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The Impact of Trade Openness on Institutions

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Background Paper for the World Development Report 2017

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The impact of opening to trade on economic institutions is likely to be multifaceted and depend crucially on country-specific circumstances. In the past decade an active body of research has studied this relationship.

To organize the discussion, it helps to start with a conceptual framework for what determines institutions. Acemoglu, Johnson, and Robinson (2005a) provide a model in which institutions are an outcome of a nexus of a political and an economic equilibrium. Agents that are in power determine institutions. Institutions in turn determine the distribution of economic resources in the economy. Ownership of economic resources in the economy in turn (partly) determines who is in power.

The mutual feedback between the distribution of political power and the distribution of economic resources occurs through, and in turn determines, institutions. This view of institutions has the ability to explain, in particular, the long-run persistence of bad institutions. Agents that are in power ("the elites") use bad institutions (such as corruption, insecure property rights, expropriation, etc.) to channel economic resources to themselves. Their control of economic resources in turn keeps them in power, generating a vicious circle.

This framework makes is especially clear why international trade opening has the potential to transform institutions. What is needed to effect institutional change is a large and discrete change in the distribution of economic resources in society. Shocks to international trade (such as opening to trade or large changes to a country's comparative advantage) can be large enough to do that, often precipitating institutional change. Unfortunately, it is not necessarily the case that the result is institutional improvement rather than a deterioration.

Building on this view of equilibrium institutions, there are broadly two reasons why trade opening will lead to a change in institutions. First, trade can change agents' *preferences* over institutions. Second, trade can change the *relative political power* of agents in the economy. These are of course conceptually distinct, and either one can on its own lead to institutional change. In the first case, even if the exact same "elites" stay in power following a trade shock, institutions can change if trade changes their incentives to install certain institutions. In the second case, all agents' preferences for different institutions could stay exactly the same, but if a trade shocks changes who is in power, institutional change can follow.

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Trade opening and agents' preferences for institutions

If a trade shock changes the preferences of those with political power regarding institutions, then those agents will be induced to change equilibrium institutions. Levchenko (2014) provides the basic model of how this can happen. It develops a framework in which imperfect institutions create rents for some parties within the economy, and are a source of comparative advantage in trade. Then, it endogenizes institutional quality using a simple political economy model in which some groups lobby for rents created by imperfect institutions. When countries share the same technology, trade leads to a "race to the top" in institutional quality. Trading partners improve institutions up to the best attainable level after opening, as they compete to capture the sectors that generate rents. By contrast, when one of the trading partners has a sufficiently strong technological comparative advantage in the rent-generating good, institutions do not improve after trade opening in either country. When other sources of comparative advantage are strong enough, changing institutions will not affect trade patterns, and thus trade does not create an incentive to improve them. The paper then tests these predictions in a sample of 141 countries, and shows that countries whose exogenous geographical characteristics predispose them to exporting in institutionally intensive sectors enjoy significantly higher institutional quality.

Relatedly, Do and Levchenko (2007) examine, both theoretically and empirically, a particular type of economic institution: financial development. It has been argued that differences in the levels of financial development between countries are a source of comparative advantage in international trade. The paper points out the reverse link: financial development is itself influenced by comparative advantage. They illustrate this idea using a model in which a country's financial development is an equilibrium outcome of the economy's productive structure: financial systems are more developed in countries with large financially intensive sectors. After trade opening demand for external finance, and therefore financial development, are higher in a country that specializes in financially intensive goods. By contrast, financial development is lower in countries that primarily export goods that do not rely on external finance. The authors then demonstrate this effect empirically using data on financial development and export patterns in a sample of 96 countries over the period 1970-99.

In these papers, whether or not trade opening improves institutions depends on the country' *comparative advantage*: if the country's (latent) comparative advantage is in sectors that require good institutions to produce, international trade will tend to lead to institutional improvement, and vice versa. An alternative determinant of whether institutions improve or not is who is *in power*. Stefanadis (2010) develops a model to illustrate this effect. In the model, there are productive agents and rent seekers. Trade opening improves institutions when productive agents are in power, but worsens institutions when rent-seekers are in power. In both cases, this is because the overall importance of domestically-produced goods declines as the country opens to trade, which means that resources are more easily diverted into building good institutions (best-case scenario) or expropriation (worst case scenario).

Segura-Cayuela (2006) makes a related argument. It models an economy with weak institutions, in which a small elite in power uses policies to extract resources from other agents. In the closed economy, the elite is somewhat limited in how much it can suppress economic activity in the rest of the economy because they themselves consume the goods that the economy produces. A trade opening implies that the prices of all goods are now set in the world markets, and thus the elite can buy from abroad instead. This means that the elite can expropriate domestic agents even more.

These papers draw attention to the distribution of political power as the determinant of how institutions react to trade opening. If "rent seekers" are in power when trade opening occurs, international trade often enables them to increase their rent-seeking behavior and institutions deteriorate. If productive agents are in power, the opposite occurs. Thus, these models point to the possibility of a divergence in institutions as countries open to trade.

Trade opening and changes in the configuration of power

Rather than changing agents' preferences, trade opening can change institutions by changing the balance of political power. The best-known examples of how this mechanism can induce positive change come from historical studies. Puga and Trefler (2014) describe the evolution of trade and institutions in medieval Venice. The Mediterranean trading opportunities in the 10-12th centuries led to an establishment of a broad-based merchant class, that used its economic power to push for constraints on the executive (by ending the practice of hereditary Doges and instituting a de facto parliament), and the establishment of robust contracting institutions. In the long run, however, wealth concentrated in a narrower set of merchant families, who used that concentrated wealth to institute an oligarchy.

Acemoglu et al. (2005b) make similar arguments about Atlantic trade in the early modern era. Opportunities created by that trade led to a rise of a merchant class in Great Britain and select other polities in Europe (such as the Netherlands). This merchant class was interested in well-functioning contracting institutions and in protecting themselves from expropriation by the state, and they used their trade-based wealth to acquire a seat at the political table. This helped them shape the institutional formation in those countries, eventually leading to the establishment of modern capitalist institutions. A recent paper by Jha (2016) provides the most direct evidence for this conjecture, by collecting individual-level biographies of members of the British elite and MPs in the 17th century. Jha (2016) shows that wealth per se did not predict individual-level support for greater constraint on the executive. However, ownership of assets in the overseas joint-stock companies significantly increased support for constraint on the executive. The introduction of shares of those joint-stock companies widened the set of individuals who benefited from the overseas trading opportunities, which in turn led to the formation of a broad coalition that favored parliamentary supremacy.

It need not be the case, however, that trade opening always brings in power those that favor better institutions. As documented by both historians and economists, in many instances international trade contributed to concentration of political power in the hands

of groups that were interested in setting up, or perpetuating, bad institutions. Thus, it is important to understand under what conditions greater trade openness results in a deterioration of institutions, rather than their improvement. Do and Levchenko (2009) develop an analytical framework to highlight the forces at work. They model institutions as barriers to entry, in a framework that has two key features. First, preferences over entry barriers differ across firms and depend on firm size. Larger firms prefer to set higher barriers to entry, in order to reduce competition. Second, these barriers are endogenously determined in a political economy equilibrium. Trade opening can lead to higher entry barriers – worse institutions – when it changes the political power in favor of a small elite of large exporters, who in turn prefer to install high barriers. The detrimental effect of trade on institutions is most likely to occur when a small country captures a sufficiently large share of world exports in sectors subject to rent seeking.

Indeed, there are well-documented historical instances in which greater trading opportunities led to a concentration of political power which led in turn to a deterioration of institutions. One instance is Caribbean sugar economies. Beginning in the 1650s Barbados, a sugar boom swept most of the Caribbean islands over a period of 200 years. Pre-sugar Caribbean islands were typically smallholder peasant societies, farming foodstuffs and perhaps tobacco for export. Some were sparsely populated, though others were quite successful. For instance, settlement in Barbados started in 1641, and by 1655 it had 10,000 British settlers, resulting in a population density higher than most regions in England (Rogozinski, 1999, p. 71). By then, all of the island's arable land had been distributed to farmers.

When sugar was introduced to the islands, the transformation was typically quite rapid. In the most extreme cases, land use was given over almost entirely to sugar, so much so that many islands had to import food. Land ownership consolidation was swift as well, with islands going from smallholder patterns of land use to giant plantations. For instance, in 1750s Barbados, 74 families owned 305 out of 536 estates. On Nevis, the number of plantations went from over a hundred to around thirty a century later. The dominance of sugar in the Caribbean economies was mirrored in the region's position as the primary exporter of sugar in the world. Caribbean produced between 80 and 90 percent of sugar consumed by western Europeans in the 18th century (Rogozinski, 1999, p. 107).

It was also clear that power was derived from being a planter, and that economic power — the size of plantation and the resulting profits — was key to political power. For instance, Stinchcombe (1995) notes that "[plantation] size measures the main causal complex that produced and maintained slave societies, societies in which the main public good was reliable repression of all rights of slaves, . . . and constraints on the rest of the society deemed necessary to the security of the slave regime." (p.89).

The final piece of the argument concerns the way in which planters, once in power, changed institutions. Clearly, the most significant consequence of planter power was the slavery that was prevalent in the sugar boom Caribbean. At the height of the sugar era, almost 9 out of 10 inhabitants of the Caribbean were slaves, a proportion of slaves to the free never before recorded in human history. The Caribbean slavery system was by all

accounts the most extreme form practiced at the time. However, and more relevant to the arguments here, planters also went to great lengths to curtail the property rights of the free members of society, such as farmers. In plantation economies, all of the land suitable for sugar cultivation was used for sugar. But even for unsuitable lands, the government policy was to explicitly discourage cultivation. Stinchcombe (1995) notes that "[t]hroughout most of the colonial period on most of the sugar islands, the formal government policy was to prevent peasant cultivation in the highlands, . . . since that provided a peasant alternative to plantation labor for freedmen." (p. 104).

This was apparently done at least in part through deliberately insecure property rights: "[m]any of the tenures on which small holdings have been held in the Caribbean have been legally precarious. . . . The more planters were in control, the more precarious were peasant tenures, since secure tenures raised the 'reservation wage' of free peasants in the free labor market, and provided a comparison point for slaves before emancipation" (p. 93). After emancipation, the governments of the islands attempted to keep the wages low and reduce earnings opportunities outside the plantations by restricting access to crown lands by either prospective planters or by peasants. (Stinchcombe, 1995, ch. 10).

Thus, in the Caribbean we can see the essential outlines of the link between trade opportunities, concentration of political power, and the ensuing institutional change. The export boom brought power to large exporters; those exporters used that power to reduce competition, in this case in the factor markets. While the case of Caribbean sugar is perhaps the best-studied (see also Bobonis and Morrow 2014 and Dippel, Greif, and Trefler 2015 for more formal econometric analyses of the link between world sugar prices and labor coercion), similar mechanisms could be argued to have operated in other booms, such as coffee in South America and cotton in Central America in the 1950s.

International agreements as commitment devices

A government susceptible to the influence of vested interests may benefit from an international agreement as a commitment device. Maggi and Rodriguez-Clare (1998, 2007) develop this theory in the context of trade agreements. The policymaker signs a trade agreement today to "tie its hands" in the face of domestic vested interests that ex post may induce it to implement suboptimal policies, such as high tariffs. Interestingly, the value of commitment provided by an international agreement is higher the weaker is domestic governance. This is intuitive: a government strongly captured by vested interests will be most tempted to implement suboptimal policies ex post, and thus has the strongest incentive to tie its hands ex ante.

Tang and Wei (2009) provide supporting empirical evidence for the commitment effect of GATT/WTO accession in particular. They show that GATT/WTO accession had the strongest growth-promoting effects in countries that undertook deeper commitments as part of their accession negotiations. In addition, the pro-growth effect of accession was strongest in countries with weakest domestic governance, suggesting, in line with theory, that the value of external commitment is highest in those countries.

While existing literature focuses on the commitment device role of trade agreements, the argument is of course broader. Countries joining the EU have to undertake deep reforms of their institutions to comply with the *acquis communautaire*. It is commonly suggested in journalistic discourse that EU membership contributed to the consolidation of democratic institutions in former dictatorships in the European periphery, such as Greece, Portugal, and Spain in the 1980s and former communist bloc countries in the 1990s and 2000s. Similarly, lending programs from multilateral institutions such as the IMF are often associated with extensive pro-market reform programs.

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