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The relevance of trade policy: Evidence from the 19th century

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The role of bilateral and multilateral trade agreements, including the WTO, in promoting trade and welfare of its members has recently been questioned. This Policy Brief summarizes a new study analyzing the so-called "Cobden-Chevalier network", a 19th century system of bilateral trade agreements with a multilateral feature (the Most Favored Nation clause). Its main results are: 1) trade agreements have large, positive and significant effects on members' trade; 2) these effects tend to differ across trade agreements; 3) trade agreements effects on non-members are small; 4) welfare effects are considerable. From an economic historian perspective, these results reshape the understanding of the Cobden-Chevalier network. From a policy-maker perspective, these results, complementing recent studies using contemporary data, provide further evidence on the overall positive effects of bilateral and multilateral trade agreements.

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Introduction

World trade has grown dramatically during the last decades. This remarkable performance went hand in hand with the consolidation of the multilateral trading system (GATT/WTO) and the proliferation of bilateral and plurilateral trade agreements.

In recent years, however, the global economy experienced severe structural changes and far-reaching political events, inciting different stakeholders to call into question the extent to which (policy-driven) trade integration enables an economy to prosper.

From an historical perspective, these trade integration dynamics are not unprecedented: during the so-called first wave of globalization (c. early 19th century – 1913), the world experimented spectacular declines in trade costs, and vigorous increases in global trade and economic activity. Indeed, around mid-19th century, liberalizing trade policies had the wind in their sails, with dozens of treaties signed in less than two decades.

In my recent paper (Timini, 2021), I analyze this trade liberalization frenzy – known as the "Cobden-Chevalier network" – and assess its trade and welfare effects.

A short history of the "Cobden-Chevalier network"

Around mid-19th century, trade liberalization policies became fashionable in Europe. It was in 1860 indeed that two great powers of the time, Great Britain and France, signed a groundbreaking bilateral trade agreement, granting reciprocal tariff concessions. Importantly, the treaty – named "Cobden-Chevalier" after its negotiators (Richard Cobden and Michel Chevalier) – included a Most Favored Nation (MFN) clause. This clause implied that the tariff concessions granted in the bilateral treaty automatically applied to all other trade partners sharing a trade agreement with a similar (MFN) clause. Since then, many countries, in different regions of the world, signed dozens of treaties within a relative short time horizon (less than two decades). The resulting group of bilateral agreements with a "multilateral quality" (the MFN clause) is known as the "Cobden-Chevalier network".

The historical (non-econometric) narrative of the first wave of globalization argued that the network generated an important trade impulse during this period: the agreed tariff cuts applied to a wide set of important products. However, econometric efforts (Accominotti and Flandreau, 2008; Lampe, 2009) dedicated to quantifying the network trade effects casted some doubts on its effectiveness, finding that, at best, the "Cobden-Chevalier network" only promoted trade in certain sectors.

Trade agreements increase trade and welfare of its members

In my recent paper (Timini, 2021), I exploit the latest advances in the (theoretical and empirical) trade literature to revisit the "Cobden-Chevalier network" trade and welfare effects.

My empirical strategy relies on a "structural gravity" model, relating bilateral trade flows to the relative economic mass of the countries involved and their (bilateral and multilateral) trade costs. Importantly, following a recent theory-based innovation, I consider both domestic and international trade flows,[2] allowing trade agreements to divert trade away from domestic to international markets. As now standard in the literature, I take into account

[2] Yotov (2021) describes the advantages of considering domestic trade in structural gravity models.

various factors that can affect trade (e.g., GDP, GDP per capita, bilateral distance, common culture or geography, etc.) by including a comprehensive and theory-based set of fixed effects. I then add the key variable identifying trade agreements, and in an additional specification, I allow the effect to be heterogeneous across trade agreements. Importantly, I also control for broader economic integration processes (e.g. reduction in transport costs, caused by the widespread expansion and adoption of railroads and steamships, see e.g. Jacks et al., 2010; Pascali, 2017).

My results indicate that, on average, the Cobden-Chevalier network led to almost a 30% increase in bilateral trade flows. This value is close to what indicated by recent efforts analyzing 20th and 21st century trade agreements. I also show that treaty-level effects are very heterogeneous.

I then use a standard one-sector general equilibrium framework to calculate the "Cobden-Chevalier network" effects on total trade and welfare (see Table 1). Overall, these effects are large, indicating that the Cobden-Chevalier network increased total exports and imports by almost 10%, and welfare by 0.3%. Heterogeneity plays a significant role in the general equilibrium framework too. Large European countries experienced above average trade gains – likely related to a larger number of trade agreements in force. However, small open economies are those benefitting the most in welfare terms, as a larger share of their products are sold in international, rather than domestic, markets. The Cobden-Chevalier network diverted trade away from non-members, but only to a very limited – minimal – extent.

From an economic historian perspective, these results reshape the understanding of the Cobden-Chevalier network, reconciling the historical narrative with the empirical evidence. From a policy-maker perspective, these results complement recent studies analyzing 20th and 21st century bilateral and multilateral agreements (including the GATT/WTO, see Baier et al., 2019, and Felbermayr et al., 2020), and provide further evidence on the overall positive effects of bilateral and multilateral trade agreements: trade policy is indeed relevant for trade and welfare.

Table 1: Cobden-Chevalier trade network general equilibrium effects

COUNTRY	Δ% EXPORTS	Δ% IMPORTS	Δ% WELFARE
AUS	-1.32	-1.06	-0.05
AUT	19.41	27.77	0.14
BEL	16.91	18.61	0.80
BRA	-0.08	-0.09	-0.01
CAN	8.65	10.75	0.34
CHL	19.23	21.09	0.61
CHN	-0.75	-1.67	0.00
COL	23.39	24.36	0.76
DEU	19.38	19.48	0.46
DNK	-0.73	-0.76	-0.04
ESP	10.84	7.47	0.13
FIN	-1.14	-0.74	-0.01
FRA	22.50	23.92	0.49
GBR	15.85	13.08	0.74
GRC	-1.41	-1.44	-0.08
ITA	27.55	18.70	0.46
JPN	-0.91	-1.24	0.00
NLD	7.00	8.15	0.97
NOR	3.28	3.53	0.16
NZL	-0.83	-0.51	-0.01
PRT	18.36	14.96	0.22
SWE	1.41	1.71	0.05
URY	6.99	8.59	0.81
USA	17.99	24.10	0.26

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