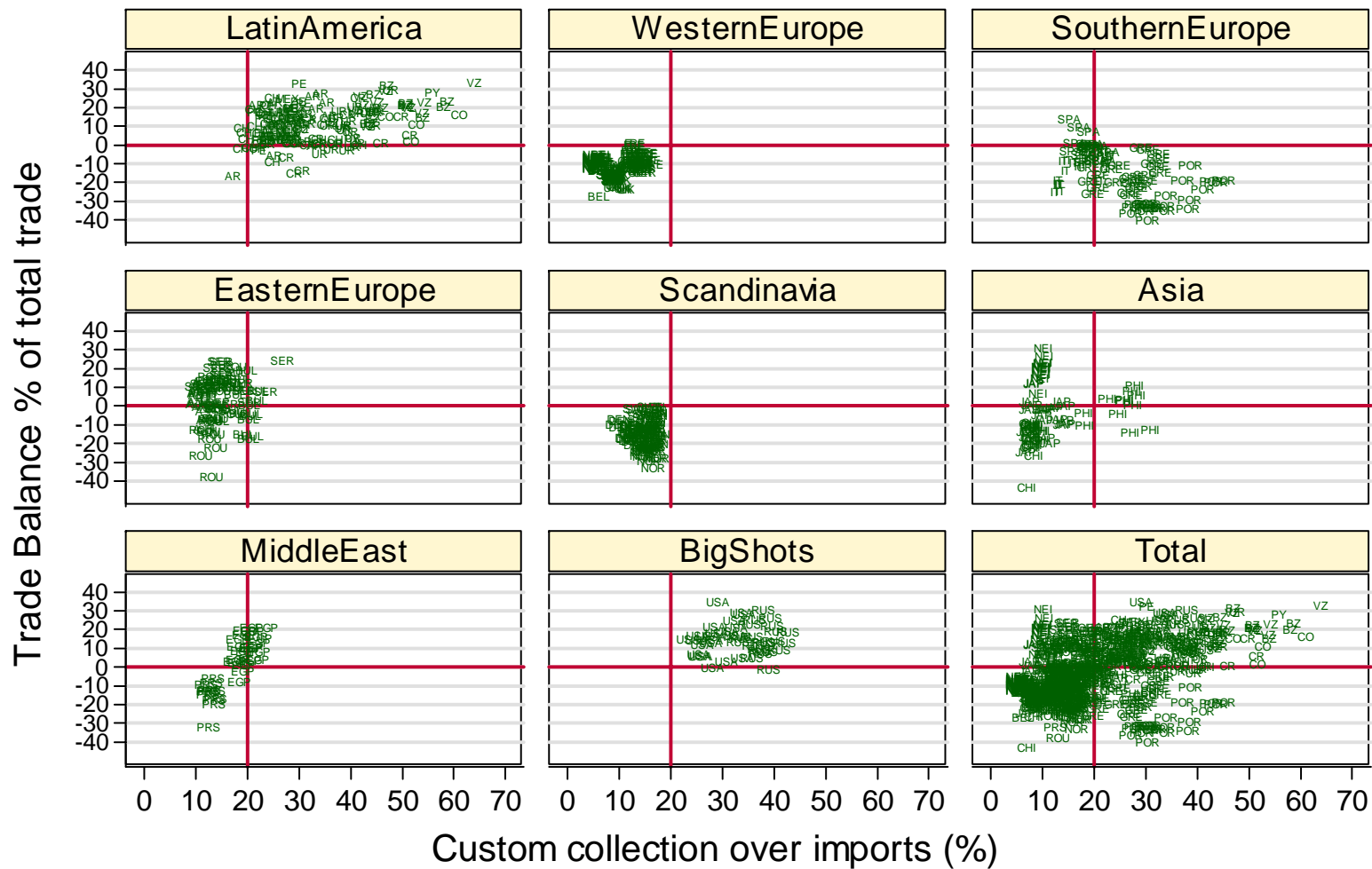


Note: Time trend shown (quadratic fit) with confidence interval shaded

Sources: elaborated from data by the *UK Statistical Abstract*. For population figures see text.

FIGURE 10

Trade Balance vs average tariff rate, 1890-1912

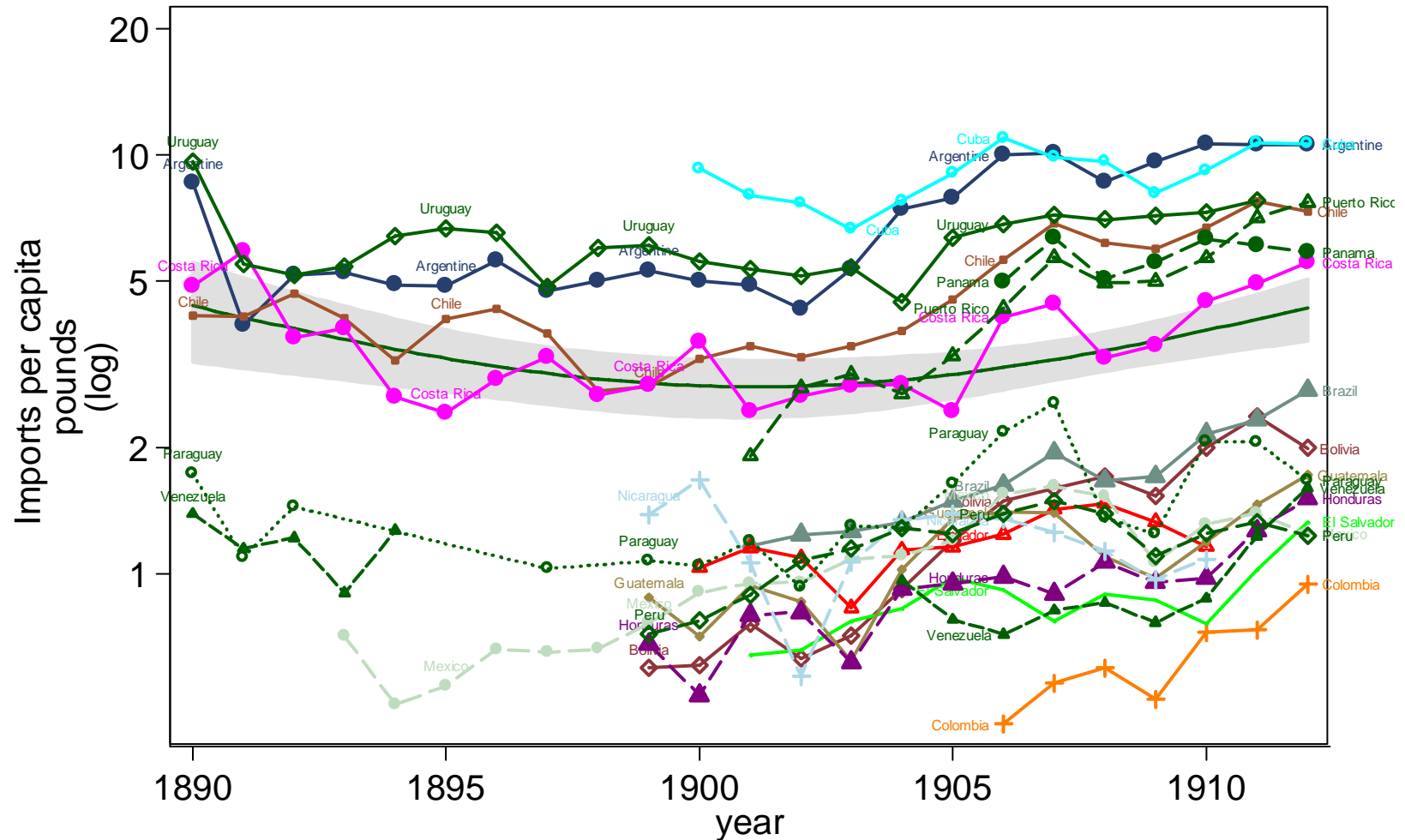


Graphs by region

Sources: elaborated from data by the *UK Statistical Abstract*

FIGURE 11

Imports per capita in Latin America over the 'belle époque'

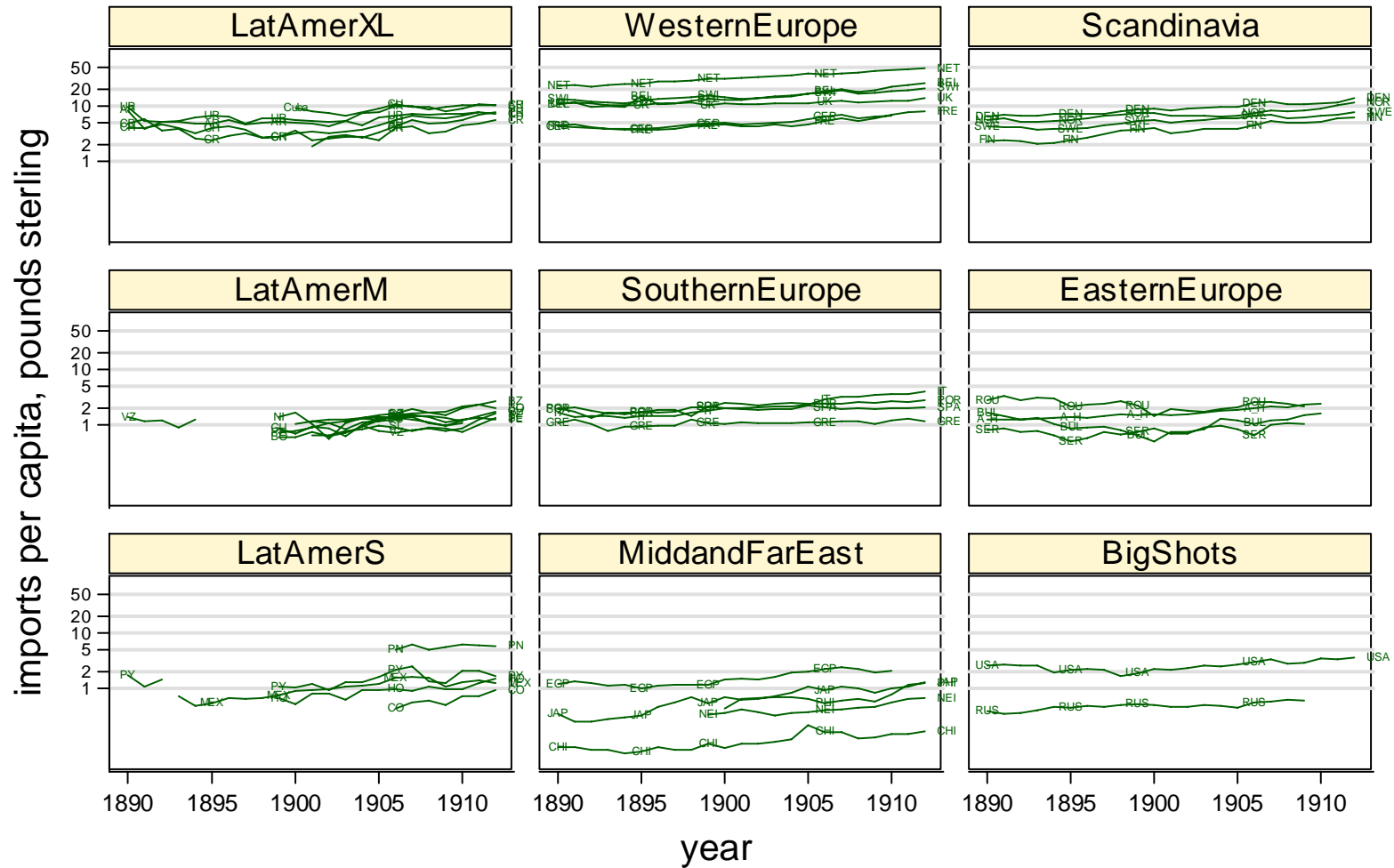


Note: Time trend shown (quadratic fit) with confidence interval shaded

Sources: elaborated from data by the *UK Statistical Abstract*. For population figures see text.

FIGURE 12

Imports per capita comparison, world regions 1890-1912



Graphs by group

Sources: elaborated from data by the *UK Statistical Abstract*

TABLE 3: EXPORTS, IMPORTS AND DUTIES PER CAPITA AND AVERAGE TARIFF RATES , 1890, 1901, 1910

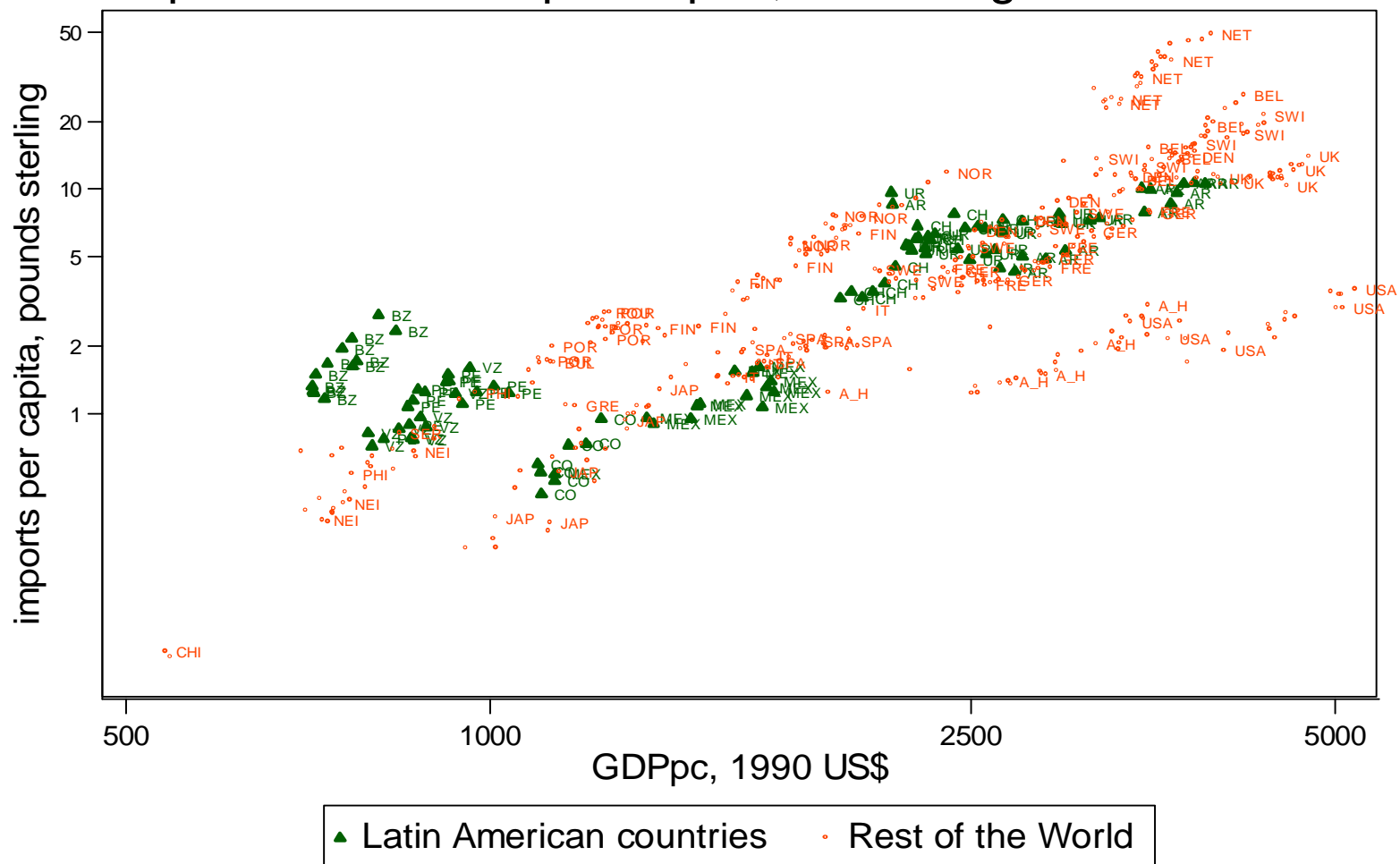
1890					
country	label	Exports per capita	Imports per capita	Custom Duty collection per capita	average tariff rate
Netherlands	NET	19,88	23,74	0,10	0%
Switzerland	SWI	9,82	13,59	0,42	3%
United Kingdom	UK	7,03	11,22	0,54	5%
Belgium	BEL	9,43	10,97	0,21	2%
Uruguay	UR	8,67	9,65	2,89	30%
Argentina	AR	6,07	8,56	1,13	13%
Denmark	DEN	4,72	6,50	0,57	9%
Norway	NOR	3,46	5,62	0,60	11%
Costa Rica	CR	4,87	4,87	1,46	30%
France	FRE	3,75	4,44	0,36	8%
Sweden	SWE	3,54	4,37	0,49	11%
German Empire	GER	3,44	4,30	0,39	9%
Chile	CH	4,11	4,12	0,75	18%
Roumania	ROU	2,13	2,81	0,17	6%
United States	USA	2,78	2,56	0,75	29%
Finland	FIN	1,56	2,38	0,34	14%
Portugal	POR	0,96	1,98	0,66	33%
Spain	SPA	1,96	1,92	0,22	11%
Paraguay	PY	1,84	1,73	0,63	36%
Bulgaria	BUL	1,42	1,68	0,16	10%
Italy	IT	1,13	1,67	0,30	18%
Venezuela	VZ	2,06	1,39	0,58	42%
Austro-Hungary	A_H	1,56	1,23	0,08	7%
Egypt	EGP	1,79	1,22	0,18	15%
Greece	GRE	0,85	1,08	0,22	20%
Servia	SER	0,98	0,82	0,05	6%
Russian Empire	RUS	0,64	0,38	0,12	32%
Japan and Formosa	JAP	0,23	0,34	0,01	4%
China	CHI	0,06	0,09	0,004	5%
Brazil	BZ			0,80	
Peru	PE			0,39	
Mexico	MEX	0,53		0,22	
N		30	29	32	29

1901					
country	label	Exports per capita	Imports per capita	Custom Duty collection per capita	average tariff rate
Netherlands	NET	27,61	32,39	0,16	0%
Switzerland	SWI	10,33	13,39	0,55	4%
Belgium	BEL	10,75	13,06	0,30	2%
United Kingdom	UK	6,74	10,93	0,73	7%
Denmark	DEN	6,22	8,50	0,65	8%
Cuba	CU	7,76	8,00		
Norway	NOR	3,81	6,82	0,86	13%
Uruguay	UR	6,25	5,34	1,86	35%
Sweden	SWE	3,81	4,95	0,53	11%
Argentina	AR	7,18	4,88	1,43	29%
German Empire	GER	3,83	4,69	0,45	10%
France	FRE	3,95	4,30	0,38	9%
Chile	CH	4,35	3,49	0,70	20%
Finland	FIN	2,80	3,23	0,44	14%
Costa Rica	CR	3,20	2,44	0,68	28%
Portugal	POR	1,17	2,39	0,61	25%
United States	USA	3,91	2,16	0,62	29%
Italy	IT	1,62	2,03	0,29	14%
Spain	SPA	1,62	1,95	0,30	16%
Roumania	ROU	2,31	1,91	0,15	8%
Puerto Rico	PR	1,85	1,91		
Egypt	EGP	1,60	1,51	0,24	16%
Austro-Hungary	A_H	1,71	1,50	0,09	6%
Paraguay	PY	1,01	1,20		
Brazil	BZ	2,21	1,16	0,50	43%
Ecuador	EC	1,24	1,15		
Greece	GRE	0,75	1,12	0,16	14%
Nicaragua	NI	1,60	1,06		
Mexico	MEX	1,10	0,95	0,19	21%
Guatemala	GU	1,65	0,94		
Peru	PE	1,39	0,89	0,24	27%
Honduras	HO	1,18	0,80		
Bolivia	BO	1,68	0,76		
Bulgaria	BUL	0,87	0,74	0,11	15%
Servia	SER	1,04	0,69	0,06	9%
El Salvador	SL	1,07	0,64		
Philippines	PHI	0,49	0,64	0,17	27%
Japan and Formosa	JAP	0,59	0,61	0,04	6%
Russian Empire	RUS	0,59	0,46	0,17	37%
Netherlands East Indie	NEI	0,47	0,42	0,02	5%
China	CHI	0,06	0,10	0,003	3%
N		41	41	32	32

1910					
country	label	Exports per capita	Imports per capita	Custom Duty collection per capita	average tariff rate
Netherlands	NET	36,88	45,50	0,19	0%
Belgium	BEL	18,18	22,75	0,36	2%
Switzerland	SWI	13,11	19,15	0,85	4%
United Kingdom	UK	9,58	12,79	0,76	6%
Denmark	DEN	9,36	11,13	0,61	6%
Argentina	AR	11,27	10,64	2,30	22%
Cuba	CU	13,48	9,18	2,24	24%
Norway	NOR	6,24	9,03	1,11	12%
Uruguay	UR	7,30	7,27	2,43	33%
France	FRE	6,05	6,96	0,56	8%
Sweden	SWE	6,04	6,82	0,62	9%
German Empire	GER	5,66	6,77	0,54	8%
Chile	CH	7,13	6,69	1,06	16%
Panama	PN	1,11	6,29		
Puerto Rico	PR	7,02	5,67		
Finland	FIN	3,96	5,25	0,65	12%
Costa Rica	CR	4,73	4,46	1,31	29%
Italy	IT	2,27	3,55	0,35	10%
United States	USA	3,84	3,47	0,73	21%
Portugal	POR	1,37	2,66	0,62	23%
Austro-Hungary	A_H	2,04	2,41	0,18	8%
Roumania	ROU	3,54	2,35	0,30	13%
Brazil	BZ	2,84	2,15	0,87	40%
Paraguay	PY	1,59	2,07		
Egypt	EGP	2,52	2,05	0,28	14%
Spain	SPA	1,95	2,01	0,29	14%
Bolivia	BO	3,06	2,00		
Bulgaria	BUL	1,19	1,64	0,24	15%
Mexico	MEX	1,75	1,31	0,31	24%
Peru	PE	1,77	1,25	0,22	17%
Greece	GRE	1,09	1,21	0,33	28%
Guatemala	GU	2,00	1,19		
Servia	SER	1,37	1,18	0,17	15%
Ecuador	EC	1,97	1,16		
Nicaragua	NI	1,72	1,08		
Japan and Formosa	JAP	0,96	0,99	0,07	8%
Honduras	HO	0,83	0,97		
Venezuela	VZ	1,33	0,87	0,34	38%
Philippines	PHI	0,82	0,76	0,14	18%
El Salvador	SL	1,47	0,76		
Colombia	CO	0,74	0,72	0,35	48%
Russian Empire	RUS	0,93	0,70	0,20	29%
Netherlands East Indies	NEI	0,78	0,56	0,03	5%
China	CHI	0,12	0,15	0,00	3%
N		44	44	35	35

Sources: elaborated from data by the *UK Statistical Abstract*

FIGURE 13
Imports vs income per capita, world regions 1890-1912



Sources: elaborated from data by the *UK Statistical Abstract*. For population figures see text.
GDP figures from Maddison (2002)

FIGURE 14

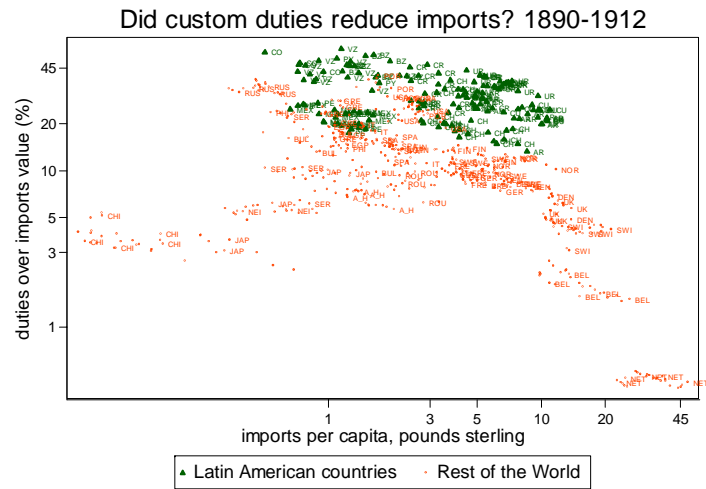
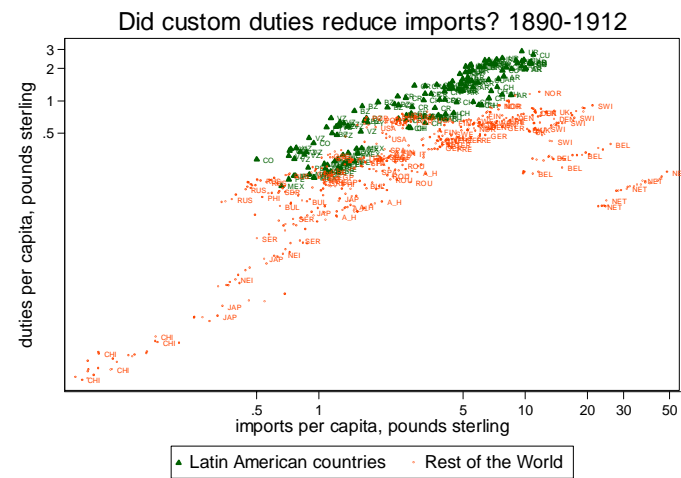


FIGURE 15



Sources: elaborated from data by the *UK Statistical Abstract*