Reciprocity in Retrospect:  
A Historical Inquest of Bilateralism in U.S. Trade Policy

Treb Allen and Stephen Meardon*

Introduction

As Doha-round negotiations for a new multilateral trade agreement stagger into their second decade, bilateral negotiations proceed apace. As of the first half of 2012, over 300 regional and bilateral trade agreements have been reported to the GATT/WTO to be in force; over one-third of them were formed in the last decade, and over four-fifths in the last two decades.¹ The United States, whose policy is to negotiate simultaneously in multilateral, regional and bilateral forums – understood sometimes as “competition for liberalization” – has contributed to the trend.² Since 2001 the U.S. has signed and enacted agreements with Jordan, Chile, Singapore, Australia, Morocco, the CAFTA-DR countries, Bahrain, Oman, Peru, Colombia, South Korea, and Panama. The U.S. policy is guided by the premise that simultaneous negotiations are complementary to the end of increasing trade.

The premise is hotly debated. The most salient counterargument is that bilateralism is counterproductive because it attenuates the will for multilateralism (Límão 2006; Bhagwati 2008). But there are those who argue that, quite apart from its effect on the will for multilateralism, bilateralism does not increase tra-

* Allen: International Economics Section, Department of Economics, Princeton University (2012-2013), and Department of Economics, Northwestern University; e-mail: treballen@gmail.com. Meardon: Department of Economics, Bowdoin College; e-mail: smeardon@bowdoin.edu. We thank Roxana Bobulescu, Graciela Márquez Colín, Jane Flaherty, Mushfiq Mobarak, Marc-William Palen, and the anonymous referees of this journal for helpful suggestions. Any errors or omissions are ours.

¹ The WTO tracks the number of bilateral and regional trade agreements at http://www.wto.org/english/tratop_e/region_e/regfac_e.htm. Consulted by the authors on 20 April 2012.

² For “competition for liberalization,” see the United States Trade Representative’s 2005 Trade Policy Agenda (USTR 2005: 1). While the term has been dropped of late, the Office of the USTR continues to state its commitment to the same effect (USTR 2012: 5).
de; and there are even those who argue that multilateralism does not increase trade (Rose 2004).

Here is a current policy question fit for historical investigation. In light of past experiences with bilateral trade arrangements, what can be said about their effects on trade? Our purposes in this essay are two. We aim to help answer the question, while also showing the difficulty of answering it with much generality. To do so we describe the varieties of bilateralism that were tried during a long span of U.S. history, use some commonplace econometrics to estimate their different effects on trade, and fold these tasks into a historiographical discussion that counsels modesty in extrapolating from past experiences to present effects.

**Historiographies of bilateralism**

For starters it bears observing that the number of past experiences with bilateral trade agreements is large. This is certainly true of the United States, notwithstanding the historical trope of “the” tariff. In fact, even during the most consequential political and doctrinal battles over tariffs in general during the nineteenth and early twentieth centuries, successive U.S. congresses and administrations did more than argue about adjusting the general tariff schedule. They also negotiated actively with partner countries to secure access to foreign markets by using tariffs, in one way or another, as bargaining chips. One way, with multiple variants, was to grant a trade partner most-favored-nation (MFN) status in exchange for reciprocal (and often additional) concessions. Another was to grant tariff preferences to the partner, thereby discriminating in its favor. Yet another was to agree not to levy retaliatory tariffs against the partner while retaliating against other partners, thereby not discriminating against it, and in effect discriminating in its favor. By our count the United States entered into 117 of such arrangements with foreign countries from independence to 1909 (the concluding date of a convenient historical U.S. treaty source: Malloy [1910]).

Histories of past experiences with bilateral trade arrangements are not so numerous, but there are some notable ones. Moments of reconsideration of the United States’ “reciprocity” practices in international trade have tended to yield new histories of those practices. In the aftermath of the McKinley Tariff Act of 1890 and the Dingley Act of 1897 – both of which, as will be discussed below, allowed presidential discretion to negotiate arrangements for specific tariff concessions – economists J. Laurence Laughlin and H. Parker Willis (1903) examined....
ned U.S. arrangements dating back half a century. They excluded MFN treaties, which were in decline. Their findings, as one should expect, were that the arrangements’ effects differed considerably depending on their design, the differential advantage they afforded, and the duration of the advantages, among other circumstances (1903: 64, 103, 226-9, 309). When the United States Tariff Commission (predecessor of the current U.S. International Trade Commission) was established in 1917, among its first major studies was a comprehensive review of the nation’s reciprocity and commercial arrangements, current and historical, including MFN (USTC 1919). The study, supervised by Harvard economist Frank W. Taussig and aided by a young Jacob Viner, found even more variability in the arrangements’ design and effects than did Laughlin and Willis. What was more, the commission concluded that even intangible considerations of motive and spirit of application had to be taken into account: any given arrangement’s effect depended “most of all upon the honesty, consistency, and rigidity or liberality with which the application is made to conform to the principle” guiding its design (USTC 1919: 42). And so the commission did not venture to expostulate on the effects of bilateral commercial arrangements in general, or even any particular type of arrangement \textit{a priori}.

Among more recent authors, Douglas A. Irwin echoes the earlier historiography. In retrospect, he argues, “bilateral trade policies cannot be uniquely praised or condemned” (Irwin 1993: 114). His purview is not nineteenth-century America so much as Europe in the same century and both Europe and America in the early twentieth century; nevertheless his conclusion is similar to that of Laughlin, Willis, Taussig and Viner. There were “progressive” or trade-expanding arrangements, like the network of nineteenth-century European MFN treaties following the celebrated Anglo-French treaty of 1860, as well as “pernicious” or trade-impeding ones, and the differences between them were due both to their design and to other circumstances. But Irwin made that assessment almost twenty years ago. The latest historiography examines a narrower set of arrangements (with the notable exception of Robert Pahre (2008), who, however, studies the causes of bilateralism rather than its effects).

And yet some of the latest historiography, while making correspondingly narrow claims, hints at broader ones. In particular, Olivier Accominotti and Marc Flandreau (2008) doubt that the nineteenth-century European MFN treaties constituted progressive bilateralism. The treaties not only failed to expand the partners’ total external trade, they failed to expand the partners’ trade with each other. Accominotti and Flandreau’s method is to use a gravity model of trade, and treaty and total trade data from a set of twenty-nine mainly European countries over five-year intervals from 1850 to 1870, to estimate the effect of bilateral MFN treaties on bilateral trade. They find no effect. A wave of remarkable trade liberalization did sweep over nineteenth-century Europe, they show, but it preceded the wave of bilateral MFN treaties by a generation, and it was mainly the result of unilateral tariff reductions. So they hold mainly. But they also hold more broadly that, because nineteenth-century European bilateralism-cum-MFN
did not promote trade, the historical case for progressive bilateralism is exag-
errated. Bilateralism is not everywhere and always bad, they acknowledge, but
even so, “the lessons of history cast a long shadow on today’s international trade
bargaining trends” (Accominotti and Flandreau 2008: 182).

Markus Lampe (2009) is more circumspect. To say that the nineteenth-cen-
tury European MFN treaties were not progressive because they did not increase
total trade is amiss, he argues, because the treaties were not intended to boost
total trade. They were intended to boost trade in particular goods. Using likewise
a gravity model, but disaggregating the trade data by particular tariff lines and
distincting plain MFN arrangements from those with tailor-made tariff prefer-ences, he finds that the treaties did increase trade in the specific channels for
which they were intended. Their broader accomplishment, whether intended or
not, was to “contribute to the deepening and diversification of intra-European
trade” (ibid.: 1037) – but he proffers no clear lesson for the present.

The problem with the latest historiography is that it does not give a good
understanding of the numerous forms in which bilateralism was practiced in the
nineteenth century. Granted, it does not profess to do so. The principal aim of
Accominotti, Flandreau, and Lampe alike is to evaluate the particular form of
bilateralism that was most salient for a couple of decades in mid-nineteenth Eu-
rope. But in the periphery of their sights (particularly for the former two authors,
less for the latter) is the purpose of saying something relevant for bilateralism in
the present day. Hence the “long shadow” that Accominotti and Flandreau see
cast over the present. The purpose of this essay is to draw attention away from
that shadow, however large or small it may be, by showing that the form of
bilateralism casting it was but one of several. In this respect the essay is like the
earlier historiography of reciprocity.

Unlike the earlier historiography, the essay compiles a series of trade-arran-
gement data to aid an inquest of the bilateral-trade practices of one country, the
United States, from 1776 to 1909 (with emphasis on the nineteenth century). It
also marshals the data for an econometric exercise using a gravity model akin to
Accominotti, Flandreau, and Lampe’s. The innovation of the exercise is the small
but essential one of adding separate explanatory variables for the existence of
the several different forms of bilateralism practiced by the United States over
roughly a century. The results corroborate what Laughlin, Willis, Taussig, and
Viner knew a century ago – and Irwin suggested two decades ago – but has
fallen from historical view even as bilateralism has boomed. The effects of bilia-
teralism depend upon the form and application of it.

In what follows, Part 1 gives a narrative account of the content and rationale
of several historical forms of U.S. bilateral trade treaties and agreements. Part 2
enumerates them: it shows when, with whom, and in what numbers the deals
were sealed. Part 3 uses a gravity model to examine how the different forms of
bilateralism affected trade. The conclusion sums up our view of history’s lessons
for bilateralism today.
1. Reciprocity in U.S. trade policy, 1776-1909

From the late eighteenth to the early twentieth centuries, the general category of trade arrangements known in present parlance as “bilateral” were known instead to Americans as “reciprocal” – or, substituting a noun for the adjective, “reciprocity”. The particular forms of reciprocity varied throughout the period. So too did their purposes and the political circumstances of their enactment.

**Conditional MFN**

The first reciprocity arrangement between the United States and another country was the Treaty of Amity and Commerce with France, signed and ratified in 1778. The treaty was one of a pair: its counterpart, negotiated simultaneously, was the Treaty of Alliance by which the U.S. and France joined forces against Britain. The commercial treaty was intended to establish the rules of exchange between the two nations on the basis of “the most perfect equality and reciprocity” and in absence of “all those burthensome preferences which are usually sources of debate, embarrassment and discontent.” It would not bind the parties in their trade relations with other nations: each reserved “the liberty of admitting at its pleasure other nations to a participation of the same advantages” (Malloy 1910, 1: 468-9).

The treaty contained thirty-one articles concerning the treatment of each nation’s ships, citizens, and goods in the other’s waters, ports, customs houses, and territory. Among the foremost articles (second only to the declaration of “firm, inviolable, and universal peace”) was the exchange of most-favored nation privileges. Article II read,

The Most Christian King and the United States engage mutually not to grant any particular favor to other nations, in respect of commerce and navigation, which shall not immediately become common to the other party, who shall enjoy the same favour, freely, if the concession was freely made, or on allowing the same compensation, if the concession was conditional. (*ibid.*: 469)

The conditional most-favored nation treaty, of which the French treaty was the prototype, would become the staple of U.S. reciprocity arrangements. There emerged soon another understanding of reciprocity, however, that would support other kinds of arrangements.

In his *Report on Manufactures* of 1791, Alexander Hamilton wrote of the “numerous and very injurious impediments” to the exportation of U.S. manufactured goods that were thrown up by several countries. “In such a position of things,” he determined, “the United States cannot exchange with Europe on equal terms; and the want of reciprocity would render them the victim of a system which should induce them to confine their views to agriculture and refrain from manufactures” (Hamilton [1791] 1913: 17). But after using “reciprocity” to con-
note a circumstance that commercial impediments would upset, Hamilton transitioned to a usage connoting that which they could accomplish. Specifically, if equal access to foreign markets could not be obtained, then equal impediments to foreign imports should be imposed. By such means the United States could “secure to their own citizens a reciprocity of advantages” \(\text{(ibid.}: 37)\) – the “advantage” referring now to the encouragement of domestic manufacturers. Some complementary means were available to the same end, including the prohibition of exports of domestic innovations or machinery that might be useful to foreign manufacturers. Considering that other nations had already established such prohibitions, wrote Hamilton, the United States’ adoption of them “seems to be dictated by the principle of reciprocity” \(\text{(ibid.}: 43)\).

The understanding of reciprocity embedded in the French treaty did not equate to free trade, but it reflected the free-trade worldview. Hamilton’s understanding reflected more nearly the protectionist one. The tension that inhered in the word would be sustained into the early twentieth century and would be felt all the while in the United States’ domestic politics and international diplomacy.

**Implicitness of MFN conditionality**

The controversy surrounding the Jay Treaty of 1794 with Great Britain was an early example of that tension. Like the French treaty of a few years before, the treaty expressed the wish of both countries to grant reciprocally the benefits of commerce. Also like the French treaty, the Jay Treaty included a most-favored-nation article. Yet in its details the Jay Treaty’s MFN article was somewhat different. It mandated that no “other or higher duty be imposed in one country on the importation of any articles the growth, produce or manufacture of the other, than are or shall be payable on the importation of the like articles being of the growth, produce, or manufacture of any other foreign country” \(\text{(Malloy 1910, 1: 600)}\). It stated more explicitly the kind of commercial favors at issue than the French treaty did, but it did not state whether, how, or when the favors would be extended if either signatory granted additional or unforeseen favors to another nation. Thus the conditionality (or lack thereof) of the MFN provision would have to be construed implicitly.

The controversy of the Jay Treaty, however, was not about the details of its most-favored-nation provision. More telling than those details was the fact that they appeared in Article XV, not (as in the French treaty) in the more prominent position of Article II. The preceding fourteen articles included lengthy stipulations of the conditions governing each country’s rights of access to the other’s territory and waters, especially on the U.S. northern frontier, the Mississippi, and the West Indies, and the conditions governing indemnification for losses and damages that each country’s citizens’ had inflicted on the other’s. The treaty, in sum, was one between countries that had been very recently at war. The politics of its ratification in the United States took on a belligerence that echoed the late hostilities. The Federalist party of Alexander Hamilton and John Jay, the latter of
whom served as President Washington’s special envoy in negotiation of the treaty, favored it despite the party’s inclinations. Federalists assessed pragmatically the benefits to the United States of British shipping and commerce; their affinity with the British people and social system and eagerness for peace with their cousins also weighed heavily in their advocacy (Estes 2006: 18-9). Against the Federalists stood the Republican party, which continued to align itself with France against Britain and sought to remove the United States from Britain’s orbit. The problems that Republicans saw in the treaty, however, did not include the possibility that the MFN provision was inadequate to promote trade. As far as that provision was concerned, the Republicans’ fear, notwithstanding their free-trade inclinations, was that it might indeed be effective. The problems concerned instead the concessions that Jay failed to obtain in the articles preceding the fifteenth, especially those concerning the West Indies trade and the indemnification of U.S. property, as well as the veil of secrecy under which the treaty was negotiated. One could also say, less charitably for Republicans, that another problem was the possibility that Federalists would score a political victory (ibid.: 201, 29-34). In any case, what determined advocacy and opposition to the Jay Treaty were considerations that were related only obliquely to the partisans’ general views on restricting or liberalizing trade.

The same could be said of the burst of reciprocity treaties in the mid-1820s following a long period of relative inaction. The Jay Treaty was the only reciprocity arrangement signed and proclaimed during Washington’s two terms as president. John Adams’s single term brought three more, all of them most-favored nation treaties. After Adams, the executive branch was dominated by Republicans through the successive pairs of terms of Jefferson, Madison, and Monroe; during those twenty-four years, only five more treaties were signed that were later proclaimed. Yet the next presidential term, that of John Quincy Adams, brought eight new MFN treaties. They were sought under the presidency of a man who had been a Federalist under the first party system, would be aligned with the protectionist Whigs under the second, signed while in office the highly protective “Tariff of Abominations” of 1828, and whose Secretary of State, Henry Clay, was the renowned (or notorious) author of the “American system” of tariff protection.

Some of the arrangements of the younger Adams’s presidency were MFN treaties of the explicitly conditional variety, in the mold of the French treaty of 1778. Others were MFN treaties that were not explicit about conditionality, in the mold of the Jay Treaty of 1794. The repeated resort to one of those forms of reciprocity or the other would be interrupted on some occasions, albeit rare ones, in the decades preceding the Civil War. Some interruptions of the pattern were unimportant to contemporary politics or future events; others were important indeed.

Unconditional MFN

A treaty with Switzerland, signed in 1850 and ratified in 1855, divided the MFN provision into three successive articles: Article VIII stipulated generally that the
countries would “treat each other, reciprocally, as the most favored nation”; Article IX, more specifically, that they would not “impose any higher or other duties upon the importation, exportation, or transit of the natural or industrial products of the other, than are or shall be payable upon the like articles, being the produce of any other country”; and Article X that, in order to make the preceding two articles more effective, they would promise “not to grant any favor in commerce to any nation, union of nations, State, or society, which shall not immediately be enjoyed by the other party” (Malloy 1910, 2: 1766-7). This was the unconditional variety of MFN. It was the norm among European countries in the mid-nineteenth century. In the United States, it was of some importance in the 1850s but very little before or after, until the 1920s. Two unconditional MFN treaties, with Portugal and China, were signed and ratified in the early-to-mid 1840s; three others, with Madagascar, the Orange Free State, and Tonga, spanned the 1860s to the 1880s.

**Preferential arrangements**

Reciprocity with Canada, arranged by a treaty between the U.S. and Britain that was signed in 1853 and proclaimed in 1854, was of greater moment. The treaty concerned first of all the fisheries of the U.S. and Canada: it granted alike to U.S. citizens and British subjects the right to take fish, but not shellfish, out of the sea coasts and bays, but not the rivers, of British North America and the United States. Following the articles concerning the fisheries was the one titled “reciprocity.” The article was, for the 1850s, an unusual expression of the reciprocity principle. It stated that a few dozen agricultural items and raw materials – grains, animals, fishes, and metal ores of all kinds, as well as hides, butter, coal, timber, rice, tobacco, and other like goods – would be admitted into the United States and Canada duty free if they were the product of either country (Malloy 1910, 1: 668-72). The treaty contained no most-favored-nation article; instead, it entailed each party’s preferential treatment of the other by way of duty-free treatment of the enumerated goods. Under the general tariff law then in effect, the standard U.S. duty on most of the goods was twenty to thirty percent *ad valorem* (9 U.S. Stat. [1846]: 42-9).

Protectionists in the United States did not necessarily oppose the Canadian treaty, nor did free traders necessarily favor it. In that respect the treaty was similar to the many MFN treaties that preceded it. But the dissimilarities were more notable, and they were not limited to the substitution of favorable tariff treatment for a promise not to disfavor. Unlike earlier reciprocity treaties, the Canadian one was understood and debated in terms of restrictions or liberalization, protection or free trade.

Those who advocated the Canadian treaty were likely to agree with the *North American Review*’s anonymous author (1854: 479) who argued that it “fulfils [sic] the predictions, redeems the pledges, and discharges the obligations of the protectionists, and at the same time realizes the visions of Free-Traders.” Protectionists, the editors maintained, sought to apply their doctrine only to industries
in their infancy. The goods enumerated in the treaty were the products of mature industries, so they could be traded freely; manufactured goods were the products of infant industries, so they were not enumerated in the treaty and remained protected. Those who opposed the treaty included less accommodating protectionists, especially those from the coal-producing state of Pennsylvania, which faced seemingly limitless competition from Nova Scotia and New Brunswick. The opponents also included free traders with comparable sectional interests, or doctrinal objections, or both. Thomas J. D. Fuller, a Democratic U.S. congressman from Maine, was in the latter group. “While I profess to be a thorough-going free-trade man in my political principles,” he declared, “I am, at the same time, of the opinion that free trade, in a few specific articles, and with one nation or community alone, may result in the most objectionable system of protection” (*Congressional Globe* 1853, 32, 3: appendix 229). His constituents produced lumber – another of the enumerated goods that Canada produced in abundance – and purchased from elsewhere nearly all their finished goods. Unlike Massachusetts manufacturers, they had little need for Canadian raw materials. They could expect to earn less from their main source of income but pay the same as always for their necessaries. “Take off duties on everything and we are content,” Fuller insisted, “but if you put the duties on, put them on equally” (*Congressional Globe* 1853, 32, 3: appendix 231, italics in original).

After the Civil War, the divisions within the protectionist and free-trade ranks on the question of reciprocity eroded while the antagonisms between them sharpened. Reciprocity continued to be pursued in the general mold of the Canadian treaty – but not with respect to Canada, which awakened protectionists’ long-standing apprehensions about “British Free Trade” (Carey 1852; Carey [1874] 1883). Instead of obtaining raw materials for manufactures from Great Britain’s North American colonies, the United States would reach southward and across the oceans. Instead of renewing the Canadian treaty, the United States would compete with its former master for markets and even territory, using reciprocity with other countries as a means.

**Restrictive preferences**

The treaty that was signed and proclaimed with Hawaii in 1875 illustrates the drift of post-bellum reciprocity. Its first two articles specified the goods from each country that would enter the other freely. Unlike the Canadian treaty, the Hawaiian one had different duty-free lists for each partner: the United States would allow free entry of a handful of Hawaiian goods, including bananas, hides, rice, and especially sugar. Hawaii would reciprocate for a larger list of U.S. goods, including agricultural implements, animals, cotton manufactures, iron, lumber, machinery, petroleum, and textiles. The third article was a vague expression of the rules of origin applying to both parties. The fourth article applied only to Hawaii, however, and was conspicuously unmatched by an equivalent applying to the United States. It read,
It is agreed, on the part of His Hawaiian Majesty, that, so long as this treaty shall remain in force, he will not lease or otherwise dispose of or create any lien upon any port, harbor, or other territory in his dominions, or grant any special privilege or rights of use therein, to any other power, state or government, nor make any treaty by which any other nation shall obtain the same privileges, relative to the admission of any articles free of duty, hereby secured to the United States. (Malloy 1910, 1: 917)

From the protectionist perspective, the advantages of reciprocity with Hawaii extending beyond those of the Canadian treaty were two. Because the items that the U.S. would import from Hawaii duty-free were not widely produced at home (the important exception being sugar in Louisiana), few import-competing interests would object. Because Hawaii was proscribed from extending similar preferences or granting territorial privileges to other countries – Great Britain again looming largest among them (LaFeber 1998: 35) – Americans were ensnared an exclusive haven in the Pacific for their trade and capital.

The presumption that reciprocity would entail the growth not only of U.S. transactions with the partner, but also U.S. influence, was not entirely new. An earlier reciprocity treaty with Hawaii of the conditional MFN variety, signed in 1849 and proclaimed in 1850, included an article stipulating that citizens of each country would enjoy “perfect liberty of conscience” in the jurisdiction of the other. More concretely, guests would not be “liable to be disturbed or molested on account of their religious belief” (Malloy 1910, 1: 912-3). The article was a dim but unmistakable reflection of the evangelical designs of the American Board of Commissioners for Foreign Missions (Phillips 1969: 77). Even so, the promise twenty-five years later of exclusiveness of U.S. access to Hawaiian trade and territory was exceptional in light of past precedents. The treaty’s restrictiveness presented a significant wrinkle on the preferential variety of reciprocity.

From the free-trade perspective, the same novelties of the treaty that appealed to protectionists were cause for alarm. Given that some tariffs were necessary for revenue, the scarcity of domestic sugar producers made sugar a prime candidate for the imposition of duties, not their removal. The aim, as an early leader of the post-bellum free traders put it, was to “interfere as little as possible with the industrial pursuits of the people” (Atkinson 1871: 470-1). They wanted to make a small number of consumer goods with poor prospects for domestic production – tea, coffee, sugar, wines, liquors, and certain luxuries – bear the burden of customs duties, and to reduce substantially the duties on products in competition with domestic manufactures. They wanted to do so unilaterally and without discrimination among trade partners. The latest variety of reciprocity seemed to entail the opposite.

The restrictiveness of the Hawaiian treaty proved difficult to replicate elsewhere. It required the partner country to be exceptionally pliant – or, perhaps, so apprehensive of annexation into the British, French, or German territorial empires that it would seek shelter, by way of unreciprocated preferences of indefinite duration, in the United States’ emerging commercial one. In 1883, President Chester Arthur and Secretary of State Frederick Frelinghuysen, with Ulys-
ses S. Grant as their special emissary, hoped to obtain from Mexico a concession similar to that of article four of the Hawaiian treaty. They abandoned hope once they determined that Mexico would grant the concession only at the cost of a reciprocal one from the United States (Pletcher 1998: 110). They settled instead for an article stipulating that neither party would be prevented from granting to other nations the tariff privileges spelled out in the treaty, but that if either party did so, then the other was free to denounce and terminate the treaty in short order (Malloy 1910, 1: 1151). It proved insufficient to get the treaty's implementing legislation through the U.S. Congress (Márquez Colín 2012).

Reciprocity under the McKinley and Dingley Acts

In the decade that followed, protectionists, who were mainly Republicans, worked out a new variety of reciprocity that maintained the purpose of the Hawaiian treaty but surmounted what they believed to be its weaknesses. The new variety remained consistent with the protective doctrine, but was more easily replicable for many countries and more conducive for leveraging American economic might for negotiating power.

The debut of the new reciprocity program had to await the end of the presidency of Grover Cleveland, whose Democratic administration sympathized with the aims of free traders and was disinclined toward reciprocity. Cleveland unwittingly hastened the event by voicing his sympathies boldly in his 1887 State of the Union address. The existing tariff laws, he declared, were “the vicious, inequitable, and illogical source of unnecessary taxation” (Cleveland 1887: 21); he would campaign for reelection in 1888 on a program of comprehensive tariff reduction. After Cleveland lost, Republicans set out to buttress their opposing program. “We are uncompromisingly in favor of the American system of protection,” their platform for 1888 had stated; “we protest against its destruction as proposed by the President and his party” (McKee 1906: 240). The Republican platform made only a passing reference to reciprocity, but after he took office, President Harrison made its alteration and extension a priority of his administration (Laughlin and Willis 1903: 177-8). The alteration, however, required Congress to participate in drawing up first a general design.

“The real difficulty in the way of negotiating profitable reciprocity treaties,” Harrison explained, was that because of the lengthy free list in the general tariff law, “we have given freely so much that would have had value in the mutual concessions which such treaties imply.” He called on Congress to present trade partners with “other considerations” that would “favorably dispose them to adopt such measures, by treaty or otherwise, as will tend to equalize and greatly enlarge our mutual exchanges” (Harrison 1890: 1). William McKinley, chairman of the House Ways and Means Committee, heeded Harrison’s call. In the final version of McKinley’s tariff bill, the “other considerations” were to be supplied by Congress’s creation of a dual tariff structure and its granting the President the authority to apply one set of tariffs or the other, at his discretion, to a partner country’s imports.
Specifically, “with a view to secure reciprocal trade with countries producing … sugars, molasses, coffee, tea, and hides,” Congress provided for the free importation of those goods. But it also provided the President the power to survey the tariffs that other countries levied on U.S. goods, whether “agricultural or other products,” and, if he determined any particular country’s tariffs to be unduly high, to “suspend, for such time as he shall deem just” the free importation of that country’s sugars, molasses, coffee, tea, and hides, and substitute a set of higher tariffs that were detailed in the bill (26 U.S. Stat. [1890]: 612). If the country were not compelled by the spirit of reciprocity to drop its tariffs on U.S. goods after witnessing the U.S. reductions of certain tariffs, the thinking went, then it would be coerced to do so by the President’s threat of imminent retaliation.

The imported goods that were the focus of the McKinley Act’s reciprocity provision point to the geographical area of special concern to Republicans in the 1890s. The United States’ main suppliers of sugars, molasses, coffee, tea, and hides were in Latin America. While it is true that Latin American countries were highly protectionist in the nineteenth century, particularly in the 1890s (Coatsworth and Williamson 2004), their protectionism was not the only, and perhaps not the main, reason for the Republicans’ concern. The same European powers that the United States had outmaneuvered in Hawaii were enlarging their interests in the Americas. Well before Harrison had taken office, James G. Blaine, his Secretary of State (who served in the same position in the brief administration of James Garfield), observed in reference to South America that “if the commercial empire that legitimately belongs to us is to be ours, we must not lie idle and witness its transfer to others” (Blaine 1882: 3). The Republican platform on which Harrison campaigned, in a plank invoking the Monroe doctrine, expressed grave concern about “the extension of foreign influence in Central America and of foreign trade everywhere among our neighbors” (McKee 1903: 243). And Harrison himself, when he urged Congress to write legislation in support of new reciprocity arrangements, signaled that he had in mind specifically arrangements between “the United States and the several other Republics of this hemisphere” (Harrison 1890: 1). The reciprocity arrangements that followed from the McKinley Act’s passage, then, were mainly with Latin American countries: aside from Germany and Austria-Hungary, there were agreements with Brazil, Spain (on behalf of Cuba and Puerto Rico), the Dominican Republic (a.k.a. San Domingo), El Salvador, Nicaragua, Guatemala, and Honduras.

The reciprocity arrangements authorized by the McKinley Act were not treaties, as prior bilateral arrangements had been. No two-thirds majority vote in the Senate was required to ratify them. Indeed, no vote in either house of Congress was required to ratify them, because the votes had already been cast in advance. The arrangements were properly called “agreements”; they were worked out between the U.S. Secretary of State, acting for the President, who acted in turn for Congress, and the partner country’s minister plenipotentiary in Washington, who acted for his country’s head of state. The partner country’s minister communicated to the Secretary of State a detailed list of the several
U.S. goods that would be admitted into his country duty free, and, in some cases, additional lists of goods that would be admitted at reductions of twenty-five to fifty percent from the tariffs then in force. The President then published the lists in a public proclamation. The proclamation was, in effect, the final text of the agreement (Wharton 1892: 28-124).

“There were some South American countries, indeed,” reported Laughlin and Willis (1903: 212), “which did not hesitate to show their lack of enthusiasm for reciprocity” of the McKinley Act variety. Colombia was one of those deemed by the President to have an unreciprocal tariff schedule. Its minister was duly warned by Secretary Blaine that if it could not come to terms with the United States, then the retaliatory provisions of the McKinley Act would be applied beginning March, 1892. The Colombian Congress would not agree to change the country’s tariff law to the satisfaction of the United States, so the United States acted as promised. Colombia protested that the action violated the MFN article of its treaty with the United States of 1846, but Blaine disagreed, and there the matter ended (ibid.: 213). The McKinley Act had similar results for Venezuela and Haiti.

Democrats and free traders objected strenuously to reciprocity under the McKinley Act. The Democratic platform of 1892 denounced it as “sham reciprocity” that “juggles with the people’s desire for enlarged foreign market and freer exchanges” by offering the mere pretense of them (McKee 1906: 264). Worthington C. Ford, a free-trade advocate, statistician, and chief of the State Department’s Bureau of Statistics in the first Cleveland administration, saw the new reciprocity variously as ineffective or devastatingly effective in promoting trade with partners. He disbelieved that the wave of McKinley Act reciprocity agreements of 1891 and 1892 offered any inducement to trade that would not have happened, or had not already begun to happen, anyway (Ford 1893: 37, 39-40). On the other hand, if the agreements did boost U.S. trade, they did so in consequence of encompassing efforts to carve out forcibly an avenue for U.S. influence in the partners’ political systems and a monopoly of their imports. “This is a dangerous course to enter upon,” Ford warned, “for the stages of progress are defined and strictly logical.” Material interests that depended on U.S. influence would grow up inside the partner’s borders. Those interests, “whose greed is commensurate with the influence and power they think they can invoke in their behalf,” would drum up pretexts for extension of the U.S. political role:

Once let a difference occur and paper protests be disregarded, and political influence easily drifts, if not into actual occupation, into a limited protectorate, with an undefined and indefinable division between interference in mere external relations, and interference with political and commercial relations. (Ford 1893: 10)

Thus, in the last decade of the nineteenth century, free trade became aligned decidedly against reciprocity. Free trade, anti-imperialism, and aversion to reciprocity were kindred causes. After Cleveland’s return to office in 1893, the free

---

4 Palen (2012) supports this point in detail. See ch. 7, “‘A Sea of Fire’: The Listian Harrison
traders in his party pushed for the dismantling of reciprocity. William L. Wilson of West Virginia, chairman of the House Ways and Means Committee, reported a bill in December to repeal the relevant section of the McKinley Act.

Ironically, when the amended Wilson Tariff was enacted the following year, it was not the efforts of free traders but those of protectionists that caused the effective abrogation of the existing agreements. Wilson proposed that the duties on sugars, molasses, coffee, tea, and hides would remain zero; he only stripped the president of any authority to impose alternative and retaliatory duties. Louisiana planters were able to introduce positive duties on sugar as a condition of the bill’s passage, however, thereby breaking the promise that the U.S. had made to its partners in the agreements of 1891 and 1892. Several of the partners filed protests. Once again, although for a quite different reason, protests were in vain (Laughlin and Willis 1903: 230-69). Reciprocity was vanquished. From the free traders’ perspective, the unintended abrogation of agreements that were born of imperialist bluster was an acceptable sacrifice to make for the victory.

The victory proved to be short lived. When the author of the tariff act of 1890 became president in 1897, he signed into law the Dingley Tariff, which included reciprocity provisions similar to the one that Wilson had repealed. There were differences: whereas sugars, molasses, coffee, tea, and hides were the products for which the U.S. had once threatened its partners with higher tariffs, the products were now limited to coffee, tea, tonqua, and vanilla; or, alternatively, distilled spirits and sparkling or still wines. The first set of products, which was intended as before to be the grounds for negotiations with tropical countries, was diminished by the removal of sugars and hides. The second set, which was intended for negotiations with European countries, was also of insufficient importance to extract substantial concessions (Laughlin and Willis 1903: 281). Another provision was added, therefore, that allowed the President to offer reductions of twenty percent below the Dingley tariffs, for a period of up to five years, subject to ratification by the Senate. Thus sweetening the pot, the Dingley Tariff Act produced reciprocity agreements with several European countries through 1909. With the exception of the goods in question, the provenance of the partners, and the partial reliance on explicit preferences, the agreements were similar to those negotiated under the McKinley Act.

The forms of reciprocity that were salient at the turn of the century resembled, in some ways, those that preceded them for more than a hundred years. Their purposes consisted partly in fomenting trade between the U.S. and the partner, and partly in serving one side or another in rivalries that were at once economic and political, practical and doctrinal, domestic and international. The resemblance disappears when one descends from the broadest generalities. From U.S. independence to the early twentieth century, the forms of reciprocity differed—Administration, the McKinley Tariff, and the Imperialism of Economic Nationalism, 1889-93”; and ch. 9, “Republican Rapprochement: Cleveland’s Cobdenites, Anglo-American Relations, and the 1896 Presidential Elections.”
red substantially in the particulars of their purposes and provisions. One would expect them to differ also in their effects on patterns and volumes of trade.

2. Enumerating the reciprocity arrangements

To study the effects of different forms of reciprocity requires an enumeration as well as a taxonomy of reciprocity arrangements between the U.S. and its partners. Our enumeration of 117 such arrangements draws upon Malloy (1910) and Wharton (1892). It is different from the subset of U.S. arrangements in Pahre’s (2008) list of trade arrangements signed around the world between 1810 and 1916, and not only because of the different start and end dates. Pahre includes arrangements that were signed but did not enter into effect; he excludes several others amounting to about half of ours, for reasons we cannot discern. As for our taxonomy of the arrangements, it draws upon the historical sketch in Part 1.

Figure 1 graphs the number of arrangements by decade and by region. With the exception of a long spell of relative dryness from 1776 to 1820 and a shorter

\[\text{Figure 1}\]

U.S. RECIPROCITY ARRANGEMENTS, BY REGION, 1776-1909

\[\text{Graph showing number of arrangements by decade and region.}\]

\[\text{Asia / Oceania} \hspace{1cm} \text{Africa / Oceania} \hspace{1cm} \text{North America} \hspace{1cm} \text{Europe}\]

\[\text{Frequency}\]

\[\text{1776-1820} \hspace{1cm} 1821-1830 \hspace{1cm} 1831-1840 \hspace{1cm} 1841-1850 \hspace{1cm} 1851-1860 \hspace{1cm} 1861-1870 \hspace{1cm} 1871-1880 \hspace{1cm} 1881-1890 \hspace{1cm} 1891-1900 \hspace{1cm} 1901-1909\]

\[\text{For brevity’s sake we omit our list from this essay. It is available by request. The discrepancy between our list and Pahre’s illustrates, in part, how one’s enumeration of the relevant arrangements depends on one’s purpose. If one wants to know the reasons for countries’ negotiation of arrangements, then one should include signed but unperfected arrangements, as Pahre does; if one wants to know the arrangements’ effects on trade flows, then one should exclude them, as we do. But it illustrates in larger part the contingency of any enumeration upon the underlying sources and on the researcher’s judgment in parsing them, even where purposes overlap. Like Pahre (2008, ch. 6), we have aimed to include bilateral instruments of cooperation of all kinds that pertain directly to trade flows, and to exclude those that pertain to trade only indirectly (say, by way only of navigation). By our sources and judgment, such instruments include, for example, a conditional MFN treaty between the U.S. and Belgium signed 10 November 1845, and an exchange of notes between the U.S. and Brazil on 31 January 1892 regarding Brazilian tariff concessions, while by Pahre’s they do not. On the other hand, Pahre includes a convention with Austria dated 8 May 1848 to supplement an earlier treaty of 1829, while we include the original treaty but omit the supplement.}\]
one from 1871 to 1880, between eight and sixteen reciprocity arrangements that later came into force were signed in each decade up to 1909. In its first forty-five years the United States formed them mainly with European countries, but in the remainder of the nineteenth century it did so equally with countries of the Americas. The equality is, in another light, an imbalance. Throughout most of the nineteenth century U.S. trade (exports plus imports) with Europe amounted to anywhere between half and three quarters of total trade, or roughly six to fifteen percent of GDP. Trade with Canada, Latin America, and the Caribbean amounted to between one fifth and one third of total trade, or roughly two to five percent of GDP. While the number of trade treaties and agreements between the U.S. and Europe numbered thirty from 1821 to 1900, however, those between the U.S. and the Americas numbered thirty-two. The disproportionate importance of the Americas in the United States’ reciprocity arrangements is another reflection of the observation made throughout the historical sketch. Trade treaties are about more than trade. In the Americas, they were also about facilitating the activities of U.S. investors in the hemisphere and cementing U.S. political supremacy over European rivals.

Figure 2 shows the United States’ affinity for the different forms of reciprocity over time, counting by decade the number of arrangements in each of several categories. The categories correspond mostly to the italicized headings in the historical sketch. The categories of conditional MFN (like the French treaty of 1778), unconditional MFN (like the Swiss treaty of 1850), and preferential (like the Canadian treaty of 1854) are straightforward. The “restrictive preferential arrangements” that appear in the sketch are folded into the preferential category. The category named “implicit conditional MFN” includes arrangements like the Jay Treaty of 1794, which did not state explicitly what would happen if...

Figure 2

U.S. Reciprocity Arrangements, by Type, 1776-1909

6 Authors’ calculations from Irwin (2006) and Sutch (2006).
either signatory granted additional or unforeseen favors to another nation. Because several U.S. Secretaries of State and Supreme Court decisions interpreted the arrangements to be conditional rather than unconditional MFN (Herod 1901, ch. 2; Osborne 1911), we do too. But because their interpretations were far from obvious, and because not a few partners disputed them, we label conditionality of this kind as “implicit” and give the arrangements a separate category, as we did in the historical sketch.

The “McKinley / Dingley” category completes the taxonomy. The agreements made under the authority of the McKinley and Dingley tariff acts were peculiar. They were the fruits of negotiations in which the United States offered reduced duties (non-discriminatory in the case of McKinley agreements, discriminatory in the case of some Dingley arrangements) if partners agreed to reduce their own tariffs (without discrimination in some cases, with discrimination in others), and threatened increased and discriminatory duties if partners did not so agree. We would not know otherwise how to classify these agreements, so we give them a category of their own.

The features of Figure 2 that stand out are, first, a pause in the pursuit of new bilateral trade relationships in the 1870s followed by its resurgence in the 1880s; and second, the waning importance, in both absolute and relative terms, of MFN as the principal general form of reciprocity beginning in the 1860s.

Figure 3 offers a partial explanation for the second phenomenon. The figure plots from 1821 (the first year for which all the relevant data are readily available) to 1909 three different measures of openness to trade: the ratio of total customs duties collected to the value of all imports, the ratio of duties to the value of dutiable imports, and the ratio of exports plus imports to GDP. During the Civil War, the average tariff – expressed as either the ratio of duties to total imports or duties to

**Figure 3**

**U.S. Trade Openness and the Average Tariff, 1821-1909**
dutiable imports – rose dramatically, ostensibly for war finance. Afterward, the number of primary goods on the free list grew, so that by 1873 the ratio of duties to total imports had fallen approximately to its peak in the two decades prior to the war. Meanwhile, the ratio of duties to dutiable imports remained extraordinarily high, between forty-five and sixty percent, and there they remained through the end of the nineteenth century and into the first decade of the twentieth. The era was one of Republican dominance (with a two-part Democratic interregnum embodied in Grover Cleveland) and preeminence of the protective doctrine. Some forms of reciprocity were perceived to be compatible with that doctrine. Most-favored-nation arrangements, whether unconditional or conditional, were not.

So much for the effects that different forms of reciprocity were presumed to have on trade. One also wishes to know the effects they really did have.

3. Empirical Analysis

In this part, we use a data set we have constructed on bilateral trade between the United States and twenty-two partner countries to examine how the implementation of different types of trade agreements is associated with trade flows. We first describe the data, then the empirical methodology we employ, and finally present the results.

The data

To estimate the effects of different forms of reciprocity on bilateral trade, we combine our data on U.S. trade arrangements with data on bilateral trade flows between the United States and partner countries and the GDP of these partners. Most of our trade flow data is taken from Brian R. Mitchell’s *International Historical Statistics* (2003a, 2003b, 2003c). To these data we add additional data for U.S.-Canada bilateral trade flows from Chalfant Robinson (1911). The GDP data are from Angus Maddison (2006). We use historical price indices and exchange rate data from the Global Financial Data (2006) to convert nominal values of trade flows into 1990 U.S. dollars.

The United States’ 117 trade treaties and agreements in our enumeration were signed with 63 different partner countries. The trade flow data from Mitchell and Robinson overlap with 42 of these countries. Of the 42, just over half are represented in Maddison’s GDP and Global Financial Data’s exchange rate data. The data set is summarized in Table 1. In total, the data set includes bilateral trade flows between the U.S. and GDP data for 938 country-year observations, spanning twenty-two partner countries and nineteen trade agreements and treaties. The time period of data differs by country, beginning at the earliest in 1821 (for Brazil) and ending for all countries in 1909. Because the data set is unbalanced and the missing country-years are likely non-random (e.g. trade and GDP data is more likely to be missing for smaller countries and less important trading partners), the following analysis should be taken as suggestive rather than conclusive.
The model

We follow Rose (2004) and Accominiotti and Flandreau (2008) by using a gravity equation to estimate the effect of trade arrangements on bilateral trade. Suppose that the value of trade between the U.S. (country $i$) and partner country $j$ in year $t$, $X_{ijt}$, is proportional to the product of U.S. GDP, $Y_{it}$, and the partner country GDP, $Y_{jt}$, and inversely proportional to their effective distance, $D_{ijt}$:

$$X_{ijt} = \frac{Y_{it}^\alpha Y_{jt}^{\beta}}{D_{ijt}} \iff \ln X_{ijt} = \alpha \ln Y_{it} + \beta \ln Y_{jt} - \ln D_{ijt}.$$  \hspace{1cm} (1)

Oftentimes it is assumed that $\alpha = \beta = 1$. Although our empirical results find coefficients close to one, we do not make such a restriction in the following estimation. As for the effective distance between two countries, it is likely to be a function of multiple variables, including the time-invariant characteristics (e.g. shipping distance, common language, and shared border), time-varying characteristics such as the cost of shipping and, importantly, the presence of a trade treaty or agreement. We assume that the effective distance can be written as a log-linear function of a time-invariant bilateral pair term, a time varying (but bilateral pair-invariant) term, a term capturing the impact of a trade agreement, and a residual:

$$\ln D_{ijt} = \delta_{ij} + \delta_{i} - Treaty_{ijt}^{age, type} + \epsilon_{ijt}.$$  \hspace{1cm} (2)

We suppose that different types of trade arrangements had different effects on trade flows. Furthermore, there are several reasons to believe that the effect of a certain type of arrangement will vary with its age. First, the full force of an arrangement is unlikely to be felt immediately; we would expect that after it goes into effect there is a period of adjustment for trade flows. Second, if one partner or the other enters subsequently into additional arrangements with other partners, then the relative volume of trade between the original partners may be eroded as time goes on. It is possible that a pair of countries can get “stuck” with an antiquated reciprocity arrangement so that, as the network of regional and world arrangements enlarges, the pair’s trade falls behind that of other pairs of countries. How well a treaty ages, however, is likely to be a function of its type: for example, we would expect that the benefits of an unconditional MFN treaty would erode more slowly than those of a conditional MFN treaty, insofar as the former requires either partner’s future concessions to third parties to be extended automatically to the other partner.

Combining equations (1) and (2) and dropping the $i$ subscript (since all of our data include the U.S. as one of the two countries) yields:

$$\ln X_{jt} = Treaty_{jt}^{age, type} + \beta \ln Y_{jt} - \delta_{i} - \delta_{j} - \epsilon_{jt}.$$  \hspace{1cm} (3)
Equation (3) forms the basis for our empirical strategy. Note that the effect of the United States’ GDP, $Y_{it}$, on trade flows does not need to be included on the right hand side, as it is absorbed by the year fixed effect. Ideally we would like to estimate the causal impact of different types and ages of trade arrangements on bilateral trade flows. However, because the negotiation of an arrangement is likely to be correlated with the unobserved components ($\varepsilon_{jt}$) of effective bilateral distance, the estimated coefficients of $Treaty_{age, type}^{jt}$ will be subject to endogeneity bias. To put the point differently, if a given type of trade deal is negotiated so as to overcome an unexplained paucity of trade, which is to say high $\varepsilon_{jt}$, then the estimated effect of the deal on trade flows will be biased downwards. The usual method for correcting the bias is to use instrumental variables. But we are unaware of any instrument that predicts the passage of different types of trade arrangements and satisfies the exclusion restriction. In the presence of such bias – which, we will suggest, is more likely for some of the following results than for others – the estimates must be interpreted only as correlations of trade arrangements with trade flows, not measures of effects.

**The results**

We estimate two different specifications of equation (3). In the first specification, we assume that each type of trade arrangement has an effect on trade flows that is invariant with its age, i.e. $Treaty_{age, type}^{jt} = \alpha_{type} \times Treaty_{jt}$. This allows us to estimate the relationship between trade flows and a particular arrangement type using ordinary least squares. We construct dummy variables for each type that are equal to one when an arrangement of that type is in force and zero otherwise, and then estimate the coefficient $\alpha_{type}$ of each dummy. Columns 1-3 of Table 2 present the results for three different dependent variables: exports to the U.S., imports from the U.S., and total bilateral trade flows.

The results show that different types of arrangements are associated historically with substantially different trade flows, all else equal. Compared to the absence of any arrangement, conditional MFN treaties are associated with a lesser value of imports from and exports to the United States. Unconditional MFN treaties are associated with a greater value of both. Implicit MFN arrangements are associated with greater exports to the United States and lesser imports from the United States. Preferential trade arrangements are associated with greater imports from the United States, McKinley agreements with greater exports to the United States. Dingley agreements are associated with both lesser imports from and lesser exports to the United States. All of these results are statistically significant at the 5% threshold or beyond.

But by presuming the relationship between each type of trade arrangement and trade flows to be invariant with age, the foregoing results may mask substantial changes in any or all the relationships over time. So in the second specification we remove the presumption. Instead, we suppose that the effect of each arrangement on log trade flows is linear in the arrangement’s age, i.e.
\[ \text{Treaty}_{j}^{\text{age,type}} = (\alpha_{\text{type}} \times \text{Treaty}_{j}) + (\beta_{\text{type}} \times \text{age}_{\text{type}}). \]

To the extent that trade deals are negotiated in light of perceived problems with the current level of trade rather than with expected future trends of trade, the coefficient \( \beta_{\text{type}} \), which captures how trade flows change with a given type of arrangement’s age, is less subject than \( \alpha_{\text{type}} \) to endogeneity bias. Thus our estimates of \( \beta_{\text{type}} \) may be interpreted more aptly than those of \( \alpha_{\text{type}} \) as the effects of trade arrangements on trade flows – albeit the incremental effects year by year.

Columns 4-6 of Table 2 present the results. They show that conditional MFN treaties are not associated with any incremental changes in trade flows over the life of the treaty. Bilateral trade flows decrease slightly with the age of unconditional MFN arrangements, whereas they increase substantially with the age of implicit MFN arrangements, an effect driven entirely by exports to the United States. Dingley and McKinley agreements have no statistically significant incremental effects on trade flows over time, while preferential trade agreements are associated with strong increases in trade flows over time.

Furthermore, the relationship between different arrangements and the level of trade flows, \( \alpha_{\text{type}} \), seems to corroborate the endogeneity of trade arrangements with respect to trade flows. For instance, implicit MFN and preferential arrangements are associated with lesser trade flows levels of trade, despite the fact that trade flows increase over the lives of both types of treaties. This suggests they were signed with partners for whom the unobserved component of the effective distance was large (i.e. bilateral trade flows were lower than the gravity equation would predict), and they succeeded at least partly in overcoming the perceived problem. Conversely, unconditional MFN agreements were signed with partners for whom the level of exports to the U.S. was higher than the gravity equation predicted, but the agreements were insufficient for maintaining high trade flows over time.

One concern with the specification of trade costs in equation (3) is that technological innovations over the period of study reduced the effective distance of certain destination countries more than others. For example, the spread of railroads may have reduced the effective distance between the United States and Mexico more than it reduced the effective distance between United States and Sweden. Because the year fixed effects only control for the average effect of technological change, equation (3) may then systematically over-predict trade flows with Sweden and under-predict trade flows with Mexico. To see if such a bias is affecting our results, we incorporate an annual trend variable, \( \text{year}_{t} \), with a coefficient \( \gamma_{j} \) that varies across partner countries:

\[ \ln X_{j} = \text{Treaty}_{j}^{\text{age,type}} + \beta \ln Y_{j} + \delta_{t} + \delta_{j} + \gamma_{j} \times \text{year}_{t} - \varepsilon_{jt}. \]

Table 3 presents the results. The first three columns replicate the first three columns of Table 2, while columns 4-6 show how the results change when a partner-country specific time trend is included. As is evident, the relationship between trade flows and different types of trade arrangements is largely unaf-
fected by the inclusion of a partner-specific time trend. Nor are there any statistically significant changes in the sign of the coefficients, although in several cases coefficients lose their statistical significance. But the inclusion of a partner-specific time trend does substantially reduce the estimate of the relationship between partner country GDP and trade flows. This is unsurprising: since both GDP and trade flows are increasing over time, failing to include a partner-specific time trend causes some of the increase in trade associated with falling partner-specific trade costs to be attributed instead to growing GDP.

Let us pause to compare the foregoing results to some of the earlier historiography of bilateralism. Viner (1924), writing on his own account a few years after his contribution to the U.S. Tariff Commission report (1919), made several candid observations. The conditional MFN provision that was the mainstay of U.S. policy during much of the nineteenth century was mainly a way of wresting concessions from other countries “without … the obligation of giving concessions in return” (ibid.: 125). To Viner, because of the way they were employed, conditional MFN arrangements were the source of so much diplomatic controversy, variations in construction, international ill-feeling, conflict between international obligations and domestic law, and uncertainty of operation (ibid.: 111).

One might expect that such arrangements were negotiated with countries that were engaged in less than the conditional expected value of trade with the United States. One might also expect that, once the arrangements were put into effect, their incremental effects would have been disappointing. Our results are consistent with both expectations.

Viner saw preferential arrangements as tending, depending on the circumstances, either to passively abet or actively promote the diversion of trade from its “natural” channels (ibid.: 107). One might expect their estimated incremental effects on bilateral trade to be strongly positive. Our results are consistent with that expectation, too.

As for the agreements authorized by the McKinley and Dingley Acts, Viner observed they were negotiated at a time when discrimination against the United States was on the rise all around the world, especially in Europe. It was moreover a time when the United States had become an important exporter of manufactures, which exports required imported manufactures of capital equipment and intermediate goods from Europe. For both reasons American bargaining power vis-à-vis Europe was on the wane; in consequence, “the concessions secured by the United States … were often trivial in character” and “merely effected a partial removal of the adverse discriminations to which American trade was subjected” (ibid.: 125-6). The small and statistically insignificant estimates of the incremental effects of McKinley and Dingley agreements are consistent with Viner’s observation.

Overall, the results that we produce using multiple regression analysis are consistent with the earlier historiography of bilateralism. To state them simply: the relationship between trade arrangements and trade flows depends on the type and age of the arrangement. Failing to account for the different forms of
bilateralism, the different effects of the arrangements over time, and the endogeneity of trade flows to the signing of arrangements can result in biased and incorrect conclusions. These results, although formulated differently, were known for a long time before the use of econometric methods to study bilateralism’s effects on trade. Our purpose is to keep them in view.

Conclusion

Econometric studies of the effects of bilateral trade arrangements during brief historical episodes, when the varieties of bilateralism were few, may be valuable. As with the recent studies by Accominotti and Flandreau (2008) and Lampe (2009), cited earlier in this essay, their obvious value is for understanding the historical episode at issue. Less obvious is their value for understanding the effects of bilateralism in general or in the present. The reason is that the historical effects of bilateralism have not, in fact, been general, but rather highly particular. Particular, that is to say, to the several varieties of bilateral arrangements that have been tried over longer periods (not a generation, say, but a century or more) and to historical circumstances outside of the arrangements’ texts. Among those circumstances, as one contribution to the earlier historiography of bilateralism stated, are the “honesty, consistency, and rigidity or liberality with which the application is made to conform to the principle” by which the arrangements were designed (U.S. Tariff Commission 1919: 42).

This essay has undertaken an inquest of the several varieties of bilateralism tried in the United States from independence to 1909. Part of the inquest is a survey of the varieties and the circumstances of their usage. Part of it is an enumeration of them. And part of it is an econometric exercise that uses the gravity model employed in the more recent historiography of bilateralism to estimate the effect of bilateral trade deals on bilateral trade flows. The difference in the exercise as done in this essay, besides the shift of geographical focus from Europe to the United States, is the introduction of explanatory dummy variables representing several varieties of bilateral arrangements. Estimates of their coefficients corroborate the view presented here, as well as in the earlier historiography, that bilateralism’s effects on trade flows are contingent upon its varieties and historical circumstances.

If there is a lesson from history that is relevant to bilateralism in the present day, it is probably not the likely effectiveness or ineffectiveness of the latest instrument of bilateralism for its intended ends. It may be the variety of options available to the designers of the instrument. It may be the contingency of the instrument’s effects upon circumstances apart from its design. It may also be, in light of both of the above, the especial modesty that is required when extrapolating from past experiences of bilateralism to other times, including now.
References


Harrison B. (1890). Message from the President of the United States Transmitting a Letter of the Secretary of State Relative to Proposed Reciprocal Commercial Treaties Between the United States and the other American Republics, in U.S. Senate Ex. Doc. no. 158, 51st Cong., 1st Sess., Washington, D.C.


United States [*U.S. Stat.*] (1789—). Statutes at Large, published by authority of Congress.


**ABSTRACT**

Several varieties of bilateral trade arrangements were tried in the United States from independence to 1909. They included most-favored-nation (MFN) treaties of the conditional and unconditional varieties, MFN treaties in which the conditionality was implicit, preferential trade arrangements, and agreements of a different nature authorized by the McKinley Tariff Act of 1890 and the Dingley Act of 1897. This essay is an inquest of the varieties of U.S. trade arrangements and their effects on bilateral trade flows. It surveys the several varieties, discusses the circumstances of their usage, and uses a gravity model to estimate empirically their effects. The empirical results show that bilateralism’s effects on trade flows are contingent upon its varieties and historical circumstances.

**Jel Classification:** N71, F13

**Keywords:** Bilateralism, international trade treaties, most-favored-nation, preferential trade agreements, reciprocity, trade policy
Table 1: Data Used for Empirical Analysis

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1870-1909</td>
<td>82</td>
<td>43</td>
<td>24,353</td>
<td>None</td>
<td>39</td>
</tr>
<tr>
<td>Austria</td>
<td>1891-1909</td>
<td>477</td>
<td>145</td>
<td>21,458</td>
<td>McKinley (1893-1895)</td>
<td>19</td>
</tr>
<tr>
<td>Belgium</td>
<td>1846-1909</td>
<td>429</td>
<td>116</td>
<td>29,695</td>
<td>Conditional MFN (1847-1876)</td>
<td>64</td>
</tr>
<tr>
<td>Brazil</td>
<td>1821-1909</td>
<td>204</td>
<td>1,205</td>
<td>16,886</td>
<td>Conditional MFN (1830-1842), McKinley (1892-1895)</td>
<td>89</td>
</tr>
<tr>
<td>Canada</td>
<td>1850-1909</td>
<td>1,025</td>
<td>666</td>
<td>26,920</td>
<td>Preferential (1855-1866)</td>
<td>56</td>
</tr>
<tr>
<td>Chile</td>
<td>1878-1909</td>
<td>48</td>
<td>62</td>
<td>8,941</td>
<td>None</td>
<td>32</td>
</tr>
<tr>
<td>China</td>
<td>1868-1909</td>
<td>160</td>
<td>201</td>
<td>230,245</td>
<td>None</td>
<td>37</td>
</tr>
<tr>
<td>Denmark</td>
<td>1879-1909</td>
<td>205</td>
<td>34</td>
<td>10,363</td>
<td>None</td>
<td>31</td>
</tr>
<tr>
<td>France</td>
<td>1842-1909</td>
<td>1,055</td>
<td>798</td>
<td>130,185</td>
<td>Dingley (1899-1908), Preferential (1909)</td>
<td>68</td>
</tr>
<tr>
<td>Germany</td>
<td>1882-1909</td>
<td>2,540</td>
<td>1,528</td>
<td>203,156</td>
<td>McKinley (1893-1895), Dingley (1901-1909)</td>
<td>28</td>
</tr>
<tr>
<td>Italy</td>
<td>1861-1909</td>
<td>341</td>
<td>255</td>
<td>88,494</td>
<td>Dingley (1901-1909)</td>
<td>49</td>
</tr>
<tr>
<td>Japan</td>
<td>1873-1909</td>
<td>202</td>
<td>413</td>
<td>63,556</td>
<td>None</td>
<td>37</td>
</tr>
<tr>
<td>Mexico</td>
<td>1889-1909</td>
<td>405</td>
<td>937</td>
<td>25,195</td>
<td>None</td>
<td>19</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1846-1909</td>
<td>599</td>
<td>179</td>
<td>21,457</td>
<td>Dingley (1903)</td>
<td>64</td>
</tr>
<tr>
<td>Norway</td>
<td>1866-1909</td>
<td>40</td>
<td>9</td>
<td>5,006</td>
<td>None</td>
<td>38</td>
</tr>
<tr>
<td>Peru</td>
<td>1897-1909</td>
<td>50</td>
<td>56</td>
<td>5,889</td>
<td>Implicit MFN (1897-1906)</td>
<td>15</td>
</tr>
<tr>
<td>Portugal</td>
<td>1861-1909</td>
<td>73</td>
<td>9</td>
<td>7,048</td>
<td>Dingley (1901-1909)</td>
<td>40</td>
</tr>
<tr>
<td>Spain</td>
<td>1850-1909</td>
<td>214</td>
<td>64</td>
<td>38,998</td>
<td>Dingley (1907), Preferential (1908-1909)</td>
<td>58</td>
</tr>
<tr>
<td>Sweden</td>
<td>1839-1909</td>
<td>38</td>
<td>17</td>
<td>15,315</td>
<td>Implicit MFN (1830-1839)</td>
<td>70</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1885-1909</td>
<td>153</td>
<td>314</td>
<td>15,648</td>
<td>Unconditional MFN (1885-1900), Dingley (1907-1909)</td>
<td>25</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1854-1909</td>
<td>6,935</td>
<td>2,002</td>
<td>200,808</td>
<td>Dingley (1908-1909)</td>
<td>56</td>
</tr>
<tr>
<td>Venezuela</td>
<td>1904-1909</td>
<td>42</td>
<td>81</td>
<td>2,405</td>
<td>None</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>1821-1909</td>
<td>805</td>
<td>483</td>
<td>38,375</td>
<td></td>
<td>938</td>
</tr>
</tbody>
</table>

Notes: The GDP is the value in 1909 and reported in millions of 1900 U.S. dollars. Trade flows are the averages observed for the country and are also reported in millions of 1900 U.S. dollars. The number of observations may not equal the time period because of missing observations.
<table>
<thead>
<tr>
<th>Dependent variable (logs):</th>
<th>(1) Exports</th>
<th>(2) Imports</th>
<th>(3) Total Trade</th>
<th>(4) Exports</th>
<th>(5) Imports</th>
<th>(6) Total Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditional MFN</td>
<td>-0.621***</td>
<td>-0.319***</td>
<td>-0.489***</td>
<td>-0.680***</td>
<td>-0.414***</td>
<td>-0.535***</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
<td>(0.111)</td>
<td>(0.089)</td>
<td>(0.192)</td>
<td>(0.226)</td>
<td>(0.187)</td>
</tr>
<tr>
<td>Conditional MFN*Age</td>
<td></td>
<td></td>
<td></td>
<td>0.016</td>
<td>0.010</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.016)</td>
<td>(0.024)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>Unconditional MFN</td>
<td>0.401***</td>
<td>0.257***</td>
<td>0.304***</td>
<td>0.839**</td>
<td>-0.392</td>
<td>1.112***</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.087)</td>
<td>(0.069)</td>
<td>(0.395)</td>
<td>(0.489)</td>
<td>(0.310)</td>
</tr>
<tr>
<td>Unconditional MFN*Age</td>
<td></td>
<td></td>
<td></td>
<td>-0.011</td>
<td>0.017</td>
<td>-0.022***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.011)</td>
<td>(0.013)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Implicit MFN</td>
<td>1.117***</td>
<td>-0.720***</td>
<td>0.192</td>
<td>-0.795</td>
<td>-0.686**</td>
<td>-0.859*</td>
</tr>
<tr>
<td></td>
<td>(0.238)</td>
<td>(0.124)</td>
<td>(0.151)</td>
<td>(0.718)</td>
<td>(0.297)</td>
<td>(0.449)</td>
</tr>
<tr>
<td>Implicit MFN*Age</td>
<td></td>
<td></td>
<td></td>
<td>0.135***</td>
<td>-0.004</td>
<td>0.074**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.045)</td>
<td>(0.023)</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Preferential</td>
<td>0.141</td>
<td>0.387**</td>
<td>0.373**</td>
<td>-0.377*</td>
<td>-0.207</td>
<td>-0.201</td>
</tr>
<tr>
<td></td>
<td>(0.156)</td>
<td>(0.186)</td>
<td>(0.157)</td>
<td>(0.194)</td>
<td>(0.249)</td>
<td>(0.200)</td>
</tr>
<tr>
<td>Preferential*Age</td>
<td></td>
<td></td>
<td></td>
<td>0.099***</td>
<td>0.113***</td>
<td>0.110***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.027)</td>
<td>(0.034)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>McKinley</td>
<td>0.321**</td>
<td>-0.216</td>
<td>0.014</td>
<td>0.231</td>
<td>-0.153</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>(0.134)</td>
<td>(0.134)</td>
<td>(0.104)</td>
<td>(0.234)</td>
<td>(0.295)</td>
<td>(0.216)</td>
</tr>
<tr>
<td>McKinley*Age</td>
<td></td>
<td></td>
<td></td>
<td>0.036</td>
<td>-0.028</td>
<td>-0.033</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.111)</td>
<td>(0.131)</td>
<td>(0.093)</td>
</tr>
<tr>
<td>Dingley</td>
<td>-0.329***</td>
<td>-0.220**</td>
<td>-0.190**</td>
<td>-0.222</td>
<td>-0.249</td>
<td>-0.196</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.100)</td>
<td>(0.092)</td>
<td>(0.166)</td>
<td>(0.153)</td>
<td>(0.146)</td>
</tr>
<tr>
<td>Dingley*Age</td>
<td></td>
<td></td>
<td></td>
<td>-0.027</td>
<td>0.000</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.027)</td>
<td>(0.025)</td>
<td>(0.024)</td>
</tr>
<tr>
<td>Log of partner GDP</td>
<td>1.384***</td>
<td>1.459***</td>
<td>1.553***</td>
<td>1.356***</td>
<td>1.439***</td>
<td>1.536***</td>
</tr>
<tr>
<td></td>
<td>(0.174)</td>
<td>(0.200)</td>
<td>(0.165)</td>
<td>(0.176)</td>
<td>(0.202)</td>
<td>(0.167)</td>
</tr>
</tbody>
</table>

Year Fixed Effects: Yes, Yes, Yes
Partner Country Fixed Effects: Yes, Yes, Yes
Mean of dependent variable

F-tests: Conditional MFN*Age = 0.154, 0.792, 0.115
Unconditional MFN*Age = 0.015, 0.647, 0.070
Implicit MFN*Age = 0.007, 0.011, 0.002
Preferential*Age = 4.868, 5.284, 5.953

R-squared = 0.913, 0.905, 0.926
Observations = 938, 938, 938

Notes: The dependent variable is indicated above each column; exports are trade flows to the U.S. from the partner country, imports are trade flows from the U.S. to the partner country. The unit of observation is trade flows between a country and the United States in a particular year. Robust standard errors are reported in parentheses. Asterisks indicate statistical significance: * p<.10 ** p<.05 *** p<.01.
<table>
<thead>
<tr>
<th>Dependent variable (logs):</th>
<th>(1) Exports</th>
<th>(2) Imports</th>
<th>(3) Total Trade</th>
<th>(4) Exports</th>
<th>(5) Imports</th>
<th>(6) Total Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditional MFN</strong></td>
<td>-0.621***</td>
<td>-0.319***</td>
<td>-0.489***</td>
<td>0.162</td>
<td>-0.487***</td>
<td>-0.364***</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
<td>(0.111)</td>
<td>(0.089)</td>
<td>(0.166)</td>
<td>(0.150)</td>
<td>(0.128)</td>
</tr>
<tr>
<td><strong>Unconditional MFN</strong></td>
<td>0.401***</td>
<td>0.257***</td>
<td>0.304***</td>
<td>0.387***</td>
<td>0.471***</td>
<td>0.144</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.087)</td>
<td>(0.069)</td>
<td>(0.124)</td>
<td>(0.163)</td>
<td>(0.096)</td>
</tr>
<tr>
<td><strong>Implicit MFN</strong></td>
<td>1.117***</td>
<td>-0.720***</td>
<td>0.192</td>
<td>1.073***</td>
<td>0.062</td>
<td>0.658***</td>
</tr>
<tr>
<td></td>
<td>(0.238)</td>
<td>(0.124)</td>
<td>(0.151)</td>
<td>(0.257)</td>
<td>(0.186)</td>
<td>(0.189)</td>
</tr>
<tr>
<td><strong>Preferential</strong></td>
<td>0.141</td>
<td>0.357**</td>
<td>0.373**</td>
<td>0.296*</td>
<td>0.313**</td>
<td>0.328***</td>
</tr>
<tr>
<td></td>
<td>(0.156)</td>
<td>(0.186)</td>
<td>(0.157)</td>
<td>(0.161)</td>
<td>(0.126)</td>
<td>(0.111)</td>
</tr>
<tr>
<td><strong>McKinley</strong></td>
<td>0.321**</td>
<td>-0.216</td>
<td>0.014</td>
<td>0.293**</td>
<td>0.108</td>
<td>0.192**</td>
</tr>
<tr>
<td></td>
<td>(0.134)</td>
<td>(0.134)</td>
<td>(0.104)</td>
<td>(0.120)</td>
<td>(0.087)</td>
<td>(0.091)</td>
</tr>
<tr>
<td><strong>Dingley</strong></td>
<td>-0.326***</td>
<td>-0.226**</td>
<td>-0.190**</td>
<td>-0.336***</td>
<td>-0.164**</td>
<td>-0.149**</td>
</tr>
<tr>
<td></td>
<td>(0.105)</td>
<td>(0.100)</td>
<td>(0.092)</td>
<td>(0.095)</td>
<td>(0.066)</td>
<td>(0.063)</td>
</tr>
<tr>
<td><strong>Log of partner GDP</strong></td>
<td>1.384***</td>
<td>1.450***</td>
<td>1.553***</td>
<td>0.203</td>
<td>0.709***</td>
<td>0.578***</td>
</tr>
<tr>
<td></td>
<td>(0.174)</td>
<td>(0.200)</td>
<td>(0.165)</td>
<td>(0.313)</td>
<td>(0.273)</td>
<td>(0.221)</td>
</tr>
</tbody>
</table>

**Year Fixed Effects**
- Yes

**Partner Country Fixed Effects**
- Yes

**Partner Country Fixed Effects*Year**
- No

**Mean of dependent variable**
- 4.868

**R-squared**
- 0.913

**Observations**
- 938

*Notes: The dependent variable is indicated above each column; exports are trade flows to the U.S. from the partner country, imports are trade flows from the U.S. to the partner country. The unit of observation is trade flows between a country and the United States in a particular year. Robust standard errors are reported in parentheses. Asterisks indicate statistical significance: * p<.10 ** p<.05 *** p<.01.*