# Federico-Tena World Trade Historical Series Oct 2017

## Country series revised in October 2017.
## Estimation procedures and new bibliographical reference

**Revised series oct 2017**
We have used new procedures in the estimation of the countries series that follow below. In addition we have used also new Price Index for the following countries**: Africa:** Algeria Egypt Morocco, South Africa, Tunisia; **Americas:** Argentina ,Cuba;  **Asia**: British Malaya, Iran; **Europa:** Bulgaria, Greece, Romania, Russia and Serbia. For the rest of the series the procedures followed is  in Giovanni Federico & Antonio Tena-Junguito, 2016. "World trade, 1800-1938: a new data-set," Working Papers 0093, European Historical Economics Society (EHES) http://www.ehes.org/EHES_93.pdf (and in http://hdl.handle.net/10016/22222)


**AMERICAS**

**Bolivia**
Bolivian historiography dates the proclamation of independence to 1809, but 16 years of struggle followed before the establishment of a republic, named for Simón Bolívar. During the War of the Pacific (1879–83), Bolivia lost its seacoast and the adjoining nitrate rich fields to Chile and later when a large portion of Gran Chaco was surrendered to Paraguay in in the Chaco War (1932–1936). We obtain exports and imports in current US dollars since 1900 to 1909 MOXLAD and from 1910 to 1938 from  Peres Cajías. J.A. & Carreras Marin (fortcoming). " and we extrapolate the data backwards, respectively to 1820 and 1850, following the series for Chile. We deflate with Federico-Tena price indexes.


**Brazil**

In 1821, Pedro, the elder son of the Portuguese king, stayed in his stead as regent of Brazil. One year later, Pedro stated the reasons for the secession of Brazil from Portugal and led the Independence War, instituted a constitutional monarchy in Brazil.  For imports and exports 1914-1938 , we use the series from IPEA DATA (2009), while for imports and exports 1820-1913 we rely on the revised current estimates by Absell and Tena (2017) and Absell and Tena (2016) respectively. Imports 1820-1913 are deflated with 1827-1913 import price indexes from Absell-Tena (forthcoming) linked with 1820-1827 Federico-Tena import price index. Exports 1820-1913 are deflated with the exports price index obtained from Absell and Tena (2016). Exports and imports  1914 -1938 are deflated by price index obtained from  IBGE (2003) Historical Statistics. [1]


**British Honduras (Belize)**
The Treaty of Versailles (1783) between Britain and Spain, gave the British rights to cut logwood between the Hondo and Belize rivers. In 1862, the Settlement of Belize in the Bay of Honduras was declared a British colony, called British Honduras, and the crown's representative was elevated to a lieutenant governor, subordinate to the governor of Jamaica.

According Bulmer-Thomas re-exports were particularly important for British –Honduras (Belice) as total exports per capita data show.  We have used Bulmer-Thomas domestic exports and imports estimations

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[1] We adjust the data to the calendar year and we re-scale the level when necessary. Statistics of imports are on a 'general' trade basis to 1957 and those of exports are on a 'general' trade basis to 1930. Bullion is apparently included until 1930.

bench-marks interpolation from 1820-1938 according total exports adjustment to re-exports and retained imports in Table A.11 and C.6 in Bulmer-Thomas (2012). We deflate exports 1820-1938 and imports 1850-1938 with Federico-Tena price indexes, and imports 1820-1849 with the Federico-Tena import price index for Jamaica.

### Chile

By the 16th century, Spanish conquistadors began to subdue and colonize the region of present-day Chile, and the territory became a colony between 1540 and 1818, when it gained independence from Spain. A declaration of independence was officially issued by Chile on February 12, 1818 and formally recognized by Spain in 1840, when full diplomatic relations were established. As a result of the War of the Pacific with Peru and Bolivia (1879–1883), Chile expanded its territory northward by almost one-third and acquired valuable nitrate deposits, the exploitation of which led to an era of national affluence. We use the series by Díaz, J.; Lüders. R. y Wagner, G. (2016) in current dollars from 1810 to 1938. We use constant prices and implicit export prices for export offered too in Díaz, J.; Lüders. R. y Wagner, G. (2016) Series 5001/5011. In contrast, we deflate imports with Federico-Tena price index because it is more accurate than that used by Díaz, J et al.

### Danish Virgin Island

Also spelled Danish Antilles was a Danish colony in the Caribbean, first under the United Kingdoms of Denmark-Norway and later, after the 1814 Treaty of Kiel, Denmark alone. The islands were sold to the United States in 1916 under the terms of the Treaty of the Danish West Indies and were organized as the United States Virgin Islands in 1917.
According Bulmer-Thomas re-exports were particularly important for Danish Virgin Island. We get all data from Bulmer-Thomas (2012) – Tables A.11 and C.6 for domestic exports at current prices, A.25 and C.20 for retained imports at current prices. We deflate with the implicit price index obtained from A.14 and A.26 exports and imports at 1860 prices (interpolating between benchmark years) and C.9 and C.21 for exports and imports at 1930 prices.

### Duch Antilles

The Netherlands Antilles consisted of two island groups, both in the Lesser Antilles. The ABC islands of Aruba, Bonaire, and Curaçao are in the Leeward Antilles just off the Venezuelan coast, and the SSS islands of Saint Maarten (actually a territory covering approximately half an island), Saba, and Saint Eustatius are in the Leeward Islands southeast of the Virgin Islands. The total of six islands were colonized by the Dutch in the 17th century and from 1815 onwards, Curaçao and Dependencies formed a colony of the Kingdom of the Netherlands. Slavery was abolished in 1863, and in 1865 a government regulation for Curaçao was enacted that allowed for some very limited autonomy for the colony.
According Bulmer-Thomas re-exports were particularly important for Duch Antillles. We get all data from Bulmer-Thomas (2012) – Tables A.11 and C.6 for domestic exports at current prices, A.25 and C.20 for retained imports at current prices. We deflate with the implicit price index obtained from A.14 and A.26 exports and imports at 1860 prices (interpolating between benchmark years) and C.9 and C.21 for exports and imports at 1930 prices.

### Falkland Island

At various times, the islands have had French, British, Spanish, and Argentine settlements. Britain re-established its rule in 1833, though the islands continue to be claimed by Argentina but in 1840 the Falklands officially became a Crown British Colony until today.
The source of data is the United Kingdom (colonies) Statistical Yearbook, which report yearly data since 1853 to 1938. We use 1913 re-exports data percentage (0.12%) as a fix percentage to be deducted along both series. From 1853 to 1820 we move exports an imports following Argentine respective series. We deflate also using Argentine exports and import price index.

### French Guiana

Following the Treaty of Breda on 31 July 1667 the area was given back to France.  In 1848 France abolished slavery and in 1853, gold was discovered in the interior, precipitating border disputes with Brazil and

Suriname (these were later settled in 1891, 1899 and 1915, though a small region of the border with Suriname remains in dispute).

We get series of trade at current prices in French francs from France. Statistical Yearbook (1939) since 1881 and Statistical Yearbook. France (colonies) Tableau, for the years 1821-1880. This source before 1841 reports only bilateral trade trends export and imports with France that we use to move the series backwards to 1821 from 1841 bases. As France series of exports and imports from 1847 backwards are valued in fixed prices we reflate that series to get current prices using French Guiana Federico-Tena exports and imports respective price index. Then We deflate imports and exports from 1820-1938 with the same exports and imports price index, with the exception of imports 1850-1820 that we use Federico-Tena Jamaica imports price indexes.

## Guadalupe

Guadeloupe was royally annexed into the Kingdom of France in 1674. In 1714, the French general government of the American islands divided in two, and Guadeloupe was placed under the control of the governor on Martinique. The British again held the island for three years beginning in 1810. It was ceded to Sweden in 1813 before French control of the island was recognized in the Treaty of Vienna in 1815. In 1848, slavery was abolished completely. We get series of trade at current prices in French francs from France. Statistical Yearbook (1939) since 1881 and Statistical Yearbook. France (colonies) Tableau, for the years 1821-1880. This source before 1841 reports only bilateral trade trends export and imports with France that we use to move the series backwards to 1821 from 1841 bases. As France series of exports and imports from 1847 backwards are valued in fixed prices we reflate that series to get current prices using Guadalupe Federico-Tena exports and Jamaica imports respective price index. Then we deflate imports before 1850 with the previous index and imports and exports since 1850 with the respective Federico-Tena price indexes for Guadalupe.

## Martinique

Martinique was charted by Columbus in 1493, but Spain had little interest in the territory. Martinique was occupied several times by the British, including once during the Seven Years' War and twice during the Napoleonic Wars at the conclusion it was traded back to France. Martinique has remained a French possession since then.

We get series of trade at current prices in French francs from France. Statistical Yearbook (1939) since 1881 and Statistical Yearbook. France (colonies) Tableau, for the years 1821-1880. This source before 1841 reports only bilateral trade trends export and imports with France that we use to move the series backwards to 1821 from 1841 bases. As France series of exports and imports from 1847 backwards are valued in fixed prices we reflate that series to get current prices using Martinica Federico-Tena exports and Jamaica imports respective price index. Then we deflate imports before 1850 with the Federico-Tena price index for Jamaica, and since 1850 to 1938 imports and exports with Federico-Tena price indexes for Martinique.

## Mexico

From 1519, the Spaniards absorbed the Mexican native peoples into Spain's vast colonial empire for three centuries. During this period, Mexico was part of the much larger Viceroyalty of New Spain, which included Cuba, Puerto Rico, Central America as far south as Costa Rica, the southwestern United States including Florida, and the Philippines. After a protracted struggle Mexico declared its independence from Spain on Sept. 27, 1821, after independence, Mexican politics was chaotic, with the presidency changing hands 75 times in the next 55 years (1821–76), the Mexican American War of 1846, with Mexico ceding almost half of its territory to the United States or later in the 19th century France invasion of Mexico (1861) setting Maximilian I on the Mexican throne until 1867.

We get data at current prices from fourth different sources: first, for the years1800-1820 from the Historical Statistics. Mexico (Table 19.2. pp.810-811), which we adjust from fiscal to calendar year; second, for 1821-1869 from the estimations for export and imports current data from Kuntz&Tena (forthcoming), for 1870-1929 from Kuntz-Fiker (2007 Cuadro A.3 and A.5 pp. 470 and 475) and fourth, from 1930-1938 from League of Nations (1925). Memorandum on International Trade and Balance of Payments 1910-1924, Volume II (edt.1925): and 1913-1927, Volume II (edt. 1929): Trade Statistics of sixty-four countries.

Economic and Financial Section, Geneva. League of Nations (1933,1936, 1938). International Trade Statistics. (ad annum). Economic Intelligence Service, Geneva.

Following the literature recommendations we have included bullion and spice in the especial trade coverage along the export series. From 1800 to 1870 silver and gold exports according Kuntz-Tena (forthcoming) represented between 70 to 90 per cent of total exports. As late as 1930´s this practice is recommended by League of Nations (1933-38).

We deflate imports 1800-1850 with the Federico-Tena Chile import price index and for imports 1850-1870 and exports 1800-1870 with Kuntz-Tena indexes for Mexico; imports and exports 1870-1929  with the respective indexes offered by Kuntz-Fiker  (2007, Cuadro B.1, pp.495-96) and imports and exports 1929-1938 with unit values index from MOXLAD.

## Peru
It was conquered by the Spanish Empire in the 16th century, which established a Viceroyalty with jurisdiction over most of its South American domains. The nation declared independence from Spain in 1821 but consolidated only after the Battle of Ayacucho, three years later. Spain made futile attempts to regain its former colonies, such as at the Battle of Callao, and only in 1879 finally recognized Peruvian independence.
   Mitchell (2007) reports scattered data on imports and exports at current prices in millions pesos (soles since 1863) for some years from 1821 to 1878 and a continuous series from 1883 to 1938, interpolating the missing values and converting from local currency into dollars with Global Financial data. For current exports we have preferred the recent estimation of Zegarra (forthcoming) from 1830-1930, extending backward to 1800 and forward to 1938 following Seminario (2015).  We deflate imports and exports from 1800 to 1938 with Federico-Tena price indexes, except for exports 1830-1930 that we use Zegarra (forthcoming) export price index from Appendix) that is and adjustment of the quantum index by Hunt (1973, Table 9, p.28).

## Puerto Rico
Throughout most of the 19th century, and until the conclusion of the Spanish–American War in 1898, Porto Rico and Cuba were the last two Spanish colonies in the Americas.
We get all data from Bulmer-Thomas (2012) – Tables A.11 for domestic exports at current prices, A.25 for retained imports at current prices. We used implicit price index from Tables A.14 and A.26 for exports and imports at 1860 prices (interpolating between benchmark years). Our series ends in 1900 because since 1901 trade of Porto Rico is included in the American statistics.

## St. Barthelemy (Norvegian Colonies)
The island was given to Sweden in 1784 in exchange for trade rights in Gothenburg. Following a referendum in 1877, Sweden gave the island back to France in 1878, after which it was administered as part of Guadeloupe. We offer data only for 1820 to 1870.
 All data are taken from Bulmer Thomas (2012) Tables A.11 for domestic exports at current prices, A.25 for retained imports at current prices. We used implicit price index from Tables A.14 and A.26 for exports and imports at 1860 prices (interpolating between benchmark years).

## St.Pierre and Miquelon
Is one of early settlement by Europeans taking advantage of the rich fishing grounds near New Founland, and is characterized by periods of conflict between the French and British. France finally reclaimed the islands after Napoleon's second abdication in 1815, and there followed 70 years of prosperity for the French fishing industry and residents.
  We get series of trade at current prices in French francs from France. Statistical Yearbook (1939) since 1881 and Statistical Yearbook. France (colonies) Tableau, for the years 1841-1880. As France series of exports and imports from 1847 backwards are valued in fixed prices we reflate export series to get current prices from 1841-1847 using Newfounland Federico-Tena price index. We extrapolate backwards exports from 1841 to 1820 with the USA exports series. We finally deflate current series to get constant prices with New Founland  Federico-Tena price index for the whole series.

**ASIA**

**Brunei**
  The polity was a British protectorate after 1888. United Kingdom (colonies) Statistical Yearbook from 1909 to 1923 reports series of import and exports at current prices for 1911-1913 (in Strait dollars) and then since 1915 in pounds.[2] We convert the data in Strait dollars in pounds with the rate from GlobalFinancialData, we fill the gap for 1914 and we deflate the series with a geometric mean of our indexes for Indonesia and British Malaya. We extrapolate the series at constant prices from 1911 to 1850 with a geometric mean of three indexes (1911=1) – population growth, trade of British Malaya, and trade of Indonesia. Finally, we obtain a series at current prices 1850-1911 by reflating with a geometric average of price indexes for Indonesia and British Malaya.

**EUROPA**

**Austria-Hungary**
 The series of Austro-Hungarian trade at current prices are available since 1831 (Mitchell 2003) but they suffer from two distinct shortcomings. First and foremost, before 1875, the statistical office updated prices only occasionally (e.g. in 1852, 1858, 1863) and for some items only (Lampe 2005), so that the figures an unknown mix of current and constant prices. This prevents us from following the standard procedure of deflating current price series with Federico-Tena price indexes. Second, the geographical coverage does not coincide with the territory of the Empire. The series data omit Dalmatia before 1880 and Bosnia-Hercegovina before 1908, although the former had belonged to the empire since the late 18th century (but for a spell of French rule under Napoleon) and the latter had been an Austrian protectorate since 1879.
  We obtain our series at current prices in local currency from 1875 to 1913 from Jobst and Scheiber (2014 series AH6A.A and AH6B.A), adding 2% for Dalmatia before 1879, and 1,5% for Bosnia-Hercegovina before 1907. [3] We extrapolate the series to 1831 with a new series which we obtain by multiplying the traded quantities of major products from Statistical yearbook Austria and Statistical Yearbook Hungary by the British prices, adjusted for changes in freights[4]. We use the same data to build a new series of trade at constant prices from 1831 to 1913 as quantities times 1913 prices. We extend the series to 1830 by assuming that in that year trade was 2% lower than in 1831 and from 1913 to 1918 with the data from Schulze (2005 tab.3.21).[5]  Austrian currency (Denzel 2010 tab 5.1) and for 1914-1918 the exchange rates from GlobalFinancialData.

**Germany**
   Germany is an exception to our basic definition of trade at current borders, given its extremely complex political history. Estimating trade between all its polities before unification would be plainly impossible. Thus, our series refer to the country in its 1871 borders, which by and large coincide with the Zollverein at the end of the process of expansion since its establishment in 1836. Predictably, no single source provides series for the whole period and thus we piece together different series:
 i) We build an index of exports at current prices from 1800 to 1833 by piecing together series of exports to the United Kingdom (1800-1833), France (1800-1833), Austria-Hungary (1814-1833), USA (1821-1833)

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[2] The yearbook does not report data on re-exports in any year before 1938  and thus we omit the adjustment.
[3] The figure for Dalmatia is the share on GDP of the Austro-Hungarian empire in 1870 and 1880 (Schulze 2007 tab.4), while for Bosnia we halve its share on total population of the empire (data from Mitchell 2007, linearly interpolated). We adjust the figures to the change in currency in 1900
[4] The set of products differs in time, accounting for 30.2% of imports and 22.8% of exports in 1831-1840, for 39.2% and 29.4% in  1841-1850, for  42.4% and 39.2% in 1851-1872   and for 47.1% and 44.5% in 1873-1917.
[5] We compute the total trade of 1918 as 12/10 of the figure in the table, which refers only to the first ten months of the year.

and Russia (1827-1833) from Kuntz (1974) [6]. We extrapolate this index to 1836 with the sum of imports of the same five countries. We produce an index of exports at constant prices by deflating with a Federico-Tena price index based on German prices from Jacobs-Richter (1935). [7] We then link the indexes to the 1836 level of trade.

ii) Since 1836, the Zollverein started to publish data on traded quantities, which have been used by Hoffmann et al (1965 tabs. 125 and 129) to produce a series of 'German' imports and exports at constant prices. Unfortunately, as pointed out by Lewis (1981 pp.29-30), they have taken the official data at their face value without trying to correct two major shortcomings, the failure to adjust for changes in borders of the Zollverein, which causes a spurious increase in commerce every time a polity joined the custom union and the addition of transit in 1872-1879 (which causes a spurious boom in trade and a similarly spurious collapse in 1879). Thus, we have estimated a new series of trade at 1913 prices by extrapolating the 1880 level from Hoffmann et al (1965) with a series of yearly changes. We obtain these latter from three different sources, Borries (1970 tab.11) from 1836-37 to 1855-1856, Lewis (1981) from 1856-1857 to 1879-1880 for exports and Hoffmann et al. (1965) for imports. We correct this latter for the spurious inclusion of transit by arbitrarily assuming that imports increased by 3% both in 1871-1872 (rather than growing by 22%) and in 1879-1880 (rather than falling by 26%). Then, we compute trade at current prices by reflating the series at constant prices with indexes for imports and exports. For the sake of consistency with the estimate at constant prices, we use the implicit prices from Hoffmann et al (1965) for imports and Lewis (1981) for exports. The former series starts in 1880, the latter in 1847: we extrapolate both series to 1836 the Federico-Tena price index computed with domestic prices from Jacobs-Richter (1935). [8]

iii) From 1880 we use the new series by Hungerland and Wolf (2017) at current prices, which take into account the inclusion of Hamburg and Bremen in the trade boundaries of the Empire after 1888 and.[9]
We deflate the series with the implicit price index from Hoffman et al (1965)

iv) The German Statistical Office ceased to publish trade data in 1913, but for the five war years we can rely on the estimate at current and constant (gold) marks by Hardach, as reported by Ritschl (2005 tab. 2.7). As far as we know, there are no data for 1919, while the German Statistical Yearbook (1924-1925) estimates trade at 1913 prices for 1920-1924 and the United Nations (1962) report series (allegedly) in gold dollars at current prices since 1921. However, we suspect that the United Nations have simply converted in gold dollars the data in pre-1913 (gold) marks because the implicit price index barely changes (except for exports in 1922). Thus, we prefer not to use these data. We obtain a series at current prices for 1920-1923 by reflating the data from German Statistical Yearbook with Federico-Tena price indexes. We crudely estimate trade in 1919 with linear interpolation.

iv) We use the Hoffmann (1965) series data without further change since 1923 (current prices) or 1925 (constant prices)

As said, we have to omit corrections for changes in borders before 1880 and thus, relative to an ideal series at current borders, our series at current boundaries undervalue trade by the amount of trade between German polities before their accession to the Zollverein and overvalue its growth. In contrast, we do estimate trade at 1913 borders for Germany after World War One. To this aim, we subtract 15% of trade with Poland (the share of former German territories on post-war Poland) and the whole trade with Danzig and the Saar, and we add 5% of the trade of the rest of Poland with Germany – the share of lost territories on pre-war Germany population[10]. The sources report data for 1920 and since 1922: we interpolate linearly the figures for 1921 and 1922 and we use the 1920 shares for 1919.

[6] These series have been downloaded from https://histat.gesis.org/histat/, Accessed August 2017. They cover exports of cereals, wool and wood to UK (series A13-A16), total exports from France (series B 4 and B24), Austria-Hungary (series D02 and D03) United States (series G06) and Russia (series E01).

[7] We have also computed a standard Federico-Tena index with British prices. If adjusted to local currency, with the silver Thaler/gold ratio, the results are quite similar (coefficient of correlation 0.76) but for an anomalous spike in 1826-1827.

[8] The coefficient of correlation with the standard Federico-Tena index with British prices (adjusted for changes in the silver/gold ratio) from 1836 to 1880 is 0.687 on import and 0.735 on export side

[9] Although these new series share the long-term upward trend with Hoffman et al (1965), short-term movements differ substantially. The simple coefficient of correlation between the series is 0.455 for imports and 0.395 for exports.

[10] We estimate this share (the coefficient $\gamma$ in Appendix B) with the population of these provinces on the total of the Empire in 1913 – about 5.5 millions out of 65 (German Statistical Yearbook 1915 p.3).

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Last but not least, we convert the data from Kunz (1974) in dollars with the exchange rates of each trading partner, while for 1836 to 1913 we rely on Denzel (2010 tab. 4.4), who reports exchange rates between Prussian thaler and pound sterling since 1813 and between Reichsmark and dollar since 1873. For 1913-1923, we use the gold parity of the Reichsmark and for 1924 to 1938 the exchange rate from the League of Nations.

## Ottoman Empire/Turkey

Given the poor quality of the Ottoman trade statistics, Pamuk (1987 tab A.1.1) estimates trade at current prices from 1830 to 1913 by summing up the trade with the Empire from the statistics of neighbouring countries (Bulgaria, Romania etc.), of major Western countries (United Kingdom, France etc.) and the USA. After the war, we use the series from the Turkey *Statistics yearbook Turkey*, equal to Mitchell (2007). They start in 1923: we assume arbitrarily that trade in 1922, a year of war and political turmoil, was 80% of the commerce in the following year. The Pamuk series are in pound, while we convert the post-war figures from Turkish liras to dollar with the rates from the Germany *Statistical Yearbook* (1924-25) for 1922 and from Gormez and Yigit (2014 series TR3D_A) from 1923 to 1937. We deflate the figures for 1854-1913 with the Fisher price indexes by Pamuk (1987 tab. A.2.1). We extrapolate this index to 1850 for imports and to 1830 for exports with Federico-Tena indexes and we deflate with (different) Federico-Tena indexes also the post-war series.

The Ottoman Empire has been spawning new polities throughout the period – Greece in 1832, Romania in 1859, Bulgaria, Cyprus and perhaps Montenegro in 1879, Crete in 1898, Libya and the Dodecanese (islands in the Aegean sea), seized by Italy, in 1912, Albania in 1913 and Syria/Lebanon, Palestine/Jordan, Irak and the states of Arabian peninsula in 1918.[11] These changes have to be handled differently to estimate trade at 1913 boundaries before and after World War One. Before 1913, our series of trade at current borders include trade between the Empire and the new polities after they became independent, but it exclude the same flows while the new polities still belonged to the Empire. Vice-versa, the total (Turkish) trade statistics after 1918 include the commerce with the lost territories, which was still domestic trade before the war. Therefore, we could get series at 1913 borders before the war by adding (an estimate of) the bilateral trade with the new polities before their independence, while after the war we must subtract the bilateral commerce. Unfortunately, we have no data on bilateral trade between the Empire and the new polities in any pre-war year. We thus crudely estimate these flows before the independence as the population of the new polities times a tenth of the trade per capita of the Empire in the same years.[12] The coefficient implies that domestic trade equivalent to 10% of total Ottoman trade (scaled by population): of course totally arbitrary, but results not implausible and anyway the difference is small. From 1830 to 1858, when the Empire at its full extension (after the loss of Greece), our estimate of trade at 1913 borders is 6% higher than the estimate at current borders. The adjustment to 1913 boundaries after 1918 is comparatively straightforward. We simply subtract the trade with the lost territories from total trade of Turkey *(Statistical yearbook Turkey)*.[13]

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[11] Both Romania and Montenegro are border cases. Moldavia and Wallachia, which were to constitute Romania, and some areas of Montenegro enjoyed a quasi-independent status although the Ottoman Empire did not formally relinquish its suzerainty until 1859 and 1879 respectively. We implicitly assume that the statistical offices of the Western states, which Pamuk has used to build his series, considered the official status of these areas rather than the situation on the ground and registered trade with them in the total trade of the Empire. We have decided to not to adjust for the (formal) loss of Montenegro because it does not feature in our data-base given its small size and the total lack of data. For the same reason, we ignore the Ottoman annexation of Quatar in 1871 and the loss of the Aegean Islands to Italy in 1912.

[12] We neglect the adjustment for Greece, whose independence had already been sanctioned by the Western powers and Russia in 1830, when our series for the Ottoman start.

[13] We ignore the trade with the new states of the Arabic peninsula (Yemen, Saudi Arabia, Quatar Sharjah) as the Yearbook does not quote it probably because the value of the flows was negligible. We use the 1923 shares for 1922.

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