Free Trade: Amazing or Apocalyptic? A Political Economy Revisit of 'Iowa Car Crop'

Economists have been front and center in the human quest for a better world since the early 20th century, for, that was when modern states emerged out of the ruins of the Second World War to rebuild the global system. For the countries in the West, that new global system was open, interdependent, and broadly connected. The pillar of that openness was free trade, which, by some estimates, increased global income by 24%, lifting 1 bilion people out of poverty (World Bank, 2023). However, a series of events have brought the continued survival of this crucial pillar of our world into question: power politics, populism, and techno-nationalism. Where is the future of international trade? Does the surge of trade barriers stem from the irrationality and short-sightedness of policymakers? Or does it rather reflect a self-destructive reality in which advanced stages of international trade no longer sustain sustainable development for the international community? This article adopts a political economy approach to revisit some of the classic economic theories of international trade, crystallized in David Friedman's notion of 'Iowa Car Crop.' My central argument is that the making of trade policies itself is highly political and conflictual, carrying distributive implications. The unequal distribution of benefits derived from international trade creates winners and losers within even just one country. Their divergent preferences, conditioned by their respective ability for collective action, ultimately determine the outcomes of trade policies.

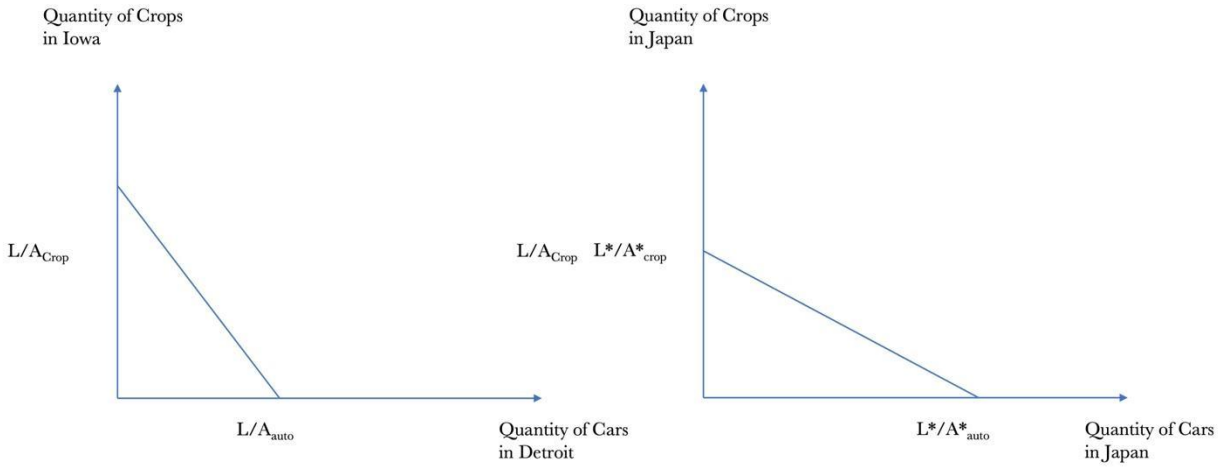
A Ricardian Analysis of the 'Iowa Car Crop'

The greatest benefit of free trade, according to Friedman, lies in its ability to "indirectly" produce more cars that Americans need outside America's borders. Simple as it may seem, this story of 'growing cars in Iowa' reflects crucial assumptions in David Ricardo's theory of comparative advantage, which has served to justify international trade.

First, it neglects the presence of opportunity costs. Given the existence of two different methods of car manufacturing, Friedman's emphasis on the 'allocation of producing a fleet of cars between Detroit and Iowa' (Landsburg, 1993), highlights the fact that even a world's leading economy like the United States has limited resources and energy. For each car Detroit produces, Iowa inevitably foregoes some opportunities to produce cars. The magnitude of opportunity costs depends on the labor input per unit of product, denoted as A_{auto} and

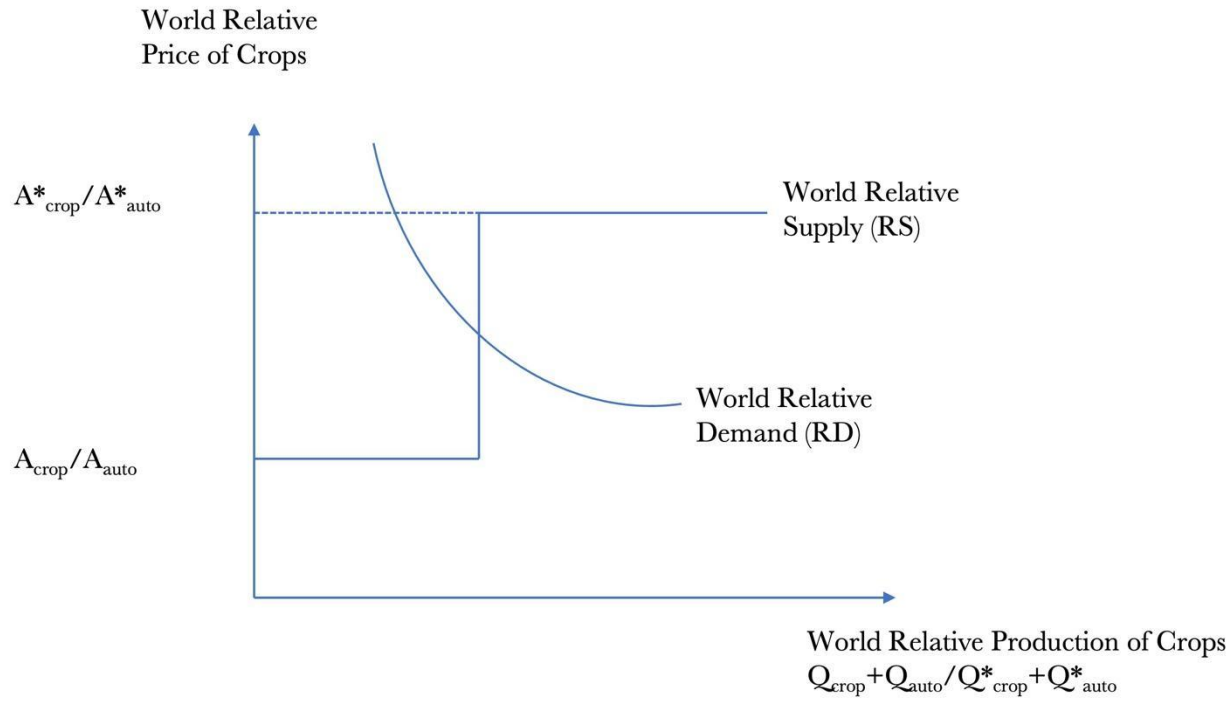
A_{crop}. As shown in Figure 1, the number of cars and crops that the closed, autarkic American economy produces can only fall under or on the production possibilities frontier.

Figure 1. Productivity Possibilities Frontiers in Autarkic U.S. and Japan



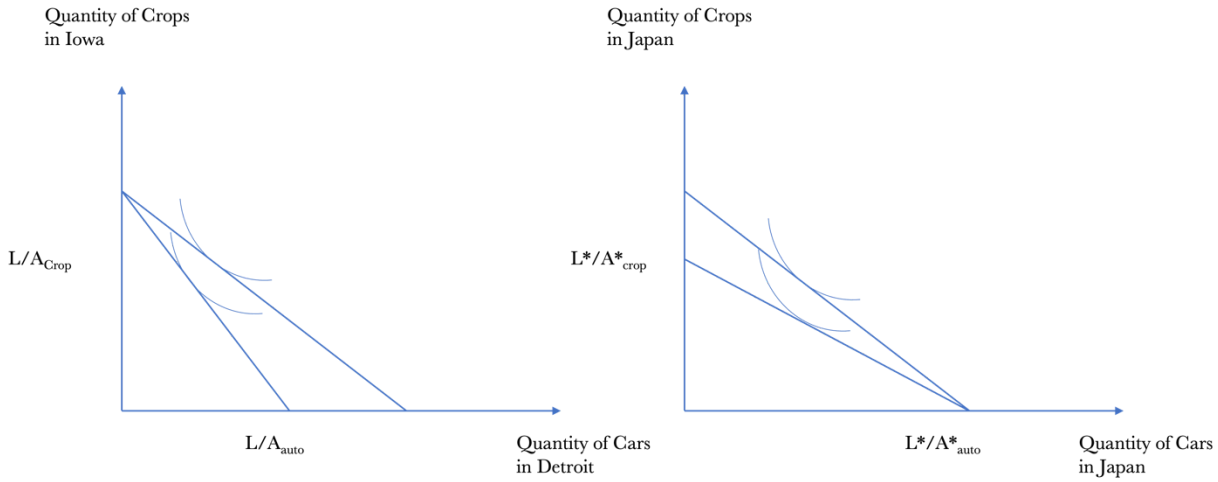
Second, the key to international trade is that nations have the incentive to produce and export products in which they have the highest production efficiency and import products in which their own production efficiency is relatively lower. In the case of 'Iowa Car Crops', when the relative price of crops (P_{crop}/P_{auto}) on the global market is higher than the domestic opportunity cost of producing crops (A_{crop}/A_{auto}) in the United States (Figure 2), Iowa's crop producers would be willing to load their harvest onto ships and sail them eastward into the Pacific Ocean.

Figure 2. Iowa Car Crop in Ricardo's International Trade



The gains from such trade primarily are twofold. On the one hand, the export of Iowa's crop confirms that $P_{crop}/P_{auto} > A_{crop}/A_{auto}$ which implies that through specialization, the United States can obtain a greater quantity of cars per unit of labor through international trade than it can produce on its own ($1/A_{crop}$ x $P_{crop}/P_{auto} > 1/A_{auto}$). Trade, therefore, proves to be a more efficient means of indirectly producing goods and services. On the other hand, the maximum utility that U.S. consumers can obtain in an autarkic setting is constrained by the country's production capacity. By contrast, trade expands the range of choices for consumers — both in the U.S. and Japan, thereby achieving higher economic utility (Figure 3).

Figure 3. Comparing Utility Function: Autarky vs. Free Trade



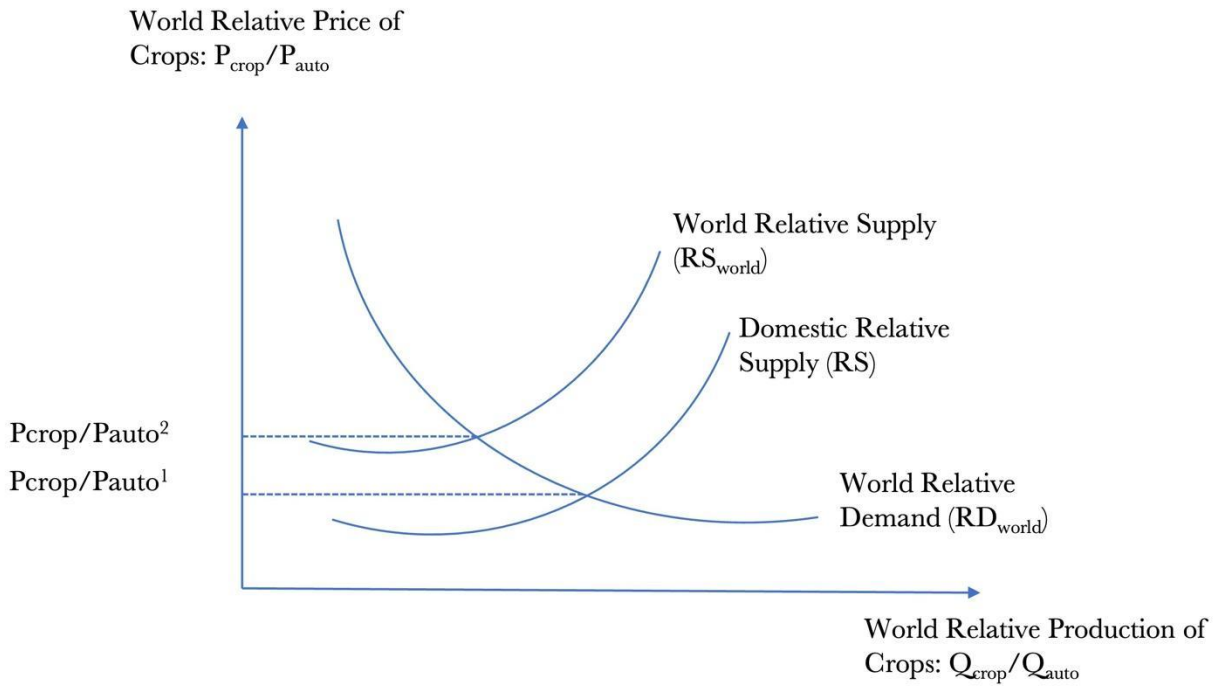
Iowa Car Crop overlooks how economic benefits are distributed among different social groups. In Ricardo's idealized trading nation, labor is the sole factor of production, and any worker can freely flow between the automobile Detroit and agricultural Iowa. In real life, production is, in fact, determined by multiple factors. The different combinations of these factors constitute differences in productivity. More importantly, these factors often appear to be 'immobile' between industries, making it difficult to change/relocate when facing the shock of international trade. Trade policy formulation precisely reveals and addresses such complexities.

Divergent Preferences for Free Trade

Two economic models, the Ricardo-Viner (R-V) model, and the Heckscher-Ohlin (H-O) model, have made remarkable contributions in explaining income distribution arising from international trade.

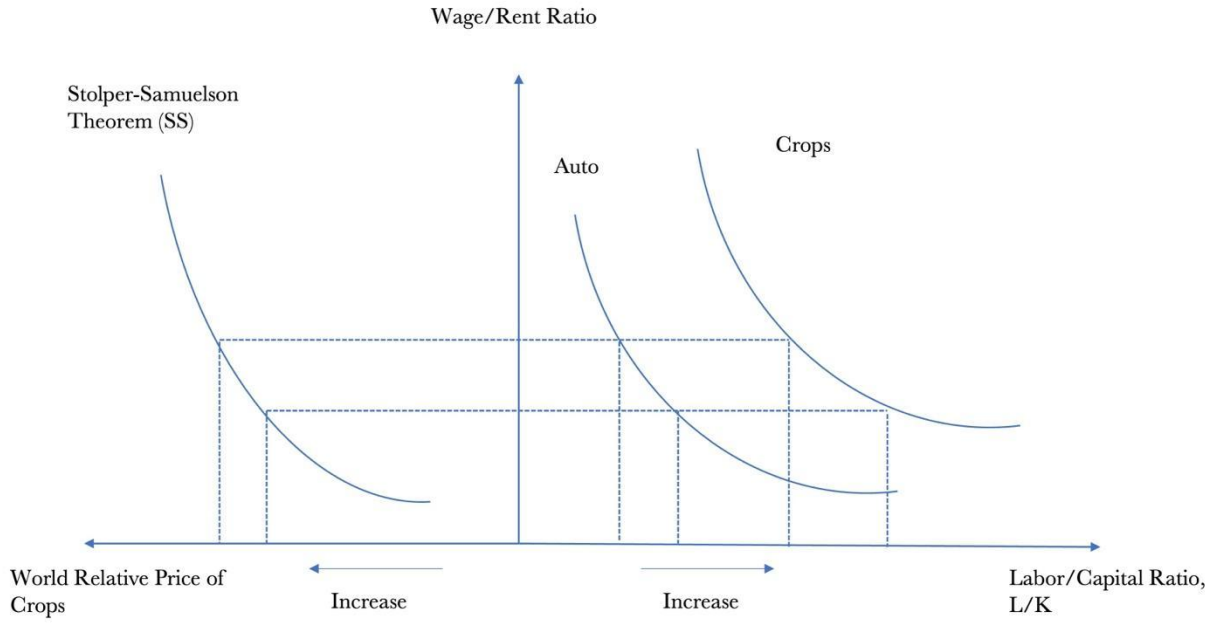
The R-V model posits that in addition to labor, capital and land are also essential factors of production required for production. However, unlike labor, which can flow freely as constructed by Ricardo, capital and land are characterized as fixed to produce specific goods. Assume that land is the specific factor for crop production in Iowa, while capital is exclusively used for automobile production in Detroit, Therefore, as Figure 4 suggests, when the world's relative price of crops is higher than the domestic opportunity cost of producing crop in the U.S., American economy begins specialize on producing and exporting agricultural products to the world. As an outcome, landowners gain more economic income. Importation from Toyota, by contrast, leads to a decrease in car prices, thus reducing profits for capital owners. As the owners of these fixed factors cannot change the factors they possess, at least in the short term, exposure to international trade results in winners and losers.

Figure 4. Iowa Car Crop and Economic Distribution in the Ricardo-Viner Model



This distributional 'unevenness' according to the H-O model, can cause even more long-lasting economic impacts. The H-O model suggests that, in a theoretical world with two countries, two factors, and two products, the differences in factor endowments become the driving force behind trade. A country exports products that intensively use its abundant factors and imports products that intensively use its scarce factors. As shown in Figure 5, when Iowa shipped its abundant harvest eastward and the relative price of crops increased in the global market, according to the Stolper-Samuelson theorem, it leads to an increase in the income of owners of the intensively used factor (capital in agricultural production). Conversely, the importation of cars accompanies a decrease in wages for owners of labor factors, particularly unskilled workers in Detroit.

Figure 5. Iowa Car Crop and Economic Distribution in the Heckscher-Ohlin Model



As expected, divergent opinions on trade policies will appear simultaneously within a country. A group of international political economy scholars has captured different patterns in attitudes toward free trade. On one hand, following the H-O model, Rogowski (1987) in his canonical paper finds that increased exposure to international trade leads to urban-rural conflicts based on different factor endowments (capital, labor, and land) in the country. More particularly, Scheve & Slaughter (2001) and Baker (2005) also find that the dominant factor type in employment explains support for trade barriers. On the other hand, the finding by Mayda & Rodrik (2005) is consistent with the R-V model, arguing that individuals employed in import-competing industries are more likely to support trade restrictions compared to individuals in non-traded sectors. This is especially significant, according to Hiscox (2001), when factor mobility is low in an economy, leading to narrow industry-based coalitions.

Moreover, preferences for free trade policies are influenced by a range of complex factors. For example, based on the new-new trade theory, Baccini et al. (2017) and Kim (2017) argue that the significant divergence in attitudes towards free trade occurs not at the individual level but at the firm level. Free trade favors only the most internationally competitive companies. Therefore, only the largest and most productive firms are more likely to support free trade. At the individual level, non-economic determinants also play a significant role in explaining

the variation in preferences over trade. Factors such as a person's position in the economy (Fordham and Kleinberg, 2012), degrees of neighborhood attachment and nationalism/patriotism (Mayda & Rodrik, 2005), exposure to economic ideas (Hainmueller and Hiscox, 2006), and perceptions of the overall U.S. economy (Mansfield and Mutz, 2009) have been reported as crucial factors that shape individual trade policy preferences.

Collective Action and Trade Policymaking

Due to the existence of these diverging preferences, I argue that trade policy is no longer a manifestation of a solely rational, and economic logic in the pursuit of maximizing human well-being. Instead, it has become a battlefield for different interest groups to obtain the benefit or prevent the harm that international trade may bring. However, what truly connects these interests to a nation's final decision to embrace or reject trade lies in their ability and extent to vote and mobilize coalitions.

For many studies in international political economy, the policy-making process of free trade resembles Olson's theory of the 'collective action problem (Olson, 1965)'. The essential challenge for the state to favor free trade is the challenge of weighing the good of the many, often served by relatively free trade, against the interests of the powerful few, who may benefit from trade restrictions (Alt & Gilligan, 1994). In American history, the infamous Hawley-Smoot Tariff Act of 1930, which raised import duties to protect American businesses and farmers and added significant strain to the international economic climate during the Great Depression, exemplified the political prowess of a group of influential, concentrated trade protectionists. Even today, powerful interest groups, from Monsanto to the sugar industry, continue to influence the formulation of trade protection measures in the country. On the other hand, the beneficiaries of free trade, typically the vast majority of consumers, often face widely distributed benefits and harms resulting from trade protection. Therefore, many of them are willing to free-ride and not actively engage in social mobilization.

However, it is still comforting to know that the abundance of protectionist interests and have not yet brought the world back to a sub-optimal mercantilist era. Despite constant pressure on governments to close markets, Democracies have supported and continue to support free-trade policies (Bailey, Goldstein, and Weingast, 1997). The forces beneath this deepening globalization rely upon domestic political institutions that act as mechanisms that aggregate interests and structure the bargaining of competing societal groups (Lake, 2009). In the U.S., the establishment of the Reciprocal Trade Agreements Act in 1934 mandated reciprocal tariff

reductions. It also authorized trade agreements based on a simple majority vote instead of a supermajority, thus consolidating domestic coalitional building in support of free trade. Internationally, the democratization of political systems in many developing countries reduces governments' ability to use trade barriers as a strategy for gaining political support (Milner and Kubota, 2005; Devashish, Thomakos and Ulubasoglu, 2002). Moreover, the triumph of global liberalization and marketization relies on strategic moves on the international stage. Framing intellectual property as 'pro-free' trade, according to Sell (2003), enabled 12 CEOs of American multinational corporations to establish the TRIPS Agreement within the WTO regime. Davis (2004) also shows the effectiveness of cross-sectoral issue linkage between agricultural and industrial issues in facilitating America's negotiation with Japan and Europe, subsequently encouraging agricultural liberalization worldwide.

Conclusion

When we employ political economy to compare David Friedman's optimistic vision in the Iowa Car Crop with the grim reality of the retreat of globalization today, here is the lesson we can learn: while free trade can yield significant welfare gains, the political and policy conditions for free trade are neither inevitable nor irreversible. Deploying the concept of 'embedded liberalism,' Polanyi (1944), Ruggie (1982) and Rodrik (2010) have long emphasized that economic globalization is not inherently given; rather, it relies on the construction of the world liberal order led by the American hegemony in the post-war period. From the WTO and IMF to the World Bank and ISO, the establishment and operation of various international organizations have built a foundation for global trade, investment, and the flow of technology. However, today, the withdrawal of the United States from its leadership role in the past few years and the rise of new (super)powers like China have undermined the international institutions and political environment that free trade relies upon. Additionally, the advent of disruptive technologies is rapidly transforming existing models of global economic growth and distribution, bringing more uncertainty to the international trade regime. In this sense, finding innovative ways to strengthen the resilience of the international liberal order is crucial to the continued prosperity of a world order we have known for half a century.

References

Alt, James E., & Michael Gilligan. 1994. “The Political Economy of Trading States: Factor Specificity, Collective Action Problems, and Domestic Political Institutions.” *Journal of Political Philosophy* 2(2): 165-192.

Baccini, Leonardo, Pinto, Pablo. M. and Stephen Weymouth. (2017) 'The Distributional Consequences of Preferential Trade Liberalization: Firm-Level Evidence', *International Organization*, 71(2), pp. 373-395.

Bailey, Michael A., Judith Goldstein, and Barry R. Weingast. 1997. 'The Institutional Roots of American Trade Policy: Politics, Coalitions, and International Trade.' *World Politics* 49, no. 3 (April): 309–38.

Davis, Christina. L. 2004. 'International institutions and issue linkage: Building support for agricultural trade liberalization', *American Political Science Review*, 98(1), pp.153-169.

Fordham, Benjamin O., & Katja B. Kleinberg. 2012. 'How Can Economic Interests Influence Support for Free Trade?' *International Organization* 66(2): 311-328.

Hainmueller, Jens and Michael J. Hiscox. 2006. 'Learning to Love Globalization: Education and Individual Attitudes Toward International Trade,' *International Organization* 60 (Spring): 469–98.

Hiscox, Michael J. 1999. 'The Magic Bullet? The RTAA, Institutional Reform, and Trade Liberalization.' *International Organization* 53:4 (Autumn): 669–98.

Hiscox, Michael J. 2002. 'Commerce, Coalitions, and Factor Mobility: Evidence from Congressional Votes on Trade Legislation.' *American Political Science Review* 96, no. 3 (September): 593–608.

Kim, In Song. (2017) 'Political Cleavages within Industry: Firm-level Lobbying for Trade Liberalization', *American Political Science Review* (2017) 111, 1, 1–20.

Lake, David. 2009. 'Open Economy Politics: A Critical Review.' *The Review of International Organizations* 4(3): 219-44.

Landsburg, Steven. 1993. *The Armchair Economist: Economics and Everyday Life Revised and Updated for the 21st Century*. New York: Free Press.

Mansfield, Edward D., & Diana C. Mutz. 2009. 'Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety.' *International Organization* 63(3): 425-457.

Mayda, Anna, and Dani Rodrik. 2005. 'Why Are Some People (and Countries) More Protectionist Than Others?' *European Economic Review* 49(6): 1393-1430.

Mitra, Devashish, Dimitrios Thomakos, & Mehmet Ulubasoglu. 2002. 'Protection for Sale in A Developing Country: Democracy vs. Dictatorship.' *The Review of Economics and Statistics* 84(3): 497-508.

Milner, Helen V. and Keiko Kubota. 2005. 'Why the Move to Free Trade? Democracy and Trade Policy in the Developing Countries.' *International Organization* 59, no. 1 (Winter 2005): 107–43.

Olson, Mancur Jr. 1965. *The Logic of Collective Action: Public Good and the Theory of Groups*. Cambridge, MA: Harvard University Press.

Polanyi, K. (2001). *The great transformation: The political and economic origins of our time*. Boston: Beacon Press.

Rodrik, D. (2010). The globalization paradox : democracy and the future of the world economy. New York: W.W. Norton & Company.

Rogowski, Ronald. 1987. 'Political Cleavages and Changing Exposure to International Trade.' *American Political Science Review* 81, no. 4 (December): 1121–37.

Ruggie, J.G. (1982). International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order. International Organization, [online] 36(02), pp.379–415. doi:https://doi.org/10.1017/s0020818300018993.

Scheve, Kenneth and Matthew Slaughter. 2001. 'What Determines Individual Trade-Policy Preferences?' *Journal of International Economics* 54, no. 2 (August): 267–92.

Sell, Susan.K. 2003. *Private Power, Public Law: The Globalization of Intellectual Property Rights.* Cambridge, UK: Cambridge University Press.

World Bank. 2023. 'Trade Overview'. https://www.worldbank.org/en/topic/trade/overview (Accessed: Jul 9, 2023).