EXAMINING THE INTERNATIONAL POLITICAL ECONOMY OF THE FIRM: THE DYNAMICS OF STATE AGGRESSION IN GEORGIAN-RUSSIAN TRADE, 1996-2014

By
James Janison

Primary Thesis Advisor: Professor John Friedman
Second Reader: Professor Maxim Boycko
Honors Seminar Instructor: Professor Claudia Elliott
Senior Thesis

Submitted in partial fulfillment of the requirements for the Degree of Bachelor of Arts with Honors in International Relations
Brown University

PROVIDENCE, RI

MAY 2016

This thesis by James Janison is accepted in its present form
by the International Relations Program as partial fulfillment
of the requirements for the degree of Bachelor of Arts with Honors.

Date_____ _____

Dr. John Friedman, Thesis Advisor

Date_____ _____

Dr. Maxim Boycko, Second Reader

Approved by the International Relations Program

Date_____ _____

Dr. Claudia Elliott,
Director/Associate Director,
International Relations Program

ABSTRACT

How does state aggression influence a firm's export decision? Existing theory of interstate peace as a condition for trade argues that state aggression –state acts of hostile coercion such as invasion or embargo– prompts uncertainty among market actors, one result of which is export deterrence. Moving beyond this general insight, I posit a more nuanced political economy of the firm in which a fluid dynamic between idiosyncratic political outlook and market factors determines a firm's proclivity to avoid risk, shaping its export decisions under state aggression. My framework adapts the concept of risk-aversion as posited by behavioral economics, integrating risk consideration with other export factors from international trade theory. Taking the 2006 Russian embargo on Georgian agricultural goods as a critical juncture of state aggression, this framework incorporates both process-tracing of firm-level interview data and differences-in-differences economic modeling to understand how Georgian firms altered their export practices in response to state aggression. This mixed methods approach allows future research to systematize dynamics between firm-level political outlook and market factors, which purely quantitative trade approaches cannot do. Because Georgia is not unique in that Russia targets its economy for political leverage, this thesis also has broader implications for Post-Soviet political economy.

Keywords: International Trade, Georgia, Embargo, Post-Soviet, Hegemonic Stability Theory, Mixed Methods Analysis

ACKNOWLEDGMENTS

There are too many people to thank for their support in the writing of this thesis. First come friends and family, who have helped keep me on track even through the most difficult and grinding periods.

I must thank Dr. John Friedman, who agreed to advise me on such short notice and has been nothing short of a fountain of insight, knowledge, patience and feedback even with late-night and weekend emails. The same must be said for Dr. Maxim Boycko, whose perspective has been an absolute pleasure to hear on Georgian and Russian economics and politics. And lastly, but certainly not least, I am grateful for the endless support, high standards, and brilliant guidance of Dr. Claudia Elliott, without whom I would not have learned half as much as I have this year.

The Georgian Foundation for Strategic and International Studies (GFSIS) deserves my gratitude for providing the opportunity to intern in Tbilisi the summer before writing this thesis, especially Tata Tserteli, who was an amazing and welcoming resource for me amid my fieldwork. The same should be said for Dr. Adam Pellillo, Dr. Katherine Torosyan and the other wonderful scholars affiliated with the International School of Economics in Tbilisi (ISET), who helped me shape my research topic and furthered my excitement about studying the Georgian economy.

It then goes without saying that I am deeply indebted to the Watson Institute for its generous grant money that made my research possible. I must also thank the amazing IPE scholars at Brown who have gotten me down this road to begin with: Namely, Dr. Nick Ziegler and Dr. Walter Molano, who have made me feel the importance of political economy in every aspect of my academic passions.

A final thanks is in order to Bob Dylan & the Band, whose music and lyrics propelled me forward typing and re-typing chapters late into the night.

TABLES

FIGURES

CONTENTS

CHAPTER ONE: INTRODUCTION

Exporting is an interesting process because it tells us about the underlying conditions of a country's competitive industries. In some places, exporting is irregular: Among the 5.5 million firms, or companies, operating in the United States in 2000, only about 4% exported at all.[1] Similarly, in the European Union, only 4.5% exported at all in 2011, which drops to 2.7% when excluding other EU countries as export destinations.[2] On the other hand, in other regions, firms export more often: In Japan, for instance, 25% of small and medium enterprises (firms with 50-300 employees) export while 60% of large enterprises (over 300 employees) export.[3] According to common wisdom, market factors that propel exports include the size of foreign demand[4] and the relative productivity of a

[1] Andrew B. Bernard et al., "Firms in International Trade," *The Journal of Economic Perspectives* 21, no. 3 (Summer 2007): 105–30, doi:http://dx.doi.org.revproxy.brown.edu/10.1257/jep.21.3.105, 108

[2] Sónia Araújo and Eric Gonnard, "Selling to Foreign Markets: a Portrait of OECD Exporters" OECD Statistics Brief, February 2011, No. 16, http://www.oecd.org/std/47014723.pdf, 1

[3] "With a Little Help from My Bank: Japanese SMEs' Export Decision," *VoxEU.org*, accessed December 9, 2015, http://www.voxeu.org/article/little-help-my-bank-japanese-smes-export-decision

[4] Jan Tinbergen, "Shaping the World Economy; Suggestions for an International Economic Policy," January 1, 1962, http://repub.eur.nl/pub/16826; James E. Anderson and Eric van Wincoop, "Gravity with Gravitas: A Solution to the Border Puzzle," Working Paper (National Bureau of Economic Research, January 2001), http://www.nber.org/papers/w8079; Pentti Poyhonen, "A Tentative Model for the Volume of Trade between Countries," (*Weltwirtschaftliches Archiv*, 1963), 90, 93-100.

given firm, among other factors.[5] Keeping the above factors in mind, what are the non-market conditions under which international trade occurs, i.e., when firms export?

Some scholars argue that interstate peace[6] is an important condition under which firms export. According to Joseph Nye and others, interstate peace is the absence of interstate conflicts such as acts of war, sanctions, or other attempt to coerce another state.[7] Proponents of this view argue that global peace between the end of World War Two and the 1960s encouraged exports by providing stable international markets[8] and guaranteed property rights.[9] By implication, aggressive states deter exports by unpredictably imposing sanctions, closing borders, and launching military campaigns that undermine stability.[10]

And yet, there are many cases in which firms export despite state aggression or hostility. For instance, Taiwanese firms exported $16.8 billion to China in 1999, despite a long-standing history of interstate hostility between the two.[11] In 2014, despite the Russian-Ukrainian war, Russia received $8.8 billion of Ukrainian exports, making it Ukraine's

---

[5] Kenneth J. Arrow, "The Economic Implications of Learning by Doing," *The Review of Economic Studies* 29, no. 3 (June 1, 1962): 155–73, doi:10.2307/2295952, 157

[6] Stephen D. Krasner, "State Power and the Structure of International Trade," *World Politics* 28, no. 03 (April 1976): 317–47, doi:10.2307/2009974, 6; Stephen Gill, "Hegemony, Consensus and Trilateralism," *Review of International Studies* 12, no. 3 (July 1, 1986): 205–22; Kendall W. Stiles, "The Ambivalent Hegemon: Explaining the 'Lost Decade' in Multilateral Trade Talks, 1948-1958," *Review of International Political Economy* 2, no. 1 (January 1, 1995): 1–26, 1; Robert Gilpin, *The Challenge of Global Capitalism : The World Economy in the 21st Century* (Princeton, NJ, n.d.) 13-14; Helen V. Milner, "International Political Economy: Beyond Hegemonic Stability," *Foreign Policy*, no. 110 (1998): 112–23, doi:10.2307/1149280; Krasner, "State Power and the Structure of International Trade"

[7] John Vincent Nye, "Revisionist Tariff History and the Theory of Hegemonic Stability," *Politics & Society* 19, no. 2 (June 1, 1991): 209–32, doi:10.1177/003232929101900204, 212

[8] Gilpin, *The Challenge of Global Capitalism*.

[9] Charles P. Kindleberger, "International Public Goods without International Government," *The American Economic Review* 76, no. 1 (1986): 1–13

[10] Charles Poor Kindleberger, *The World in Depression, 1929-1939* (Berkeley, n.d.)

[11] Greg Mastel, "China, Taiwan, and the World Trade Organization," *The Washington Quarterly* 24, no. 3 (2001): 45–56, 47

largest trade partner.[12] China and Japan may have territorial disputes, but Japanese exporters such as Toyota still rely upon Chinese consumption of their goods.[13] Although existing knowledge argues that interstate peace is a condition for exports, firms sometimes export despite acts of and tendencies toward state aggression.

This thesis answers the question: How does state aggression influence a firm's export decision? To answer this question, I analyze how firms in the Republic of Georgia account for both market factors and Russian state aggression in their decisions to export to Russia between 1996 and 2014. By arguing that state aggression deters firms from exporting, common wisdom does not fully explain how non-market factors such as state aggression only sometimes impact firms' export decisions. To provide additional nuance into this gap, I argue that a fluid dynamic between market factors and the unique political outlook of individual firms determines how each firm decides to export when confronted with state aggression. By political outlook, I mean an idiosyncratic opinion held by a firm in which they absorb information about political factors and infer market outcomes from them as a result. Political factors include variables such as interstate violence, acts of state aggression, and legacies of interstate hostility. I define state aggression as an application of national power, following Albert Hirschman's definition of national power as the "power of coercion which one nation may bring to bear upon other nations, the method of coercion being military or 'peaceful.'"[14] Incidences of state aggression, as such, include

[12] "Russia Is Still Ukraine's Largest Trading Partner," *Forbes*, accessed November 26, 2015, http://www.forbes.com/sites/markadomanis/2015/01/05/russia-is-still-ukraines-largest-trading-partner/

[13] Michael Schuman, "China and Japan May Not Like Each Other, but They Need Each Other," *Time*, accessed December 9, 2015, http://world.time.com/2013/12/01/china-and-japan-may-not-like-each-other-but-they-need-each-other/.

[14] Albert Hirschman, *National Power and the Structure of Foreign Trade*, University of California Press (Berkeley and Los Angeles, 1969), 13

trade embargoes, blockades, military campaigns, assassinations and debilitating tariff barriers.[15]

SIGNIFICANCE

This study has both conceptual and practical significance. There are three schools of conceptual literature that are relevant to this study. The first, Hegemonic Stability Theory, analyzes the political conditions necessary for exports. The second, International Trade Theory, analyzes the factors that impel countries and firms to export. The third, Behavioral Economics, examines how the psychology of economic actors, such as investors, affects market outcomes, e.g. stock prices and trades. This thesis is also practically significant for two reasons. First, it sheds light on our understanding of Eurasian regional studies. Second, understanding export behavior of firms helps policymakers understand how to grow domestic businesses.

CONCEPTUAL SIGNIFICANCE

The first relevant body in trade literature, Hegemonic Stability Theory, emphasizes political stability as a necessary condition for international trade. There are two iterations of this theory. The first, which I call "HST1," argues that a global hegemon, or a state that has a recognized international ability to enforce its desired policy outcome,[16] compels other states to adopt free trade policies and other legislative initiatives to foster trade. Without a hegemon, states pursue protectionist policies such as high tariff barriers to protect their

[15] Hirschman, 16

[16] "Hegemony" *Oxford Reference Online,* the Concise Oxford Dictionary of Politics, Third Edition, Web. 1 November, 2015

own exports and domestic interests at the expense of other countries' welfare.[17] The second iteration, which I call "HST2," argues that a global hegemon also provides firms with international peace and guaranteed property rights, which makes them confident that their international sales transactions are safe.[18] The absence of a global hegemon gives rise to border conflicts[19] and state aggression[20] that make firms worry about transactional risks such as the possibility that a foreign state will embargo their goods,[21] according to HST2. By arguing that state aggression is necessarily a deterrent condition for trade, it does not address firm-level factors that influence how they think about state aggression. This theory perceives firms' response to state aggression to be uniform; if state aggression makes trade to the aggressive state less appealing for one firm, it must also deter all other firms equally.

There are two subsections of the International Trade literature, Gravitationalism and Firm-Level Analysis. According to Gravitationalism, countries trade with one another in higher volume when they are closer to one another geographically[22] and when they have

[17] Charles P. Kindleberger, "Dominance and Leadership in the International Economy: Exploitation, Public Goods, and Free Rides," *International Studies Quarterly* 25, no. 2 (June 1, 1981): 242–54, doi:10.2307/2600355; Gilpin, *The Challenge of Global Capitalism*

[18] Beth V. Yarbrough, *Cooperation and Governance in International Trade : The Strategic Organizational Approach* (Princeton, N.J., n.d.)

[19] Evgeny Polyakov, *Changing Trade Patterns after Conflict Resolution in the South Caucasus* (World Bank Publications, 2001), 5

[20] Gilpin, 8

[21] Peter A. G. van Bergeijk, *Economic Diplomacy, Trade, and Commercial Policy : Positive and Negative Sanctions in a New World Order* (Aldershot, England Brookfield, Vt., USA, n.d.), 172

[22] Alexander V. Dye, "Trade Barriers and Their Effects on the Consumer," *Annals of the American Academy of Political and Social Science* 198 (July 1, 1938): 22–26; John Vincent Nye, "Revisionist Tariff History and the Theory of Hegemonic Stability," *Politics & Society* 19, no. 2 (June 1, 1991): 209–32, doi:10.1177/003232929101900204

larger economic "masses,"[23] measured by Gross Domestic Product (GDP).[24] Some Gravitationalists also argue that colonial legacies[25] increase two countries' trade, where a colonial legacy refers to cultural[26] or linguistic[27] commonalities between two countries as the result of one having once been the colony of another. According to Firm-Level Analysis, firm productivity[28] and consumer demand for product variety[29] influence whether a firm decides to export. This literature provides market conditions that induce exports but does not consider how acts of state aggression might influence export decisions.

The third body of literature, Behavioral Economics, shows that market participants, such as investors, can misperceive or misunderstand how a non-market factor will impact that market.[30] In finance, for example, investors can be irrational, i.e., rely upon heuristics,

---

[23] Tinbergen, "Shaping the World Economy; Suggestions for an International Economic Policy"; Anderson and Wincoop, "Gravity with Gravitas."

[24] James E. Anderson and Eric Van Wincoop, "Gravity And Gravitas: A Solution To The Border Puzzle," *American Economic Review* 93, (2003): 170-192; Pentti Poyhonen, "A Tentative Model for the Volume of Trade between Countries"; Jonathan Eaton and Samuel Kortum, "Technology, Geography, and Trade," *Econometrica* 70, no. 5 (September 1, 2002): 1741–79

[25] Simeon Djankov and Caroline L. Freund, "Disintegration and Trade Flows: Evidence from the Former Soviet Union," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, November 30, 1999), http://papers.ssrn.com/abstract=630748.

[26] Peter A. G. van Bergeijk and Steven Brakman, *The Gravity Model in International Trade: Advances and Applications* (Cambridge University Press, 2010), 234

[27] "Southern African Economic Integration: Evidence from an Augmented Gravity Model," IZA Discussion Paper (Institute for the Study of Labor (IZA), 2009), https://ideas.repec.org/p/iza/izadps/dp4316.html

[28]Diego Comin, "Total Factor Productivity," in *The New Palgrave Dictionary of Economics*, ed. Steven N. Durlauf and Lawrence E. Blume, 2nd ed. (Basingstoke: Nature Publishing Group, 2008), 329–31, http://www.dictionaryofeconomics.com/article?id=pde2008_T000081; Krugman (2008), 335; Arrow, 157;

[29] Paul Krugman, "The Increasing Returns Revolution in Trade and Geography" Prize Lecture December 8, 2008, available at http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2008/krugman_lecture.pdf, accessed 28 November, 2015

[30] Steven Pressman, "Kahneman, Tversky, and Institutional Economics," *Journal of Economic Issues* 40, no. 2 (June 2006): 501–6, 501; Kent Daniel, David Hirshleifer, and Avanidhar Subrahmanyam, "Investor Psychology and Security Market under- and Overreactions," *The Journal of Finance* 53, no. 6 (1998): 1839–85

or rules-of thumb,[31] that guide them toward incorrect predictions about financial market fluctuations. Most crucial to this study is risk-aversion: Market actors can overreact or misunderstand how interstate conflict affects stock prices, generally being prone to avoiding risk.[32] An investor that overreacts, for instance, gathers a piece of information relevant to the market and assumes it will have a greater effect on the market than it actually does.[33] An analysis of how similar actor-level mental processes of avoiding risk affect export decisions does not exist:[34] Namely, a categorization of different exporters according to behavioral patterns toward avoiding risk is not yet present in the literature. As such, we have no way of knowing whether some firm exhibit different heuristics or ways of rationalizing a given market condition from other firms when confronted with state aggression, a process that very well might partially be a functions of market factors. Without accounting for different processes by which different types of firms account for state aggression in their export practices, our existing theories of trade are left with the general but incomplete HST2, that interstate peace is *necessarily* an export condition. This thesis contributes to the political economy of international trade by creating a political economy of the firm that categorizes firms according to risk perception and market factors to address the gaps in the HST2 argument.

---

[31] Konstantinos V. Katsikopoulos, "Psychological Heuristics for Making Inferences: Definition, Performance, and the Emerging Theory and Practice," *Decision Analysis* 8, no. 1 (March 2011): 10–29, doi:10.1287/deca.1100.0191, 10

[32] George Bittlingmayer, "Output, Stock Volatility, and Political Uncertainty in a Natural Experiment: Germany, 1880-1940," *The Journal of Finance* 53, no. 6 (1998): 2243–57

[33] Robert Durand et al., "Overconfidence, Overreaction and Personality," *Review of Behavioral Finance* 5, no. 2 (2013): 104–33, doi:http://dx.doi.org/10.1108/RBF-07-2012-0011, 116

[34] Dipak K. Gupta, "Political Psychology and Neoclassical Theory of Economic Growth: The Possibilities and Implications of an Attempted Resynthesis," *Political Psychology* 8, no. 4 (December 1, 1987): 654

PRACTICAL SIGNIFICANCE

This study is practically significant for two reasons. First, it enhances our knowledge of Eurasian regional studies. Second, it provides a tool for policymakers to understand how to foster economic growth in aggression-targeted countries. Especially in Eastern Europe, trade is both a source of economic growth and contestation between states.[35] Georgia, Moldova and Ukraine have signed Association Agreements with the European Union by time of writing in 2015. One provision of these Association Agreements is the creation of a Deep and Comprehensive Free Trade Area (DCFTA) between the European Union and the signatory country, which eliminates tariff barriers and speeds the transit of goods from Associated countries to the European market, among other reforms.[36] In response, Russia has either invaded these countries or imposed embargoes on them. After Russia imposed a ban on Moldovan wine effected September 2014, Moldovan winemakers lost 29% of total exports.[37] Not only does this hurt Moldovan firms, it also presents worry for how Moldovan winemakers will provide healthcare and other benefits coverage for their employees.[38] The current war in Ukraine, further, shows the ways that state aggression in the region leads to the immiseration of affected people.[39]

---

[35] "Why Has Russia Banned Moldovan Wine?," *The Economist*, November 25, 2013, http://www.economist.com/blogs/economist-explains/2013/11/economist-explains-18; Suvi Kansikas, "The Eurasian Economic Union, Russia's Integration Policy And The EU Challenge," *Journal on Baltic Security* 1, no. 1 (2015): 108

[36] European Commission, "Agreements." Available at http://ec.europa.eu/trade/policy/countries-and-regions/agreements/

[37] "Why Has Russia Banned Moldovan Wine?"

[38] Christian Oliver, "Moldovan Winemakers Struggle as Russia Vies with EU for Influence," *Financial Times*, April 8, 2014, http://www.ft.com/intl/cms/s/0/53393338-bef0-11e3-8683-00144feabdc0.html#axzz3soJVwaYb

[39] "Ukraine's Economic Pressures," accessed December 12, 2015, http://www.ecfr.eu/article/commentary_ukraines_economic_pressures3008

Understanding the ways that state aggression impacts export decisions has ramifications for understanding the economic welfare of post-Soviet Eastern Europe.

This thesis also helps policymakers in aggression-targeted countries understand how to help grow local businesses. In the United States, the number of firms that export reached a record high of almost 305,000 in 2012.[40] In this same time period, exports in the United States contributed to nearly 30% of U.S. Gross Domestic Product (GDP) growth between 2009 and 2014.[41] Especially for poor countries, that is, countries with a Gross National Income per capita below $1045,[42] the income[43] and jobs[44] that exporting firms generate is one way to grow domestic firms and bring more wealth into the country. As such, my framework model urges policymakers to craft relationships with domestic firms that assuage their concerns over exporting to foreign state aggression or other political factors. Targeting firm perceptions of state aggression, then, can help incentivize exports and strengthen growth by assuaging producer fears.

[40] United States Dept. of Commerce. *The Role of Exports in the United States Economy*. Available at http://www.trade.gov/neinext/role-of-exports-in-us-economy.pdf Accessed November 25, 2015, 2

[41] Ibid, 2

[42] "Updated Income Classifications | Data," July 3, 2014, http://data.worldbank.org/news/2015-country-classifications.

[43] "Is China's Growth Miracle Over?," *Economic Research*, accessed November 9, 2015, http://www.frbsf.org/economic-research/publications/economic-letter/2015/august/china-economic-growth-miracle-slowdown/, Katsuroh Sakoh, "Japanese Economic Success," *Cato Journal*, September 4, no. 2 (September 1984): 538, http://www.cato.org/pubs/journal/cj4n2/cj4n2-8.pdf (accessed September 25th, 2015)

[44] "Strengthening Competitiveness Can Boost Exports and Help Transform Ethiopia's Economy," Text/HTML, *World Bank*, accessed December 9, 2015, http://www.worldbank.org/en/news/press-release/2014/07/22/strengthening-competitiveness-can-boost-exports-and-help-transform-ethiopia-economy.

RESEARCH DESIGN

CASE METHOD AND SELECTION

A case study is necessary for two reasons. First, a case study allows me to observe within-case variance in the dependent variable, export decisions, and the key independent variable, state aggression,[45] over time. Particularly, a case study allows me to analyze the before and after effects of the imposition of an embargo in a particular historic relationship between two countries. I use such an embargo as a measure of state aggression. Second, my inquiry is primarily concerned with *how* the processes and mechanisms that might link state aggression to export decisions, which is most observable with a case-study method.[46]

Some might argue that a large-*n* approach, or a statistical analysis of a large volume of cases,[47] might be a better way to determine the impact of aggressive practices on trade. Such a process includes aggregating global trade data and analyzing the influence that embargoes, wars, and other aspects of conflict have had on trade volume over a large period of time and across a variety of countries. While this approach could help make a large-scale observation that state aggression affects or does not affect trade, it is not sufficient. We need to know *how* state aggression affects export decisions step-by-step in order to understand the full extent of its influence. A large-*n* method could present useful preliminary results by affirming or denying the general importance of state aggression for trade. Even so, that approach does not adequately describe the nuanced processes that take place on a case-by-case basis and therefore not answer my research question.

---

[45] Robert K. Yin, *Case Study Research : Design and Methods* (Beverly Hills, Calif, n.d.), 7; Stephen Van Evera, *Guide to Methods for Students of Political Science* (Ithaca, NY: Cornell University Press, 1997), 82

[46] Ibid, 54

[47] Van Evera, 23

The selected case needs to demonstrate the following five factors. In order to examine how state aggression affects export decisions, I first need an aggressor state, that is, a state that has performed an act of aggression, and a target state. Second, the act of aggression needs to happen prior to firms' decisions in the target country. Third, the decision of the firms in the target country needs to have the possibility of being based on this politically motivated aggression. There are a variety of ways for a state to be aggressive, such as: Bombing campaigns, full-scale land invasion, embargoes on trade, and increased diplomatic and economic presence in the target country's geographic area. Fourth, I need these acts of aggression to be commonly known among exporters in order to see how distinct firm rationales might lead to distinct export decision outcomes. And finally, substantial trade volume between the two countries prior to the embargo and the goods upon which it was imposed is also a necessary characteristic for the case for two reasons. First, it provides a significant volume of data over which I can observe change. Second, high volumes of trade imply that there is large demand for products from one country to the other, allowing me to analyze the influence of market factors, state aggression and perceptions of risk on trade.

Case Selection

The Republic of Georgia, due to its economic and political history with Russia, meets the criteria of a good case in which to analyze the economic and political variables affecting export decisions under state aggression. Russia, reestablishing its political and economic presence within Eurasian space, imposed an embargo[48] on Georgian wines and

[48] "Russia receives first batch of Georgian wine after Seven-Year Break" *Radio Free Europe Radio Liberty*, June 15, 2007; Davit Narmania, "Economic Policy in Georgia: Liberalization, Economic Crisis and Changes," *Turkish Policy*

agricultural products, invaded the country, and was a critical export market for Georgian goods. Analysts understand this pattern of aggression as part of a Russian process to keep Georgia within its sphere of influence.[49] This demonstrates two key features of an ideal case for this research question: Attempts at dominion and market intertwinement. The embargo, which began in 2006 and ended in 2012, is particularly important because it allows me to observe change in the independent variable, state aggression, with a direct effect on Georgian exports. Further, the market shutdown was public knowledge, allowing me to analyze how firms perceived the riskiness of the market over time.

The embargo as such embodies a critical juncture of state aggression. I adapt Collier and Collier's definition of a critical juncture as a "period of significant change… which is hypothesized to produce distinct legacies."[50] Collier and Collier's definition here analyzes change across cases, within a given study. The primary goal of analyzing change across cases is to isolate the independent, moving variable(s) that drive(s) different outcomes for the dependent variable. However, I adapt their definition of a critical juncture to indicate significant change *within* a specific case: The embargo prompts responses that vary across actors, firms, rather than across cases. This variance across firms can also allow me to analyze cross-industry trends: The embargo was applied only in the agricultural sector, allowing me to see how firms respond to state aggression when they are directly targeted versus when they are not. Such a critical juncture is feasible because my framework takes

---

Quarterly 8, no. 2 (2009), http://esiweb.org/pdf/esi_turkey_tpq_vol8_no2_DavitNarmania.pdf (accessed November 4, 2015)

[49] Luke Coffey, "The Creeping Russian Border in Georgia," *Al Jazeera, July 27, 2015, http://www.aljazeera.com/indepth/opinion/2015/07/creeping-russian-border-georgia-south-ossetia-abkhazia-150722111452829.html* (accessed November 3, 2015)

[50] Ruth Berins Collier and David Collier, *Shaping the Political Arena: Critical Junctures, the Labor Movement, and Regime Dynamics in Latin America*, (Princeton, Princeton University Press, 1991): 29

firms as individual actors that make distinct, potentially opposite decisions in response to the same external stimulus.

While Georgia is not the only case to fit this description, it meets the requirements very well. Moldova, for instance, is another country on which Russia imposed an embargo for what analysts believe to have been an attempt to keep Moldova within Russia's sphere of influence.[51] The embargo was public knowledge there as well, and I have no reason *a priori* to assume that predispositions toward risk among Moldovan exporters differ from Georgian ones. However, case studies offer value to a researcher when they are data-rich[52]: Available statistical data on Georgia's economy, firms and macroeconomic trends make Georgia prime for analysis. The Georgian Department of Statistics (GeoStat) provides a wealth of economic data,[53] which might allow for more detailed analysis than another country under external threat. Personal communications with regional specialists confirm that the Georgian Department of Statistics is accurate to the point of useful[54] for academic purposes. Secondly, access to resources such as elite interviews with important policy analysts and Georgian firms make the country a rich source of qualitative data as well. Through correspondence with a variety of policy analysts, economists, and other contacts, I was able to speak to a sample of Georgian exporting firms. This allows me insight into their export decision-making process, which I discuss further in the Data section below.

---

[51] "Why Has Russia Banned Moldovan Wine?"

[52] Van Evera, 47, 77

[53] *National Statistics Office of Georgia.* http://geostat.ge/index.php?action=0&lang=eng (Accessed November 6, 2015)

[54] From personal communication with Michael Fuenfzig, Karine Torosyan and Adam Pellillo, researchers at the International School of Economics in Tbilisi, June 9, 2015

Timeframe

I analyze the period between 1996 and 2014 because it allows for changes in the most important independent variable, state aggression. Russia imposed a ban on Georgian agricultural imports in 2006 and ended the ban in 2012. Having data before and after this timeframe allows measurement of the effects of the change between embargo and free trade. Figure 1.1 shows the timeline of events of the Russian embargo:

Figure 1.1: Chronology of Sanctions by Russia

Date	Event
December 19, 2005	Ban on imports of agricultural products from Georgia
January, 2006	Sharp increase in the price of gas imported from Russia
March 15, 2006	Ban on import of Georgian wine, wine products, brandy and champagne
May, 5, 2006	Ban on imports of Georgian mineral water
July 8, 2006	Georgian-Russian border checkpoint at Verkhniy Lars closed
September 27, 2006	Arrest of Russian officers by Georgian authorities
September 28, 2006	Russia recalled its ambassador in Georgia, and began a partial evacuation of Russian diplomatic staff from Georgia
October 3, 2006	Russia suspended air, rail, road, sea and postal links to Georgia, and stopped issuing entry visas to Georgian citizens

Source: Adapted from "Impact of Russian Sanctions on the Georgian Economy," by Eric Livny, Mack Ott, and Karine Torosyan, 2009, *Georgia in Transition,* L. King, and G. Khubua, Eds. Frankfurt Am Main*: Peter Lang*, http://iset.ge/files/russian_embargo_pdf.pdf, 7

State aggression can be measured as the Russian embargo itself: banning import of Georgian goods into Russia was a politically motivated tool to extract policy concessions from Georgia by debilitating its trade position and economy.[55]

[55] Vladimer Papava, "Russia's Illiberal 'Liberal Empire,'" *Project Syndicate*, February 28, 2007, http://www.project-syndicate.org/commentary/russia-s-illiberal--liberal-empire

FRAMEWORK

In order to examine the possible effects of state aggression, political risk outlook, and market factors on trade, I take a mixed method approach of quantitative economic modeling and the case study approach. First, I perform a differences-in-differences economic analysis to understand how firms re-evaluate and re-shape their export practices after their sector is shut down. A differences-in-differences experiment entails dividing export flows into two group: The first, the agricultural export flows, is the "treatment" group, receives the shock of the embargo, while the second, industrial export flows, is a "control" group that is unaffected. Both follow the same trajectory prior to the embargo, but diverge once the embargo hits, allowing me to attribute causality in that change to the embargo.[56] Trade volume is measured as a dollar sum of exports from Georgia to Russia as indicated in data provided by the United Nations Comtrade database and the Georgian Department of Statistics, broken down into industries and products by 4-digit Harmonized Systems codes. Within this, I perform a series of regression analyses, or statistical estimations, to measure the effects of the embargo on Georgian exports to non-Russian destinations.

This helps determine how state aggression matters for firms affected by the embargo by analyzing how affected firms change their export practices during the embargo years in contrast to before and after. I do this first to establish whether and how state

[56] Marianne Bertrand, Esther Duflo, and Sendhil Mullainathan, "How Much Should We Trust Differences-in-Differences Estimates?," *The Quarterly Journal of Economics* 119, no. 1 (2004): 249–75, 249. In the author's opinion, a difference-in-difference model refers to the same general analytical process in quantitative economics that a Critical Juncture framework performs in qualitative social science research (c.f. Collier & Collier). The analytical tools may differ across social sciences, but effectively the concept is the same.

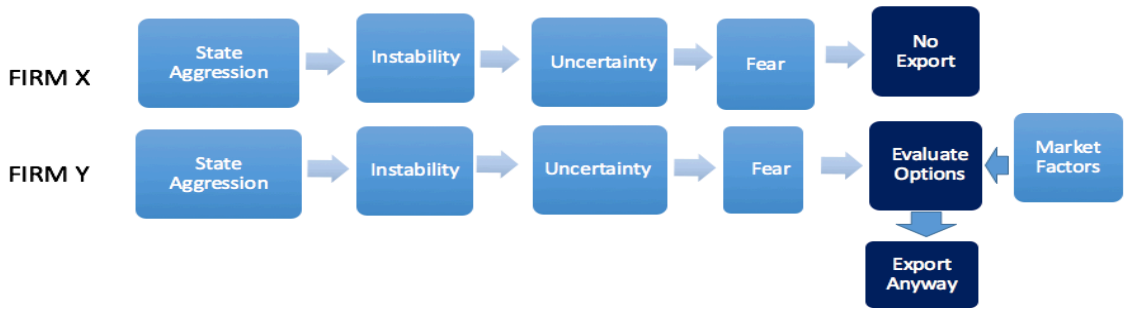
aggression matters for the flow of exports, i.e., if the Georgian case as a whole exhibits the aversion to political conflict that common wisdom deems is present.

Process-Tracing

After the economic modeling, the second part of the framework is a process-tracing approach, following Stephen Van Evera's definition,[57] to understand *how* Georgian firms decide to export to Russia after the critical juncture posed by the embargo. Van Evera defines process-tracing as following a chain of events or decisions by which "initial case conditions are translated into case outcomes."[58] Process-tracing is necessary to answer the research question because it helps understand all steps in firms' decision-making processes and how those shape the final market outcome. This allows one to investigate how Georgian firms' decisions are influenced by state aggression, even if they do decide to export to Russia.

The specific chains of causality to be investigate, in each of the firm's cases, is presented in Figure 1.2:

Figure 1.2: Possible Export Decision Processes After Episode of State Aggression



[57] Van Evera, 64

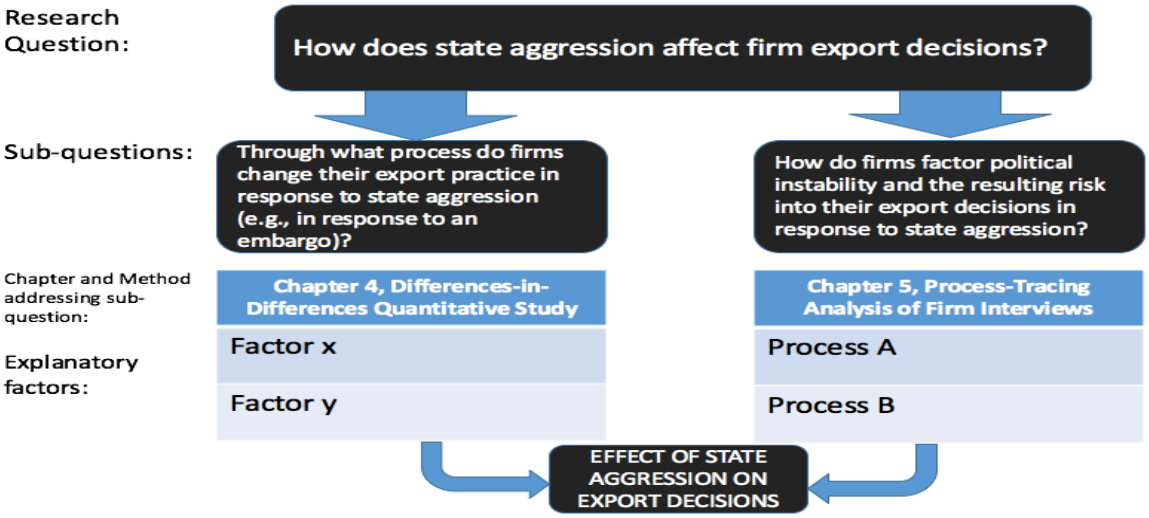
[58] Ibid, 64

Figure 1.2 indicates two of many possible ways state aggression can affect export decisions. The first process of Firm X indicates the generally expected process according to HST2: State aggression leads to perceptions of instability, which generates uncertainty among firms because they do not know whether their industry too will receive an incursion. This could lead to firm fears that an embargo will be placed on their goods as well, which leads to the decision not to get involved in the market because to do so is simply too risky. This outcome is predicted by Hegemonic Stability Theory, and Behavioral Economics literature accounts for it by considering the possibility of risk-aversion. Alternatively, firms might observe state aggression and export anyway, *despite* fears of instability, because the market factors are enough to outweigh their risk-averse tendencies. This outcome synthesizes factors from International Trade with the concept of risk-aversion in Behavioral Economics. By building chains of causality between the independent variable and dependent variable, this method walks through the mechanisms step-by-step that prove or disprove how firms consider their particular political circumstances alongside market factors to determine how they interpret an act of state aggression for their export practice. While the two processes above are possibilities according to my research design, I test for each causal link between state aggression without assuming that any causal component of the thought process is given.

Aggregation of Results

I then aggregate the results of the economic modeling and process-tracing. Figure 1.3 shows how aggregating results answers my research question:

Figure 1.3: Research Question Breakdown and Chapter Divisions



As Figure 1.3 shows, the economic modeling in Chapter Four accounts for the influence of factors such as sector, proximity flows to other export markets, and demand in the Russian market to account for how firms alter their export practice. This determines how state aggression alters firms' export practices at all, i.e., if there *is* a substantial response to the embargo. In Chapter Five, I examine *how* the ensuing process of considering risk might take place– if state aggression matters, I analyze whether it matters for all firms equally, and if perception of state aggression also matters. A diversity of firm processes here would indicate that the fluid dynamic of firm-applicable market factors and political outlook determines final export decisions because it would show that firms have unique ways of approaching risk, state aggression, and the markets themselves. If state aggression does not matter according to the economic model, I am able to observe the factors that indicate why it does not matter for exporting firms and to see what market factors impel them to export

regardless of state aggression. Both sub-questions take the embargo as a critical juncture for state aggression.

DATA ANALYSIS

I compare results across interviews for data concerning Georgian firms' fear of political instability, interest in Russian and other export markets, embargo experience, and final export decision. This determines cross-industry and cross-time thought processes among firms. The questions I ask are presented in Table 1.1 below:

Table 1.1: Critical Data on Georgian Exporting Firms, Political Risk Outlook, and Decisions to Export to Russia. From correspondences with firm representatives in English or Russian.

Firm Name	Industry / Background	Market Factors For Export	Outlook on Russian Market	Non-Russian Export Markets	Embargo Experience	Outlook on Risk / Propensity toward Risk-Aversion	DV: Final Export Decision to Russia
Firm 1							NO
Firm 2							YES
Firm x							X Decision

I pose the above questions to export managers, central executive officers, or other individuals in Georgian firms whose position indicates that they have insight into how the firm makes export decisions. The questions above allow me to see the political outlooks firms have, as well as how they respond to the critical juncture provided by the embargo.

This helps me conclude whether this fluid dynamic by which firms consider market and political factors matters for export decisions. I see whether firms alter their behavior due to an event of state aggression, if they all do so uniformly, or if they all do so in different ways.[59] If results indicate a diversity of perspectives among exporters to the

[59] Audie Klotz and Deepa Prakash, ed., *Qualitative Methods in International Relations: A Pluralist Guide* (London: Palgrave Macmillan, 2008), 114; Van Evera, 70

Russian market, I infer that a fluid dynamic occurs between market considerations and political outlook influencing whether they export to Russia. If results across firms indicate that they only care about market factors and do not worry about the possibility of an embargo on their goods, we can see that state aggression was not a significant factor for export decisions. If results across firms indicate that they worry about state aggression, we can see that state aggression does deter export decisions across-the-board. As such, I am able to observe the full variety of possible firm thought processes.

Data

The independent variable is state aggression. The intervening variables, i.e., variables through which the independent variable affects the dependent variable,[60] are political outlook and market factors that impel exports. The dependent variable is firms' export decision. For the dependent variable, export decisions, I use firm responses about whether they export to Russia, as well as macroeconomic trade volume data provided by Comtrade, the United Nations trade database that aggregates export data from national statistics services such as GeoStat. The Comtrade data has aggregate export volume of Georgian goods to all markets globally for the period 2000 through 2014, which I broke down by sector into agricultural and industrial exports. Qualitative data for understanding the mechanisms of process-tracing include interviews with seven Georgian firms across a variety of industries, including spirits, freight transit and steel manufacturing. The firms also differ in size, as measured by labor force, turnover, and time of foundation.

[60] Van Evera, 11-12

I interview firms that export and identify how a state being aggressive affects their decision to export to the aggressive state's market. Comparing the results of each part of the analysis, I understand how the intervening variables –market factors and fear of state aggression– influences export decisions as a result of state aggression. These firms include all sizes and participate in a variety of distinct industries. Interviews were conducted over the summer of 2015 in person, over the phone or by questionnaire over email in either English or Russian, depending upon the firm's preference. The presence of a range of firms across industries provides data on how firms whose products were or were not embargoed considered the political risk associated with exports.

To help inform my background research on Georgian-Russian trade, the drivers of exports, and relevant economic policy debates in Georgia, I conduct semi-structured elite interviews, or specialist interviews that allow for open-ended answers,[61] with specialists in Georgian trade, economics, and economic policy. This includes economic policymakers and advisors such as a representative of the American Chamber of Commerce in Georgia, policy analysts at the International School of Economics in Tbilisi (ISET), and representatives of Georgian trade policy such as both a former Minister of the Economy and a trade specialist at the Georgian Ministry of Foreign Affairs. Additional experts on agricultural exports and interest-groups in Georgia helped gather facts about the embargo as well. All of these interviews were conducted in person in English over the summer of 2015. While this additional background data does not directly constitute the bulk of my original findings, it helps me contextualize the rest of my data alongside secondary literature on the Georgian case.

[61] Beth L. Leech, "Asking Questions: Techniques for Semistructured Interviews," *PS: Political Science and Politics* 35, no. 4 (2002): 665–68, 668

Data Limitations

There are several limitations of the data that I use. First, my economic analysis uses export volume as a measurement of export decisions. While this is useful for understanding how Georgian exporters behave as a whole, it does not account for discrepancies between large and small firms by putting their export decisions into a single variable. That said, understanding export decisions across sectors that were embargoed still provides insight into decision-making processes, even if it does not account for every dynamic *within* the treatment and control groups. The interview data provides some insight into such dynamics, even if it is not a large sample. Second, while interviews provide useful insight into the thought process of several exporters, they are limited by the sample size and time constraints in which they were conducted. Namely, the interviews were all conducted in 2015, by which point firm representatives might not recall the precise feelings and mental processes that impelled them to export, and the representative does not necessarily give the whole picture of the firm's management. While not impervious, these interviews provide sufficient *approximate* data on export processes and lend the most insight available. While an ideal series of interviews would have occurred before 2006 and in each subsequent year, such information is not available, and my analysis of the present interviews needs to take into account the dynamics of the interviews as sources.

CHAPTER SUMMARY

Chapter Two analyzes existing literature on the relationship between international power and trade and critiques each body's existing explanation. Chapter Three provides background on the case of Georgian-Russian trade and political relations between the fall of the Soviet Union in 1991 and 2014, establishing that 2006 was a critical juncture at which Russian state aggression affected Georgian exports. Chapter Four models how Georgian export flows responded to the embargo of 2006 and argues that firms substituted export flows to Russia with other post-Soviet markets due to a variety of market factors. Chapter Five argues that a fluid dynamic between individual firm political outlook and the market factors identified in Chapter Four, such as business networks, determines how firms factor state aggression risk into their export decisions, as evinced by interviews with seven Georgian firms. The concluding chapter draws implications of my case study findings for theory of trade and practice.

CHAPTER TWO
THE PUSH TOWARD FIRM DYNAMICS IN APPROACHES TO STABILITY AND TRADE

This chapter analyzes common wisdom's explanations of the conditions under which firms decide to export their goods. There are three bodies of literature relevant to this study. The first, Hegemonic Stability Theory, argues that international political stability is a condition under which firms export. The second, International Trade Theory, does not address state aggression or stability directly, but it does provide insight into drivers of export practices. The third, Behavioral Economics, does not explain export decisions, but it does examine how psychological factors, such as risk-aversion and fear of government instability, might influence market outcomes. While Hegemonic Stability Theory argues that the absence of state aggression is a condition for firms to export, it does not take into account the distinct ways in which firms *perceive* risks from state aggression. I argue instead that firm-level perceptions of risk result from a fluid dynamic of their own political outlook and market factors for export. Integrating an adapted form of the concept

of risk-aversion from Behavioral Economics into market processes analyzed under International Trade Theory, I argue that a fluid dynamic between idiosyncratic firm political outlook and market factors determines how state aggression influences export decisions. Without this consideration, our existing theory of trade offers general insight but lacks nuance in explaining different export patterns among different categories of firms.

INTERNATIONAL TRADE THEORY

In this section, I describe the main market explanations of firm export decisions as illustrated by economic theory. There are two sections of this literature, Gravitationalism and firm-centered analysis. The first section, Gravitationalism, measures total trade volume between countries. Although this approach does not address firm behavior explicitly, it does provide some market-based explanations of why countries export in the volume that they do. This provides market conditions for exports.[1] It also argues that historical factors, such as former colonial ties between countries, and economic policies such as free trade agreements can strengthen market connectivity between countries and therefore increase trade volume. The second section of the market-oriented literature, firm-centered analysis, analyzes what factors determine which firms in a given country will export their goods to a foreign market, if given the option. The firm-centered literature identifies firm productivity as a positive influence on whether a firm will export. While this economic literature provides some insight into how market factors affect export decisions, it does not address how firms process state aggression, nor does it address how firms respond to uncertainty stemming from political factors.

[1] Andrew B. Bernard et al., "Firms in International Trade," 105

THE GRAVITATIONALIST APPROACH TO EXPORTS AND EXPORT CONDITIONS

Economists who study trade typically use a gravity model to analyze international trade flows. This quantitative tool estimates bilateral trade flows as a function of both countries' sizes and geographic distance.[2] A country's Gross Domestic Product (GDP) measure the size or "mass"[3] of a given economy, since it roughly indicates the amount of goods and services that country both consumes and produces, making it a useful proxy for volumes of supply and demand in a given country.[4] Geographic distance between two countries is a relevant factor to how much countries trade because it proxies costs incurred in the sales transaction between countries: The more distance between two countries, the more expensive transportation between the two becomes, roughly.[5] So for example, the proximity of the United States to Mexico[6] explains in part why U.S. trade volume with Mexico is larger than U.S. trade with a distant country, such as Kuwait. Some models for the gravity equation study how trade flows between two countries both ways, that is, how a given country imports from and exports to another; Others, however, exclusively analyze exports.[7] This is possible because the factors that explain trade both ways between a country pair also explains trade flowing one-directionally.

---

[2] "Politics and Trade: Evidence from the Age of Imperialism," *VoxEU.org*, accessed November 2, 2015, http://www.voxeu.org/article/politics-and-trade-evidence-age-imperialism.

[3] Ibid

[4] Estrella Gómez-Herrera, "Comparing Alternative Methods to Estimate Gravity Models of Bilateral Trade," *Empirical Economics* 44, no. 3 (March 28, 2012): 1087–1111, doi:10.1007/s00181-012-0576-2, 1090

[5] Jan Tinbergen, "Shaping the World Economy; Suggestions for an International Economic Policy," January 1, 1962, http://repub.eur.nl/pub/16826, 263

[6] Rebecca M. Summary, "A Political-Economic Model of U.S. Bilateral Trade," *The Review of Economics and Statistics* 71, no. 1 (February 1, 1989): 179–82, doi:10.2307/1928068

[7] Alan V. Deardorff, "Determinants of Bilateral Trade: Does Gravity Work in a Neoclassical World?," Working Paper (National Bureau of Economic Research, December 1995), http://www.nber.org/papers/w5377, 4

In its simplest form, the export gravity model measures the following equation:

Figure 2.1: The Simple Gravity Equation, Modified to Model Bilateral Export Flow Only

$$X_{ij} = AY_i^{\alpha} Y_j^{\beta} T_{ij}^{\gamma}$$

X_{ij} = Exports from country i to country j.
Y_i = GDP of country i
Y_j = GDP of country j
T_{ij} = Geographic distance between countries i and j.
Source: Adapted from Tinbergen, "Shaping the World Economy; Suggestions for an International Economic Policy," (264)

The values of the variables are indicated below the equation, to the left. The parameters α, β and γ are included to indicate that the relationship between Y_j , Y_i and X_{ij} is not necessarily linear; A is a constant.[8] "i" and "j" are indicators for separate countries. This equation shows the relationship between exports, mass and distance in its simplest form. While economists have since modified the gravity model around additional parameters, which I discuss later, this formula provides the basic framework of the model. This method in trade theory I call "Gravitationalist" because it explains trade as a function of gravity models as such.

Theories of Gravity

Since Poyhonen[9] and Tinbergen[10] introduce the gravity equation to international trade, critics argue that this tool does not have any theory underpinning it.[11] In response to this critique, trade theorists have supplemented this gap with theory of comparative

[9] Pentti Poyhonen. "A Tentative Model for the Volume of Trade between Countries," 93-100

[10] Tinbergen, "Shaping the World Economy; Suggestions for an International Economic Policy."

[11] Lucas Scottini, "Lecture 1: Gravity Model," International Trade, Brown University, Wilson 112, Providence, 7 September 2015, Lecture

advantage.[12] The main principle of international trade upon which Gravitationalists build their understandings of gravity derives from models of comparative advantage, which I define below.

While different Gravitationalists derive gravity equations from different theoretical models, the basic principle is that countries produce in areas of competitive strength. For example, a basic Ricardian model of trade examines an exchange in which two countries produce two goods according to their comparative advantage,[13] or "cross-country technology differences,"[14] providing lower international prices than were available prior to trade.[15] Eaton and Kortum[16] derive a gravity equation from this principle by applying a "probabilistic representation of technologies"[17] across countries in order to determine which countries have comparative advantages across sectors. Transportation costs and geographical barriers, they show, account for a "patterns of specialization" across the supply chain for a given good.[18] As a particular site of production for a part of a good become more "remote" from its final, that region exports a narrower range of goods

[12] James E. Anderson, "Gravity, Productivity and the Pattern of Production and Trade," Working Paper (National Bureau of Economic Research, January 2009), http://www.nber.org/papers/w14642; James E. Anderson and Eric van Wincoop, "Gravity with Gravitas: A Solution to the Border Puzzle"; Jonathan Eaton and Samuel Kortum, "Technology, Geography, and Trade," *Econometrica* 70, no. 5 (September 1, 2002): 1741–79; Jeffrey H. Bergstrand, "The Gravity Equation In International Trade: Some Microeconomic Foundations And Empirical Evidence," *The Review of Economics and Statistics* 67, no. 3 (1985): 474–81, doi:10.2307/1925976

[13] David Ricardo, *The First Six Chapters of the Principles of Political Economy and Taxation of David Ricardo, 1817* (New York, n.d.)

[14] Kiminori Matsuyama, "Ricardian Trade Theory," in *The New Palgrave Dictionary of Economics*, ed. Steven N. Durlauf and Lawrence E. Blume, 2nd ed. (Basingstoke: Nature Publishing Group, 2008), 183–90, http://www.dictionaryofeconomics.com/article?id=pde2008_R000276

[15] Jonathan Eaton and Samuel Kortum, "Putting Ricardo to Work," *The Journal of Economic Perspectives* 26, no. 2 (2012): 65–89, 65-66

[16] Eaton and Kortum, 1744; Anderson, 3

[17] Ibid, 1744, 1746

[18] Ibid, 1741, 1774

because costs of transporting the good increase.[19] While other economists use different specific models of trade theory to justify a Gravity model of trade, they arrive at the same conclusion[20] that export patterns result from comparative productive strength. For instance, Anderson derive the gravity equation from a "specific factors" model of trade.[21] The specific factors model examines unique factors of production for different goods, such as land and capital,[22] between which labor is freely mobile.[23] When two countries open to trade with each other, their comparative allocations of land and capital as such determine how they specialize, determining international prices.[24] Anderson shows that "resource allocation"[25] and productivity with those resources determine GDP.[26] As such, resource endowments determine at what price a country sells its goods both domestically and internationally. Resource, technological and geographic endowments drive production advantages that create gravitational trade flow patterns.

The above section argues that the theoretical foundation of Gravitationalism resting upon the principle of comparative advantage. Next, I discuss ways in which the

[19] Ibid, 1750

[20] Deardorff, "Determinants of Bilateral Trade"; Gómez-Herrera, "Comparing Alternative Methods to Estimate Gravity Models of Bilateral Trade"; "Politics and Trade"; Bergstrand, "The Gravity Equation In International Trade"; Anderson and Wincoop, "Gravity with Gravitas"; "Determining Factors Of Trade Flows In Blacksea Economic Cooperation (BSEC) Region: A Panel Gravity Model," accessed December 2, 2015, http://docplayer.net/2165991-Determining-factors-of-trade-flows-in-blacksea-economic-cooperation-bsec-region-a-panel-gravity-model.html, 66

[21] Anderson, "Gravity, Productivity and the Pattern of Production and Trade," 3

[22] Paul R. Krugman, *International Economics : Theory & Policy*, 39

[23] Ronald W. Jones and others, "A Three-Factor Model in Theory, Trade, and History," *Trade, Balance of Payments, and Growth* 1 (1971): 3–21

[24] Deardorff's Glossary of International Economics, "Specific Factors Model," accessed December 1, 2015, available at http://www-personal.umich.edu/~alandear/glossary/figs/SpecFac/sf.html

[25] Ibid, 2

[26] Ibid, 5-6

Gravitationalist approach explains how factors such as colonialism and economic policy create market incentives for countries to trade.

The Gravity Model in Practice: Trade Policy and Colonialism

The Gravitationalist approach appeals to economists largely because of its immense empirical viability.[27] Gravitationalists add additional variables onto the basic gravity model to explain how those additional factors influence trade. These factors include colonial legacies and economic policy shape market incentives to trade. By colonialism, I mean "the policy and practice of a strong power extending its control territorially over a weaker nation or people."[28] A colonial legacy, then, refers to ways in which one people's control over another as such influences social life after the formerly colonized people gets a sovereign state. By economic policy, I refer to government decisions to dictate regulations of international trade by implementing tariffs, join trade blocs, or set other policies related to trade.

The Gravitationalist approach has explained the impact of colonial legacies on market factors by analyzing how colonial legacies create cultural ties and product familiarity between countries. By cultural tie, I mean ways in which behavior in two countries is similar, be that through using the same language, consuming similar products or acting a certain way in a business negotiation. Colonial legacies can influence trade by creating common cultural and business norms– business culture as such influences how

[27] Jeffrey Bergstrand. "The Gravity Equation In International Trade: Some Microeconomic Foundations And Empirical Evidence"; Gómez-Herrera, "Comparing Alternative Methods to Estimate Gravity Models of Bilateral Trade"

[28] "Colonialism - Oxford Reference," accessed December 2, 2015, http://www.oxfordreference.com/view/10.1093/acref/9780199207800.001.0001/acref-9780199207800-e-230

exporters interact with importers and negotiate prices.[29] Not only do colonial trade policies such as preferential trade agreements facilitate trade between the imperial administrator and the subjected people, but Gravitationalist work also shows that such connections persist even after decolonization.[30] Colonial administrations, such as Russia's over countries such as Georgia and Armenia, create a common language between former colony and colonizer, in this case, Russian. Product familiarity is also a legacy of a past colonial history between two countries that increases their bilateral trade.[31]

A gravity analysis can be modified to reflect this condition.[32] An example of this is presented below, in Figure 2.2:

Figure 2.2: The Gravity Model Augmented to Include Effects of Colonial Legacies on Export

$$X_{ij} = AY_i^{\alpha} Y_j^{\beta} T_{ij}^{\gamma} C^{\delta}$$

Source: Adapted from Thierry Warin et al., "Southern African Economic Integration: Evidence from an Augmented Gravity Model," IZA Discussion Paper (Institute for the Study of Labor (IZA), 2009), https://ideas.repec.org/p/iza/izadps/dp4316.html, 6

This gravity model is the same as in Figure 2.1, but with the addition of C^{δ}, which is a dummy variable[33] indicating whether the two countries in question share a colonial legacy. Adapted as such, an augmented gravity model attempts to explain the degree to which colonial legacies positively influence trade volume. For example, colonial linkages

[29] "Determining Factors Of Trade Flows In Black Sea Economic Cooperation (BSEC) Region," 66

[30] Mitchener, "Politics and Trade"

[31] Yarbrough, *Cooperation and Governance in International Trade*.

[32] Antoine Berthou and Helene Ehrhart, "Trade Networks and Colonial Trade Spillovers," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, December 1, 2014), http://papers.ssrn.com/abstract=2535851

[33] A dummy variable is a variable that is either 1 or 0. When a "colonialism" variable = 1, that means that the two countries share a colonial past together. When it is 0, they do not.

facilitate trade deals and negotiations between importers and exporters between Armenia and Russia between 1995 and 2002, which experts observe by using a gravity model.[34]

The Gravitationalist approach is also useful for modeling how economic policy can affect trade volume. For instance, free trade agreements, in which countries pledge to eliminate tariff barriers,[35] lower trade costs and therefore incentivize trade between countries. Membership in an international economic organization such as the Commonwealth of Independent States or the European Union can influence trade between members by creating similar standards for goods and reduce transactional costs such as tariff barriers or customs procedures that take time.[36] To account for this, one typically adds a dummy variable to the simple gravity model to indicate whether the export destination and the exporter are in a common economic organization.[37] Free trade agreements, common currency union membership,[38] and other political relationships can be represented within a gravity framework. As such, it provides a useful tool for examining how trade policies influence trade volume.

---

[34] Lev Freinkman, Evgeny Polyakov, and Carolina Revenco, "Armenia's Trade Performance in 1995-2002 and the Effect of Closed Borders: A Cross-Country Perspective," MPRA Paper (University Library of Munich, Germany, 2003), https://ideas.repec.org/p/pra/mprapa/10065.html, 15

[35] International Trade Administration, "Free Trade Agreements," trade.gov/fta, accessed December 7th, 2015

[36] Givi Melkadze, Anna Mardaleishvili and Nino Vakhvakhishvili, "An Empirical Investigation of International Trade Pattern in the South Caucasus: Gravity Approach," International School of Economics at Tbilisi, 2010, available at http://www.iset.ge/files/submission_melkadze__mardaleishvili__vakhvakhishvili.pdf, 2

[37] Ibid

[38] Reuven Glick and Andrew K. Rose, "Does a Currency Union Affect Trade? The Time Series Evidence," Working Paper (National Bureau of Economic Research, July 2001), http://www.nber.org/papers/w8396, 1138; "Revenge of the Optimum Currency Area," *Paul Krugman Blog*, accessed December 2, 2015, http://krugman.blogs.nytimes.com/2012/06/24/revenge-of-the-optimum-currency-area/.

Gravitationalism Misses the Firm

While the Gravitationalist approach establishes some market factors that influence the amount countries trade, such comparative advantage, resource endowment, trade costs and business networks resulting from colonial legacies, it does not answer the question of why particular firms decide to export while others do not. Large volume of bilateral trade can be the result of a large number of firms exporting small volumes of goods or a small number of firms exporting large volumes of goods. As such, it does not explain variation between firms' different responses to the same underlying condition, such as state aggression, nor does it provide a way to systematize those differences between firms according to different market conditions. As such, it cannot explain entirely the process whereby state aggression –or other factors– influences firm export decisions. International trade theory that analyzes the firm, however, provides some insight into what factors influence export decisions. In the following pages I summarize this approach before turning to non-economic factors in firm export decisions.

THE NEW TRADE THEORIES: FIRM-LEVEL ANALYSIS OF EXPORT DECISIONS

This section analyzes how economic theory of international trade identifies two additional market factors that influence whether a firm exports: consumer demand for variety[39] in a foreign market and firm productivity heterogeneity. This literature includes the New Trade Theory, and it is divided into two unclearly named subsections: the old New Trade Theory and the new New Trade Theory. By demand for variety, I mean consumer

[39] "Paul Krugman, Nobel," *Forbes*, accessed December 2, 2015, http://www.forbes.com/2008/10/13/krugman-nobel-economics-oped-cx_ap_1013panagariya.html

demand for different types of a given product, for instance, when customers at a grocery store buy different brands of the same product, such as different brands of yogurt or soft drinks.[40] By productivity heterogeneity, I refer to the differences between firms in their abilities to produce the same good.[41] Missing from this firm-centered literature, however, is an analysis of how firms' cognizance of political factors such as state aggression affects their decision to export.

The goal of the old New Trade Theory is to explain international trade between countries with similar economies,[42] in contrast to previous theory that only explains trade between different economies.[43] By similar economies, I mean that their predominant sectors are the same: For instance, France and Germany have similar economies insofar as they both produce cars and trade them between each other between the 1990s to 2015.[44] Trade theorists applies the concept of external economies of scale, or hub environments that drive productivity –such as Silicon Valley for technology[45]– to show that firms in a given industry demonstrate increasing returns to scale, i.e., when output grows at a faster rate than inputs for a firm.[46] In this model, firms in a given industry export because hub

[40] Jaehwan Kim, Greg M. Allenby, and Peter E. Rossi, "Modeling Consumer Demand for Variety," *Marketing Science* 21, no. 3 (August 1, 2002): 229–50, doi:10.1287/mksc.21.3.229.143, abstract

[41] Marc J. Melitz, "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica* 71, no. 6 (2003): 1695–1725, 1698

[42] "Economist's View: Paul Krugman's Nobel Prize Lecture," accessed November 8, 2015, http://economistsview.typepad.com/economistsview/2008/12/nobel-prize-lec.html

[43] Cameron G. Thies and Timothy Peterson, *Intra-Industry Trade : Cooperation and Conflict in the Global Political Economy*, n.d, 27; Roy J. Ruffin, "The Nature and Significance of Intra-Industry Trade," *Economic and Financial Policy Review*, no. Q IV (1999): 2–9, 8

[44] Thies, 5

[45] Lucas Scottini, "Lecture 8: External Economies of Scale," International Trade, Brown University, Wilson 112, Providence, October 25, 2015

[46] Susanto Basu, "Returns to Scale Measurement," in *The New Palgrave Dictionary of Economics*, ed. Steven N. Durlauf and Lawrence E. Blume, 2nd ed. (Basingstoke: Nature Publishing Group, 2008), 141–44, http://www.dictionaryofeconomics.com/article?id=pde2008_I000297

environments increase productive capacity and consumers in foreign markets enjoy variety: They are willing to consume imported goods even though their country produces those same goods because foreign goods offer something new.[47] A firm that can brand itself in a foreign market, by implication, has incentive to export to that market in order to profit from the consumer desire to consume a new, distinct product.

The next theory of the firm –the new New Trade Theory– seeks to explain what influences firm export decisions by emphasizing firm heterogeneity in productivity.[48] Prior to considering international trade, heterogeneity in productivity means that firms produce different amounts of goods at different prices: More productive firms have lower marginal costs.[49] This means that, under monopolistic competition,[50] relatively productive firms can offer lower prices and higher quantities for their goods than less productive firms. As such, more productive firms make higher profits than less productive ones.

When the country opens to free trade, the new New Trade Theory argues that differences in individual levels of productivity either cause firms to export, shrink, or shut down altogether. Melitz, a pioneer of the new New Trade Theory, argues that "exposure to

---

[47] Dirk Ehnts and Hans-Michael Trautwein, "From New Trade Theory to New Economic Geography: A Space Odyssey," *Œconomia. History, Methodology, Philosophy*, no. 2–1 (March 1, 2012): 35–66, doi:10.4000/oeconomia.1616, 10; Paul R. Krugman, *International Economics : Theory & Policy* (Boston, n.d.), 121; Thies, *Intra-Industry Trade*, 5, 27

[48] Marc J. Melitz, "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica* 71, no. 6 (2003): 1695–1725; Kalina Manova, "Credit Constraints, Heterogeneous Firms, and International Trade," *The Review of Economic Studies* 80, no. 2 (April 1, 2013): 711; Stephen J. Redding, "Theories of Heterogeneous Firms and Trade," *Annual Review of Economics* 3, no. 1 (2011): 77–105, doi:10.1146/annurev-economics-111809-125118; Andrew B. Bernard et al., "Firms in International Trade" ; Hugo A. Hopenhayn, "Entry, Exit, and Firm Dynamics in Long Run Equilibrium," *Econometrica* 60, no. 5 (1992): 1127–50, 1128

[49] Lucas Scottini, "Lecture 9: Internal Economies of Scale," International Trade, Brown University, Wilson 112, Providence, November 2nd 2015, Lecture

[50] By monopolistic competition, I refer to a market condition in which firms in the same industry have differentiated brands of the same good and can turn an economic profit. Monopolistic competition is an market situation that both New Trade Theories analyze

trade will induce only the more productive firms to enter the export market and will simultaneously force the least productive firms to exit."[51] This happens because the market size increases and that the number of firms with which domestic firms compete increases. Some firms are able to stay in the market domestically, after introducing trade, while the very least productive are forced to exit the market altogether. This is how the new New Trade Theory explains export decisions: More productive firms have a competitive advantage in an international market which distinguishes them from firms that are only competitive on the domestic market.[52]

The new New Trade Theory therefore introduces productivity heterogeneity to the list of market factors that explain firm export decisions. Together with consumer preferences for variety, the New Trade Theories introduce new market explanations of export decision-making. Although these are salient factors, the New Trade Theories do not analyze non-market factors, namely, how political factors such as interstate aggression or peace influence export decisions. The next section discusses common wisdom on how state aggression influences export decisions.

CONVENTIONAL LITERATURE ON STATE AGGRESSION AND TRADE

In this section, I discuss Hegemonic Stability literature, which explains how political, non-market factors influence export decisions. Hegemonic Stability literature divides into two subsections: Hegemonic Stability Theory proper and Political Economy applications of the principles of Hegemonic Stability Theory. Hegemonic Stability Theory

[51] Melitz, "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," 1695

[52] Joachim Wagner, "Exports, Imports, and Productivity at the Firm Level. An International Perspective: Introduction by Guest Editors," *Review of World Economics / Weltwirtschaftliches Archiv* 144, no. 4 (2008): 591–95, 591

proper claims that the presence of a global hegemon provides stability for international markets.[53] As a result, it argues that interstate conflict of interest on trade policy and state aggression deter exports. Political Economy applications of Hegemonic Stability Theory argue that the risk of political interference in the market deters firms from exporting. While this literature argues that state aggression generally limits firms' abilities to export, it does not address how firms might have different perspectives on state aggression. As such, it does not address the unique psychological processes by which each firm interprets acts of state aggression, which influences their decision to export.

HEGEMONIC PEACE AS A CONDITION FOR TRADE

Hegemonic Stability Theory argues that the existence of a global hegemon creates international peace, which is a condition for international trade. By hegemon, I mean a power with a "preponderance of material resources," which includes control over markets, competitive advantage in producing highly valued goods, control over raw materials, and control over sources of capital.[54] By international peace, I mean the absence of state aggression that creates mistrust between states and makes them inhibit free trade.[55] In the context of this discussion of international trade, a hegemon is a state actor, and the classes over which it presides are weaker states. The best example of a global hegemon is the

[53] Robert Gilpin, *The Challenge of Global Capitalism : The World Economy in the 21st Century* (Princeton, NJ, n.d.), Stephen D. Krasner, "State Power and the Structure of International Trade," *World Politics* 28, no. 03 (April 1976): 317–47, doi:10.2307/2009974; Thies, *Intra-Industry Trade*; Charles Poor Kindleberger, *The World in Depression, 1929-1939* (Berkeley, n.d.)

[54] Robert O. (Robert Owen) Keohane, *After Hegemony : Cooperation and Discord in the World Political Economy* (Princeton, N.J., n.d.), 32

[55] Helen V. Milner, "International Political Economy: Beyond Hegemonic Stability," 113

United States[56] between the end of the Second World War and the early 1990s.[57] This stability allows for firms to export their goods because they are able to foster international business ties. There are two outcomes that Hegemonic Stability Theory explains. The first is the international flow of goods and capital. The second is trade policy as formulated by states and interstate organizations, which I do not discuss in as much depth, as trade policy is not the outcome this thesis seeks to explain.

Hegemonic Stability as a Determinant of Trade Policy

The first iteration of Hegemonic Stability Theory argues that a global hegemon is necessary to create a set of international trade laws that are most conducive to free trade. Without a uniform set of trade laws, countries pursue trade policies that benefit themselves at the expense of others. These benefits can be either economic, i.e., gaining more national wealth, or political, as in using trade regimes to achieve state foreign policy goals.[58] Examples of such trade policies are protective tariff barriers and competitive devaluations.[59] A protective tariff is a tax on imports. By making goods more expensive on a given domestic market, a protective tariff gives domestic producers an advantage over foreign firms in that market. Competitive devaluation is when a country lowers the value of its currency on international currency exchange markets. This makes domestically produced goods cheaper to foreign consumers. The relative cheapness of domestic goods,

[56] Ibid.; Krasner, "State Power and the Structure of International Trade"; Gilpin, *The Challenge of Global Capitalism*

[57] Gilpin, *The Challenge of Global Capitalism*

[58] Albert O. Hirschman, *National Power and the Structure of Foreign Trade*, Expanded ed, The Politics of the International Economy, v. 1 (Berkeley: University of California Press, 1980)

[59] Charles P. Kindleberger, "International Public Goods without International Government," *The American Economic Review* 76, no. 1 (1986): 1–13

then, increases foreign demand for them while also decreasing domestic demand for foreign goods. Domestic firms can now export, because their export prices are relatively cheap for foreign countries. States deploy protective policies such as competitive devaluation and protective tariffs in the absence of a global hegemon.[60] Such protective policies, called "beggar thy neighbor"[61] policies, decrease trade and hurt other countries.

The only way to prevent such outcomes, Hegemonic Stability Theorists argue, is for all countries of the world to codify into law a ban on harmful trade policies, i.e., a promise to allow free trade. For this reason, Hegemonic Stability Theorists laud the creation of the General Agreement on Trade and Tariffs.[62] But in order to establish and enforce these practices, Hegemonic Stability Theorists argue, the United States needed to leverage its position as a global hegemon in order to compel the rest of the world to follow suit with this trade policy[63] of open markets, i.e., a ban on protective trade barriers. Because the United States was recognized as the supreme world military and economic power**,** all other countries respected its trade policy decisions because it had both the means to enforce international law and the economic influence to incentivize other countries to adopt its desired policy outcomes.[64] A hegemon leveraging its power to create and enforce free trade is necessary in order to maximize the amount of total goods traded internationally.

---

[60] Simon Arnd Benedikt Schropp, *Trade Policy Flexibility and Enforcement in the WTO: A Law and Economics Analysis* (Cambridge University Press, 2009), 170

[61] Jason Kuo, "Beggar Thy Neighbor," *Yale Economic Review* 6, no. 2 (Fall 2010): 19

[62] Gilpin, *The Challenge of Global Capitalism*

[63] Ibid, 4

[64] Milner, "International Political Economy," 114; Kindleberger, "International Public Goods without International Government," 9; Keohane, *After Hegemony*, 39

This aspect of Hegemonic Stability Theory argues that a global hegemon is necessary to create a policy of free international trade. Next, I discuss the second iteration of Hegemonic Stability Theory (HST2), which argues that the existence a global hegemon gives market actors a better outlook on market stability, therefore fostering international trade.

The Influence of Hegemonic Stability on International Markets

The second iteration of Hegemonic Stability Theory argues that the perceived stability created by a global hegemon positively affects firm decisions to export because they can guarantee that their market transactions occur as intended. By implication, then, state aggression deters export decisions.

A hegemon creates certain public goods[65] for international markets that establish a predictable environment for market transactions. A public good is a good that benefits all members of society regardless of whether they contribute to producing or establishing that good.[66] Examples of public goods include "an open trading system, including freedom of the seas, well-defined property rights, standards of weights and measures that may include international money."[67] Among the most important of these, Kindleberger[68] and Smith[69] argue, are interstate peace and the guarantee of property rights because both give firms certainty that that they can conduct business without interference from government or state

[65] Robert Pahre, *Leading Questions : How Hegemony Affects the International Political Economy* (Ann Arbor, n.d.)

[66] Kindleberger, "International Public Goods without International Government," 2

[67] Ibid, 7

[68] Ibid, 6

[69] Adam Smith, *The Wealth of Nations* (New York, n.d.)

agents. Firms know what transit routes are available for their goods and have enforceable right to their own property in the event of theft of breach of contract. Certainty is the critical factor that such public goods provide.[70]

According to this iteration of Hegemonic Stability Theory, certainty fosters trade.[71] Political stability means that trade policies and interstate relationships remain constant: Firms can expect governments not to change policies such as tariffs, customs procedures, or free trade openness in general. They can therefore gather information on a foreign market and determine if exporting maximizes profit without worrying about the possibility of theft. Predictability therefore factors into firms' export decision-making process. Both iterations of Hegemonic Stability Theory have implications for how state aggression affects firm export decisions. In the next section, I discuss how Political Economists apply Hegemonic Stability Theory's implications to the firm.

HEGEMONIC STABILITY THEORY APPLIED TO THE FIRM

In the above section, I discussed Hegemonic Stability Theory and its argument that interstate peace is a condition for exports. In this section, I discuss ways in which Political Economy theorists use the underlying implication for state aggression that Hegemonic Stability Theory presents to understand firm export decisions. I define this implication as the State Aggression Principle for Hegemonic Stability Theory below. Namely, this approach models how firms decide to export under consideration of political risks such as

[70] Paul D. Mueller, "Adam Smith, Politics, and Natural Liberty," *Journal of Private Enterprise* 29, no. 3 (Fall 2014): 119–34

[71] Yarbrough, *Cooperation and Governance in International Trade*; Pahre, *Leading Questions*.

potential embargoes. While this approach argues that political risk negatively impacts firm's decisions to export, it does not take into account how firms might perceive these risks in different ways. This means that the Political Economy application of Hegemonic Stability Theory does not account for how political-psychological processes influence firms' individual export decision-making processes.

Both iterations of Hegemonic Stability Theory imply that the absence of a global hegemon generates uncertainty among firms over how rules and regulations of the market might change at any given moment. The first iteration argues that without a hegemon, states create trade policies that can be damaging to international trade, such as protective trade barriers that favor their own exporters at the expense of the rest of the world. In this case, a state can be aggressive toward another by such means as sanctions or other interruptions of the free flow of goods between the two. State aggression as such restricts trade. The implication of the second iteration of Hegemonic Stability Theory is that the absence of a clear hegemon fosters unpredictability over the laws governing international markets. Given this unpredictability, firms are averse to enter a foreign market. As such, both iterations of Hegemonic Stability Theory argue that state aggression dis-incentivizes firms from exporting.

Political Economy Approaches to State Aggression

The Political Economy applications of the State Aggression Principle model firm responses to the possibility of an embargo on their export market[72] among other political factors that are sources of uncertainty.[73] This approach starts with the insight that a state with a large economy has 'state power'[74] over another country's trade insofar as it can hurt that country by imposing sanctions, tariffs, or embargoes on that other country.

To analyze 'conflict among nations'[75] in which one state might use this particular method of exerting influence, Bergeijk[76] creates a model of the firm in which it considers possibly disrupted access to a target export market. The problem of the representative firm in typical economic models is to choose the output level that maximizes profits, and in an international system, this decision determines the output level a firm chooses for export. Instead, Bergeijk proposes a model of the representative firm in which firms maximize profits, but also account for the possibility of an export market shutdown. Firms discount the effective value of their production for the probability that, in a given period of time, the government of a foreign market imposes an embargo. This leads to a profit maximization problem of the firm below:

---

[72] George S. Tolley and John D. Wilman, "The Foreign Dependence Question," *Journal of Political Economy* 85, no. 2 (April 1, 1977): 323–47, 323; Peter A. G. van Bergeijk, *Economic Diplomacy, Trade, and Commercial Policy*

[73] Udo Broll, Jack E. Wahl, and Wing-Keung Wong, "Elasticity of Risk Aversion and International Trade," *Economics Letters* 92, no. 1 (July 2006): 126–30, doi:10.1016/j.econlet.2006.01.031; John Pomery, review of *Review of A Theory of International Trade under Uncertainty*, by Elhanan Helpman and Assaf Razin, *Journal of Political Economy* 88, no. 5 (1980): 1061–64, 1061; Elhanan Helpman, *Trade Policy and Market Structure* (Cambridge, Mass, n.d.)

[74] Hirschman, *National Power and the Structure of Foreign Trade*, 16; Bergeijk, *Economic Diplomacy, Trade, and Commercial Policy*, 6

[75] Bergeijk, *Economic Diplomacy, Trade, and Commercial Policy*, xiii

[76] Ibid, 127

Figure 2.3: Profit Maximization Problem of Accounting for Embargo Risk

$$\max_{x} \pi(x + p\varphi(x)) + (1 - \pi)(x + p_d\varphi(x))$$

Source: Bergeijk, *Economic Diplomacy, Trade, and Commercial Policy,* 135, Figure 6.6

In Figure 2.3, π is the probability that free trade will continue. As such, (1- π) is the probability that free trade disappears, i.e., the probability of an embargo. x is the good that the firm supplies, p is the relative price of good x on international markets, and $x + \varphi(x)$ is the firm's production function of good x, which Bergeijk justifies earlier but whose exact mechanisms are not relevant to this study.[77] p_d is the price of good x in the event of an embargo, which is different from p, Bergeijk explains, because, in the event of an embargo, the embargo has a ripple effect on domestic markets and alters the price of the good in question.[78] Essentially, the mechanism of the export decision process is that the firm maximizes profit by performing an expected value calculation[79] of its profit that accounts for the probability of an embargo. An increase in the probability of an embargo is inversely proportional to "improvement in the diplomatic climate"[80] between the two countries, reducing the desirability of exporting to the foreign market.[81]

Another model of how state aggression dampens international trade weighs the 'scale' of different political events in terms of how 'serious' they are. A 'political event'

[77] Ibid, 127

[78] Due to a misprint in the text, I added an extra) after $\pi(x + p\varphi(x)$ to close the parenthesis. This does not impact the context of the formula itself.

[79] Expected Value is the sum of different possible values for a variable multiplied by the probability of the variable having that particular value. For instance, the expected value of a variable that has a value of 2 with probability *p* and a value of 1 with probability 1-*p* is given by Expected Value (EV) = 2•p + (1-*p*)•1

[80] Bergeijk, 129

[81] Ibid, 137

as such is an event that stands out as "newsworthy" among a "constant flow of transactions,"[82] which includes acts of state aggression by a foreign adversary on the one hand and acts of interstate cooperation on the other. These are ranked on a scale between an event that signals "high intensity of cooperation," such as the "creation of strategic alliance or common market" on one side while including events that signal conflict, such as wars, invasion, or sanctions.[83] This model argues for a negative correlation between an act of state aggression and trade volume between countries. The explanation is that firms respond to the uncertainty generated by the acts of conflict with aversion to export.

The Next Question in Hegemonic Stability Theory and Its Application

While useful for testing whether embargo risk matters at all, the above political economy approach, however, does not provide a satisfactory framework for answering my research question. Namely, there is an issue with considering a representative firm, i.e., a firm that "represents" the entirety of a country's exports: Firms consider the same probability that their export flows will be cut off by an embargo,[84] i.e., the model assumes that firms all perceive the same level of threat to their export practice This might not necessarily be the case, however, since differences among firms might influence their perception of what the probability of an embargo is. In other words, Figure 2.3 assumes no intervening variables between state aggression and the export decision outcome: If state aggression matters, it matters to our representative firm in only one way. But there might be intervening variables, such as the strength of business networks, experience with the

[82] Ibid, 149

[83] Ibid, 149, 150

[84] Ibid, 137

foreign market, or political outlook that affect a firm's perception of the probability of an embargo. The representative firm model is useful for its goal, that is, to test for whether the threat of an embargo matters at *all*. However, by not telling us *how* firms formulate their export decisions, it cannot provide a full explanation of why firms might respond differently to the same stimulus of the embargo.

This particular issue reflects a shortcoming of the second iteration of Hegemonic Stability Theory, or HST2: The failure to account for the fluid dynamic between market factors for export and firm political outlook. Hegemonic Stability Theory characterizes state aggression as a factor that is *necessarily* a deterrent from exporting across firms. While one firm might perceive a high probability of market interference, another might not regard the threat of embargo very seriously due to a combination of its personal political perspectives, inherent aversion to risk, and the strength of its networks. This means that two firms in the same country, when presented with the same foreign market, could respond very differently in how they decide to export because they have different conditions and processes for evaluating embargo risk. This means that Hegemonic Stability Theory might only justify preliminary observations that stability matters without explaining *how* it does. The next and final section of this chapter argues for a framework of firm export decisions that partially draws upon insights in Behavioral Economics that systematize risk-aversion among market actors.

ACCOUNTING FOR POLITICAL OUTLOOK AND MARKET FACTORS BY ADAPTING THE CONCEPT OF RISK-AVERSION

In this section, I describe approaches undertaken in Behavioral Economics that explain how markets respond to political risks. Of particular importance is behavioral finance, which analyzes risk-aversion in investment decisions, a concept I adapt for export markets instead of financial markets. By political risks, I refer to the possibility of exogenous political shocks to a market,[85] or the possibility of sudden shifts in government policy that impact the market in question.[86] While the field of Behavioral Economics uses the concept of risk-aversion to explain and systematize market irrationality, I adapt the concept of risk-aversion to include perceptive discrepancies between categories of firms, or "risk types," that result from the fluid dynamic of market factors and idiosyncratic political outlooks on state aggression.

Literature on Actor-Level Risk-Aversion: Behavioral Responses to Political Factors

Behavioral examinations of risk-aversion emerged to explain irrational market actors. Namely, prior theory of the financial market, among others, exclusively analyzed financial actors as rational, profit-maximizing agents who calculate their profit using a precise profit-maximization formula.[87] To explain cases in which market participant decision-making violates the above behavioral parameter,[88] behavioral finance posits that

[85] IRMI, "Defining 'Political Risk,'" https://www.irmi.com/articles/expert-commentary/defining-political-risk Accessed December 6th, 2015

[86] Bergeijk, *Economic Diplomacy, Trade, and Commercial Policy*, 150

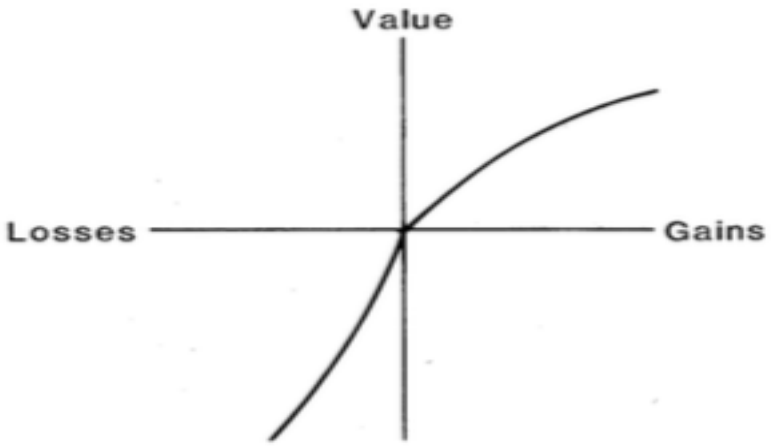
[87] Kadir Can Yalcin, "Market Rationality: Efficient Market Hypothesis versus Market Anomalies," *European Journal of Economic and Political Studies* 3, no. 2 (October 1, 2010): 23, 26

[88] Wesley C. Mitchell, "The Rationality of Economic Activity," *Journal of Political Economy* 18, no. 3 (March 1, 1910): 197–216; Amos Tversky and Daniel Kahneman, "The Framing of Decisions and the Psychology of Choice," *Science* 211, no. 4481 (1981): 453–58; Daniel Kahneman and Amos Tversky, "On the Psychology of Prediction,"

actors make decisions based on a variety of heuristics, or rules-of-thumb by which people process information.[89] Because people use these rules-of-thumb in their thought processes, they do not always perceive an optimal decision clearly. As a result, they make market decisions that are irrational and therefore are inexplicable in a model that only considers perfect rationality. The consideration of a heuristic allows analysts to systematize the irrationalities that are otherwise difficult to account for.

Risk aversion is an important heuristic that behavioral analysts uses to predict financial market outcomes.[90] I present an utility function for a risk-averse actor below in Figure 2.4:

Figure 2.4: A Hypothetical Value Function for a Market Actor



Source: Amos Tversky and Daniel Kahneman, "The Framing of Decisions and the Psychology of Choice," *Science* 211, no. 4481 (1981): 453–58, 454, Figure 1

Psychological Review 80, no. 4 (July 1973): 237; Daniel Kahneman, "Maps of Bounded Rationality: Psychology for Behavioral Economics[dagger]," *The American Economic Review* 93, no. 5 (December 2003): 1449; Katsikopoulos, "Psychological Heuristics for Market Inferences"

[89] Konstantinos V. Katsikopoulos, "Psychological Heuristics for Making Inferences," 10

[90] Martin R. W. Hiebl, "Risk Aversion in Family Firms: What Do We Really Know?," *The Journal of Risk Finance* 14, no. 1 (2013): 49–70, doi:http://dx.doi.org.revproxy.brown.edu/10.1108/15265941311288103; Broll, Wahl, and Wong, "Elasticity of Risk Aversion and International Trade"; Kenneth J. Arrow, "The Economic Implications of Learning by Doing"; David Genesove and Christopher Mayer, "Loss Aversion and Seller Behavior: Evidence from the Housing Market," Working Paper (National Bureau of Economic Research, March 2001), http://www.nber.org/papers/w8143

Figure 2.4 measures the amount of 'value' an actor gets from certain gains, which is money, in the case of a market. Gains have a positive relationship with value and losses a negative relationship. The main takeaway of this graph is that the degree to which a loss of one unit of value hurts is greater than the degree to which a gain of an equivalent volume is beneficial.[91] Kahneman and Tversky[92] consider a decision-maker who has the option of saving either 200 lives with 100% certainty or potentially saving 600 lives with a 1 in 3 probability. Although the expected value[93] of both options is the same, most respondents chose the first option because they are guaranteed to save some lives, and would rather save fewer but be guaranteed that they can save them. In another example, the magnitude of losing $100, a loss, is greater than gaining $100, a benefit. This explains why the slope is steeper for losses than it is for gains: losses hurt more than gains benefit. People make generally risk-averse choices regarding gains, this literature argues.

Behavioral finance applies these heuristics to how exogenous political shocks affect financial markets. Bittlingmayer[94] argues that stock market volatility occurs as the result of political uncertainty. By uncertainty, he refers to investors' inability to see what future government financial policy would be or whether or not the government itself would collapse.[95] He specifically analyzes the case of German financial markets from 1880 to

[91] Ibid, 454

[92] Ibid, 453

[93] Saving 600 people with a 1 in 3 probability yields an Expected Value of 600 x 33% = 200, which is the same as the value of the first program, 200 x 100% = 200. A perfectly rational decision-maker, according to the paradigmatic is indifferent between the two options.

[94] George Bittlingmayer, "Output, Stock Volatility, and Political Uncertainty in a Natural Experiment," 2243

[95] Ibid, 2248

1940 because events took place such as the First World War, strikes, and insurrections, econometrically analyzing the effects of stock price volatility on German output. Investors worry that strikes, war, and insurrection drive down industry productivity, therefore making them skeptical about the German stock market value.[96] Because investors are risk-averse, they pull their money out of the stock market when they think that such political events might impact the market. Risk aversion can therefore influence investor distaste for the uncertainty brought about by political events.

A Fluid Dynamic of Risk and Market Factors Determines Actions of the Exporting Firm

Behavioral economics most critically introduces the concept of risk-aversion to the analysis of market outcomes. As such, it allows us to analyze the thought processes that drive market actors, in particular when they respond to political events, across different political conditions. The concept of grouping firms according to different approaches to risk offer a tool for the systematic evaluation of risk as a market phenomenon. I adapt the concept of risk-aversion presented in the behavioral literature to an analysis of different firm categories of risk-perception in response to state aggression. In the behavioral literature, considerations of risk aversion can vary from actor to actor:[97] One exporter who is more risk-averse than another avoids exporting to a market that might receive an embargo, whereas a non-risk-averse exporter does not care. My framework accounts for different categories of firms that respond to risk in ways unique to that particular categorization. Where Hegemonic Stability Theory predicts uniformity among actors, in

[96] Ibid, 2255

[97] Alan L. Carsrud and Malin Brännback, *Understanding the Entrepreneurial Mind: Opening the Black Box* (Springer, 2009), 293-295

that they generally perceive risk at the onset of a risk-inducing event, in a universal way, a model that includes a nuanced risk-aversion component can explain distinct responses among *types* of actors, or groups of firms.

My framework requires categorizing firms by their risk-type, i.e., a group of firms that deploys a specific thought process in response to an act of state aggression. In the case of exporting firms, risk-aversion is a plausible non-market factor that influences export decisions: Firms might avoid exporting to destinations in which future trade policy is uncertain. However, it is also plausible that a set of market factors influence *how* they think about this risk: Well-connected firms, for instance, might have strong enough connections in the risky foreign market that their fears of political risk are altogether assuaged. They might also have enough experience exporting that makes them more familiar with the political instability issues but not impacted their decisions. Meanwhile, other firms might find that, not having any contacts, familiar products, or other factors in the risky market, the uncertainty of a possible market shutdown stops them from exporting to that market altogether. In this sense, different market factors might influence the different ways firms perceive political risk. Adapting the concept of risk-aversion to a categorization of risk perceptions, i.e., risk-types, allows me to analyze discrepancies between firm thought processes not previously accounted for. Market factors are an influence on the risk-typing of different firms' responses to an act of state aggression.

Of course, personal political beliefs, i.e., idiosyncratic political outlook, might also influence the risk-typing of different firms, but they do so in tandem with the market factors. Namely, there is a degree to which political outlook is unique to a group of firms simply because that particular group of people has a certain set of political beliefs. The

risk-typing model I create, however, accounts for this consideration by categorizing decision-making processes as a fluid dynamic between market factors for export on the one hand and individual political outlook on the other. Altogether, this constructs a framework with which to understand how different types of firms respond to the same act of state aggression. A firm's mental process for interpreting political events shapes the perceived significance of state aggression in this case, framing a larger perception of risk more broadly that is not uniform across market actors, as predicted by HST2. This thesis adds nuance to conventional notions of stability in trade by positing different cross-firm risk categorizations that show the fluid dynamic between political outlook and market factors that create different cross-firm categorizations.

CONCLUSION

In this chapter, I have reviewed the three bodies of relevant literature: Hegemonic Stability Theory, International Trade Theory, and Behavioral Economics. Hegemonic Stability Theory presents the common wisdom that stability matters for international trade: A hegemon is a source of open trade laws and international peace, which are conditions for trade because firms dislike trading under condition of political uncertainty. International Trade Theory identifies factors including firm productivity, the comparative advantage of a firm's industry, trade costs, and demand factors such as consumer interest in variety. Behavioral Economics argues that psychological factors can affect markets, namely, risk-aversion, but it has not yet been applied to theory of international trade. I argue that a fluid dynamic between firm-level political outlook and market factors identified in the International Trade literature creates risk-types among firms, adapting the principle of risk-

aversion from the Behavioral literature. Behavioral applications and adaptations as of yet do not exist within the field of international trade. As such, I contribute a more comprehensive and nuanced understanding of export decisions that delves deeper into the general insight on exports offered by Hegemonic Stability Theory. In the next chapter, I summarize key events in the history of my particular case, Georgian-Russian trade and political relations from 1991, when the Soviet Union fell, through 2014. This provides context for understanding the conditions under which Georgian firms decide export to Russia and justifies the case selection.

CHAPTER THREE
THE WINE JUNCTURE IN GEORGIAN-RUSSIAN TRADE

This chapter justifies the case selection and timeframe by establishing that the 2006 embargo signaled a critical juncture of Russian state aggression on Georgian exports. I review relevant political and economic developments in the two countries' relations between 1991 and 2014. I break the timeframe into four parts: 1991-1995, which provides background for the beginning of my analysis in 1996; 1996-2005, which sees the deepening of trade, regime change in both countries, and fomentation of hostilities; 2006-2012, in which Russian aggression heightens to its peak with embargoes and invasion; and 2012-2014, in which relations begin to normalize and Georgian exports restart. While my timeframe starts in 1996, the economic collapse after the fall of the USSR influences later development of Georgian trade of relations with Russia, for which reason I begin there.

THE POST-SOVIET AFTERMATH, 1991-1995: ECONOMIC AND POLICY CONSEQUENCES

The Initial Collapse in Output: Consequences for Exports

The immediate wake of the fall of the Soviet Union saw a collapse in the Georgian economy's capacity to produce goods. Between 1991 and 1994, Georgia's real GDP contracted at a rate of -26% per year,[1] driving many small scale "private plot" agricultural producers to shield themselves by producing for their own household consumption.[2] The heavy industry sector also declined, as production of steel declined in Rustavi, a prominent metallurgy town, in response to gas and oil price volatility between 1990 and 1993.[3] Overall, Georgia's GDP contraction was among the worst in the post-Soviet world,[4] one of the chief issues of which was hyperinflation. Inflation was rampant throughout the Post-Soviet world, occurring at more than 100% throughout the whole region in 1991.[5] After the removal of price controls at fixed below-market levels, the price level across the Soviet Union increased: Price controls had previously repressed the market equilibrium prices that finally released.[6] To this cross-USSR inflation Georgia was no exception: In 1993 and 1994, prices increased by 15444% and 6042%, respectively, according to GDP deflator

[1] Author's calculation from GDP growth rate data on Georgia from the World Bank. A full presentation of macroeconomic indicators relevant for this study is given in Table 3.1 in the Appendix.

[2] Stanislaw Wellisz, "Georgia: A Brief Survey of Macroeconomic Problems and Policies," *Russian & East European Finance and Trade* 35, no. 1 (February 1999): 6–31, 8

[3] "Российско-грузинские отношения: в поисках новых путей развития," *Кавказский Узел*, accessed January 6, 2016, http://www.kavkaz-uzel.ru/articles/240382/

[4] Ibid.

[5] Anders Åslund, *How Capitalism Was Built : The Transformation of Central and Eastern Europe, Russia, the Caucasus, and Central Asia*, n.d., 115

[6] Michael Kaser, "Escape Routes from Post-Soviet Inflation and Recession," *Finance and Development | F&D*, accessed April 13, 2016, http://www.imf.org/external/pubs/ft/fandd/1999/06/kaser.htm

indices.[7] This inflation eroded public incomes and international reserves. The initial collapse of the USSR brought about economic turmoil in Georgia.

Further, inflation led to low investment and consumption. Resulting confidence in the banking sector was weak, exacerbated by several banking scams that took place in 1992-1993.[8] Payment issues were rampant in Georgia in this period as well, lowering consumption. Barter became a standard basis of trade: "non-payment networks" for goods developed, fanning the flames of rampant corruption throughout the country. This led to some estimates of an average unregistered share of real GDP at 60%, that is, 60% of GDP occurred through clandestine or corrupt exchange networks.[9] Companies shunned the usage of checks as part of tax evasion strategies, making cash transactions harder to trace.[10] Persistent Current Account deficits led to increased borrowing throughout the 1990s to pay for basic needs, such as gas and electricity.[11] When the supply of rubles, the initial currency after the fall of the USSR, became erratic, Georgia introduced an issuance of coupons in 1993 as a currency, although this quickly lost credibility: transactions occurred in Russian rubles or US dollars, the latter being a preferred store of value.[12]

In response, the International Monetary Fund (IMF) in 1994 intervened with a stabilization program that coordinated with the Shevardnadze government to pursue "the

[7] See Table 3.1 in the Appendix for full details.

[8] Wellisz, "Georgia," 18

[9] Tamar Burduli, "Economic Transitions in Georgia: On the Path From Shock Therapy Towards DCFTA," (Master's Thesis, College of Europe, 2014), 23

[10] Wellisz, "Georgia."

[11] Aslund, 115

[12] Ibid, 9

liberalization of prices, trade, and the exchange system" in addition to tight financial policies for Georgian state expenditures to curb inflation. Some critical goals here were the development of a "vigorous private sector" and tighter government fiscal policy.[13] In accordance with the 1994 IMF Standby Agreement, the National Bank of Georgia introduced Georgia's currency, the Lari, which fluctuated within a "narrow range" throughout the remainder of the 1990s.[14] The IMF called for other structural reforms, such as voucher privatization of large enterprises by 1996, the deregulation of bread prices, the abolition of state subsidies, and the downsizing of state institutions in efforts to promote efficiency.[15] In the period following IMF intervention, the Georgian economy began to grow, which I discuss in the next section.

Before the IMF intervened, however, overall economic weakness correspondingly entailed export decline. While reliable quantitative data is unavailable for Georgian export volume between 1991 and 1995, due in part to the lack of administrative control over the country, secondary sources support the claim that Georgian exports declined as a result of the economic collapse.[16] On the supply side of Georgian export products, the collapse of the command economy led to ties fracturing between different, cross-republic integrated production systems.[17] On the demand side, Georgia's export markets in the Former Soviet

[13] Marta de Castello Branco, "Georgia: From Hyperinflation to Growth," IMF Survey, September 23, 1996, accessed March 23rd, 2016, available at https://www.imf.org/external/pubs/ft/survey/survey96.htm

[14] Wellisz, "Georgia," 15

[15] "IMF Approaches Stand-By Credit and Second STF Drawing for the Republic of Georgia," International Monetary Fund website, accessed April 12, 2016, https://www.imf.org/external/np/sec/pr/1995/pr9537.htm

[16] Åslund, *How Capitalism Was Built*, 71, 73, 75

[17] Vladimer Papava, "Экономическая Составляющая Российско-Грузинского Конфликта," *Кавказ и глобализация* 6, no. 1 (2012), http://cyberleninka.ru/article/n/ekonomicheskaya-sostavlyayuschaya-rossiysko-gruzinskogo-konflikta

sphere were weak: With the immediate rupture of the ties between Soviet countries, and the subsequent decline in GDP across countries, consumers in post-Soviet countries consumed less of Georgian wine. By design, old Soviet winemaking equipment was intended to produce a specific brand of wine that was palatable largely to other post-Soviet markets.[18] So when these economies, faced with inflation and economic downturn of their own, imported less, demand for Georgian exports shrank. Lower production inevitably led to lower production for export.

Trade Policy as a Part of Economic Growth Strategy, 1992-1994

President Shevardnadze and his administration included the protection of domestic industries and expansion of exports into its growth strategy in early years, making limited strides toward free trade with Russia. Between 1992 and 1996, the government pursued protectionist strategies: The creation of export-import regulation by the government provided benefits to protected industries. For instance, a 1992 regulation temporarily regulated the quotation and licensing of export-import transactions. That same year, a government resolution created fixed export taxes at 8% of the "contract value" of goods traded, import taxes at 2%, and barter tax at 20%.[19] In 1992, this import policy issued prohibitions on 13 item types from entering Georgia, which was increased to 15 by resolution of the Cabinet of Ministers in March 1993.[20] This approach of defending

[18] Kym Anderson, "Is Georgia the next 'New' Wine-Exporting Country?," Working Paper (Robert Mondavi Institute Center for Wine Economics, January 2013), http://econpapers.repec.org/paper/agsmondwp/162523.htm, 16

[19] Vladimer Papava and Teimuraz Beridze, "Industrial Policy and Trade Regime in Georgia," *Eurasian Studies*, 1996/1997 Vol. 3, No. 4, 75

[20] Ibid

domestic industry continued with a 1995 law allowed for exemption from a Value Added Tax (VAT) to goods manufactured explicitly for export, while imports were subject to VAT, in addition to a 12% customs duty if they originated outside the CIS.[21] Protection of domestic industries was a priority of the early Georgian government, as exemplified by export-import policy.

Within two years, however, and in response to pressures from the IMF, Georgian policymakers gravitated toward generating exports by way of trade openness instead. For instance, given the broader agenda of Central Bank and IMF authorities to stabilization and liberalization, Georgia established a Free Trade Agreement (FTA) with Russia in 1994, eliminating all customs duties and taxes between the two.[22] Under the FTA, party could restrict the flow of goods from the other party exclusively in the case of "sharp commodity deficiency at the domestic market," or in cases where an influx of a given commodity into one market "inflict[ed] damage on domestic procedures of similar or directly competitive goods." Each country was allowed to protect its domestic industries, but in extremely limited capacities. The maneuver toward general trade openness, motivated by impetuses toward stabilization and growth, contributed to the deepening of Russian-Georgian economic ties.[23]

[21] Wellisz, "Georgia," 13

[22] "Agreement on Free Trade Between the Government of the Republic of Georgia and the Government of the Russian Federation," World Bank WITS Database, accessed March 25th, 2016, available at http://wits.worldbank.org/GPTAD/PDF/archive/Georgia-RussianFederation.pdf, 2

[23] "Российско-грузинские отношения."

Russian Regional Presence in 1992-1993

Simultaneously, Russia's regional interests in Georgia were exclusively oriented toward resolution of ethno-nationalist violence in the South Caucasus that had erupted in the immediate aftermath of the Soviet Union. Neighboring Azerbaijani-Armenian ethnic clashes, deportations, and hostilities occurred over the territory of Nagorno-Karabagh. Comparable disputes occurred between Georgia and its ethno-national minority regions of Abkhazia and South Ossetia: Abkhazia sought independence, and ethnic separatist violence broke out in South Ossetia. In 1992, Russia offered military assistance to resolving these conflicts[24]: President Shevardnadze, initially, refused this assistance because he thought support was conditional upon acquiescence to Russian regional geopolitical interests.[25] In 1993, however, he accepted the Russian troops intervened to support him in the civil conflict. Despite the fact that the Shevardnadze government managed to legitimate itself, these ethnic and national frictions would persist as security concerns for Georgia throughout and after his administration.

While Russia asserted its regional presence in this timeframe, its role as such was primarily aimed at maintaining geopolitical and national stability rather than entering Georgian economic life. Common wisdom argues that the 1992-1993 war in Abkhazia took place "during a period of transition in Russian foreign policy, from… a view towards Western integration in 1991, to a reassertion of geopolitical concerns and a traditional view of control in Russia's 'near abroad' by 1993."[26] In this timeframe, Russian leadership re-

[24] D.B. Malysheva, "Международные факторы российско-грузинских отношений," 2014, 37–45, http://istina.msu.ru/publications/article/6511164/

[25] *The Caucasus: A Challenge for Europe* (Silk Road Study Program, 2006), 51

[26] Alexandros Petersen, *The 1992-93 Georgia-Abkhazia War: A Forgotten Conflict*, 2008

evaluated its international goals and aspirations to retain the South Caucasus in the control of its 'near abroad,' or sphere of influence. To do so, it needed to show that it was willing to use force to keep peace for conflicts outside its own borders. As such, Russia forged itself a regional presence in Georgian internal affairs, but it did not significantly impact the Georgian economy in this period, let alone trade.

ECONOMIC REVITALIZATION AND POLITICAL TENSIONS: 1995-2008

The period 1995-2008 sees simultaneous improvements in the Georgian economy and export growth at the same time that Russia's political assertiveness in the region deepens. First, I describe the expansion of Georgian international trade, the development of its comparatively advantageous industries, and Georgia's natural trade partners. Second, I discuss the deterioration of Russian-Georgian relations preceding the Russian embargo in 2006 and invasion in 2008 as a function of an increased Russian state presence in Georgia.

ECONOMIC EXPANSION AND GEORGIA'S COMPARATIVE ADVANTAGES

1995 was the year the Georgian economy began improving visibly. With inflation stabilizing, the newly introduced currency (Lari) exchange rate steadied, and domestic and regional markets growing, they country began seeing a steady GDP increase despite remaining one of the region's poorest countries.[27] This improvement has several precise causes between the late 1990s through 2008 that the literature discusses, but the overall

[27] Peter Havlik and Vasily Astrov, "Economic Consequences of the Georgian-Russian Conflict," *The Vienna Institute for International Economic Studies* 2 (2008), http://wiiw.ac.at/monthly-report-no-8-9-2008-dlp-175.pdf, 2

trend toward liberalization and structural market reforms initiated in have supported Georgian growth.[28] This process deepened with the ushering in of Mikheil Saakashvili to the presidency in the Rose Revolution in 2003 and the deepening of liberal market reforms.

Economic Reforms, The Rose Revolution, and Euro-Atlantic Integration, 1995-2003

The general trend of Georgian international trade policy in the late 1990s was liberalization and the push of Georgia toward Euro-Atlantic integration, or deepened integration with the European Union and NATO. In January 1995, Georgia moved further away from its protectionist trade policies by passing the resolution "On Perfection of State Regulation on Export-Import of Goods" which reduced the amount of prohibited goods into the country from 15 items back to 12.[29] The country also signed Free Trade Agreements with Kazakhstan, Turkmenistan and Ukraine and acceded to the World Trade Organization in 1997, leading to Terms of Trade improvements for the country. By this point, Georgia had removed "significant export restrictions" and completely removed "quantitative import barriers," further strengthened by duty-free imports from CIS countries.[30] Liberalization efforts led to deepening economic relations with the European Union. In 1997, Georgia signed the Partnership and Cooperation Agreement with the European Union, one goal of which was "transition into a market economy" for Georgia in

[28] Tamar Burduli, "Economic Transitions in Georgia: On The Path From Shock Therapy to DCFTA," 2015, doi:10.13140/RG.2.1.1449.9280; Papava and Beridze, "Industrial Policy and Trade Regime in Georgia"; Marta de Castello Branco, "Georgia: From Hyperinflation to Growth"

[29] Papava and Beridze, "Industrial Policy and Trade Regime in Georgia," 73

[30] "The Secrets of the Georgian Coup, an Ex-Soviet Republic, by Paul Labarique," *Voltaire Network*, accessed January 10, 2016, http://www.voltairenet.org/article30094.html, 21

part by providing "trade and investment and economic relations" between the signatories.[31] By 2000, Georgia had become a World Trade Organization (WTO) member.

Georgia's Rose Revolution took place in 2003, one of several 'color' revolutions in post-Soviet space alongside Ukraine's Orange Revolution and Kyrgyzstan's Tulip Revolution in the following two years. Mikheil Saakashvili, a Western-educated politician, ousted Shevardnadze as president and issued reforms with the majority support in Parliament of his United National Movement (UNM) party. The non-violent overhaul of administration in Georgia was caused in part by local frustration at economic hardship and a corrupted state apparatus. Elite consolidation among oligarchs, for instance, had led to vast political-economic networks in which former *nomenklatura*, or Soviet elites, transformed "bureaucracies into financial power, privatizing not only the economy, but the state itself."[32] State failure resulted, with 67.5% GDP of taxes "missed out on" due to the size of the shadow economy.[33]

Upon replacing this government, Saakashvili ushered in a wave of further liberal market reforms, targeting economic and political corruption to create a more stable system of property rights and business practices in the country. His administration early on centralized authority by cracking down on corruption and thereby asserting his party's authority.[34] In an avowed mission toward openness, new government buildings were built

[31] Kakha Gogolashvili, "The Conflicts in the South Caucasus and Their Impact on the Eastern Partnership," accessed April 10, 2016, http://gfsis.org/index.php/resources/library/view/4722, 5

[32] "Power Elites in Georgia," accessed March 28, 2016, http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=106054, 15

[33] Burduli, "Economic Transitions in Georgia," 35

[34] Civil.ge, "Saakashvili Wants New Chief Prosecutor, Vows to Crackdown on Criminals," accessed April 10, 2016, http://civil.ge/eng/article.php?id=6000&search=rose%20revolution

out of glass to symbolize transparency. His government simplified the Tax Code of 1997to reduce the total number of taxes from 21 to seven, passed laws creating Free Industrial Zones (FIZs) in 2005 to encourage foreign capital inflows, and passed a 2005 Law on Privatization of State-Owned Agricultural Land to transfer land to long-term trade-able licenses.[35] The mission of these government practices was an invitation to foreign businesses and encouragement of liberal market practices.

For external trade and political relations, Saakashvili's mission entailed deepening ties with the European Union. Georgia signed into an European Neighborhood Policy (ENP) with the European Union in 2005, facilitating European investment flows into and international trade with Georgia.[36] That same year, Georgia joined the Special Incentive Arrangement for Sustainable Development and Good Governance.[37] The UNM government a year later would deepen its connection with Europe by way of an Eastern Partnership (EaP) agreement in 2009, whose declared goals include the "sustainable development of business environment and improvement of investment climate."[38] Such procedures were undertaken for a number of other post-Soviet, Eastern European countries on their way toward European Union membership. While Saakashvili was not the first Georgian policymaker to direct efforts on a Euro-Atlantic trajectory, his government made a mission of ensuring Georgia's deepened relationship with the European Union and

[35] Tamar Taralashvili and Jakub Kraciuk, "Foreign Trade of Georgian Agricultural Products and Existing Potential of Export to the European Union Market," *Acta Scientiarum Polonorum. Oeconomia*, no. 1 (2014): 123–34, 127

[36] Dimitri Japaridze, "Trends and Changes in Project Environment in Georgia, 2006," 2006, http://eprints.iliauni.edu.ge/usr/share/eprints3/data/1553/1/Trends%20and%20Changes%20in%20Project%20Environment%20in%20Georgia,%202006.pdf, 25

[37] European Union, "Enhancing Georgian Exports: Diversifying Georgian Foreign Trade," October 2007, available at http://www.eeas.europa.eu/delegations/georgia/documents/eu_georgia/gsp_en.pdf, accessed April 10, 2016

[38] Davit Narmania, "Economic Policy in Georgia: Liberalization, Economic Crisis and Changes," 119

adherence to the core principles proposed by initial IMF policy.

As a result of the structural reforms implemented in 1994 and the liberal market reforms of the Rose Revolution government, Georgian GDP between 1995 and 2008 expanded at a rate of approximately 7% per year.[39] State prioritization of private markets incentivized inward investment flows, especially in the form of FDI that overcame the lack of technological advancements and "managerial know-how."[40] One prominent example of this is the creation of the British Petroleum-owned Baku-Supsa oil pipeline constructed through the South Caucasus.[41] Of course, improvements in FDI inflows and macroeconomic stabilization from within could not stop the external shock of the Russian Financial Crisis from having regional repercussions for Georgia in 1998.[42] In spite of the crisis, however, the Georgian economy's continuation of growth continued an economic expansion through the 2000s: As a result of the reforms of the Rose Revolution government, the World Bank noted extensive improvements in Georgia's Ease of Doing Business standing[43] and GDP grew by approximately 8.4% per year between 2003 and 2008.[44] The period 1996-2008 saw a high rate of Georgian economic expansion.

---

[39] See Table 3.1 in the Appendix for full details.

[40] Vacharadze, 21

[41] "The Impact of the Russia-Georgia War on the South Caucasus Transportation Corridor," *The Jamestown Foundation*, accessed January 6, 2016, http://www.jamestown.org/programs/recentreports/single/?tx_ttnews%5Btt_news%5D=34654&cHash=db033dd942, 9

[42] Åslund, *How Capitalism Was Built*, 69

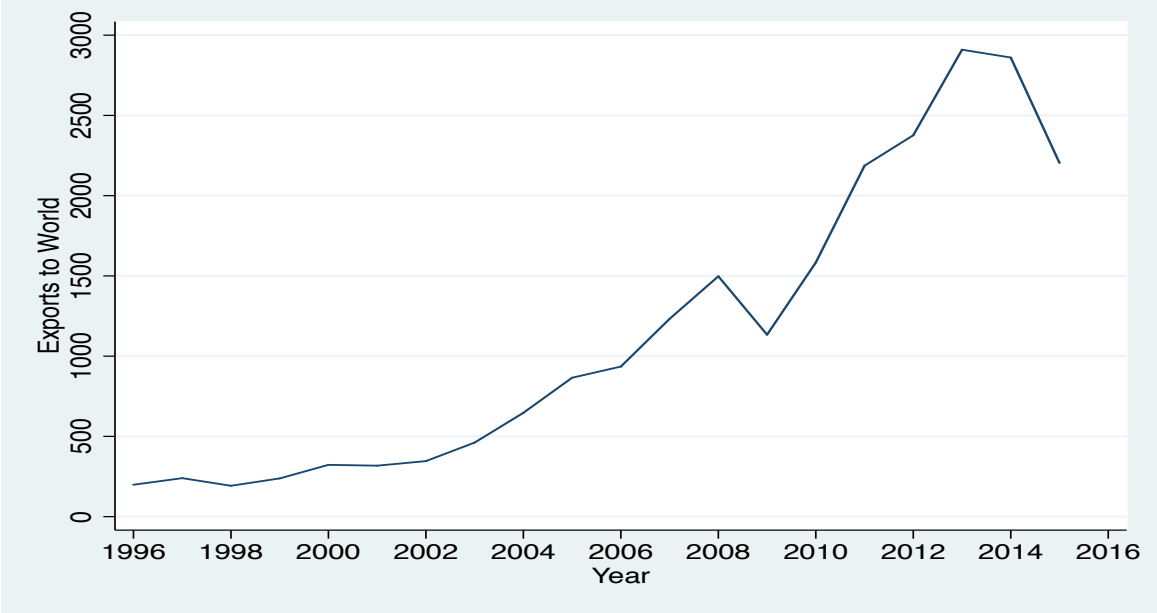
[43] The World Bank Group, "Doing Business in 2006," accessed April 10, 2016, available at http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB06-FullReport, 100

[44] See Table 3.1 in the Appendix for full table of relevant GDP data.

International Trade Growth and Sectors of Comparative Advantage

As the country's GDP grew, so did exports. Companies found foreign markets to which they could export in higher volume than they could sell domestically, due to the small size of the Georgian economy.[45] The growth of neighboring economies such as Russia after 1998 indicate more demand in the region,[46] which likely attracted Georgian exports. Figure 3.1 shows the growth in Georgian export volume starting in 1996:

Figure 3.1: Georgian Total Exports to World, 1996-2015. Measured in millions USD equivalent of trade value.



Source: Data from UN Comtrade Database, available at http://comtrade.un.org/

Figure 3.1 shows the growth trajectory of exports starting in 1996 indicating an expansion that does not contract until 2008, when the Global Financial Crisis hit and Russia invaded, which I discuss later. Notably, Georgian exports picked up in volume starting in 2002, although the volume as early as 1996 shows initial growth. Not reflected in the above chart

[45] Davit Narmania, "Economic Policy in Georgia: Liberalization, Economic Crisis and Changes," 120

[46] Aslund, "How Capitalism Was Built," 70

is how the concentration of export destination changed since 1996: In 1996, the three main exports markets of Turkey, Azerbaijan, and Russia constituted 59% of Georgian exports,[47] but this had lowered to 49.3% in 2001.[48] Below, I consider the main factors underlying Georgia's comparative advantages and determine export destinations since 1996.

The Georgian economy derives many of its comparative advantages from the legacy of the Soviet Union. The determinants of which industries are internationally competitive are in some capacity rooted in shared history, creating natural market attraction. During the Soviet era, Georgia's trade with other Soviet republics determined by planning and comparative advantage: Intra-Union trade accounted for 43% of Georgia's GDP, according to reconstructed figures.[49] Georgia afterwards inherited old Soviet obsolete technologies and –often– noncompetitive goods production apparatuses.[50] In other words, the technology and resource endowment with which Georgia was bequeathed emerged straight from the former Soviet Union, determining the sectors in which it has comparative advantages.

Georgian agriculture, especially its wine, exemplifies how a colonial history in Russia's orbit determines its natural trade flows. Agriculture is Georgia's biggest sector, which continues to employ over 50% of its workforce by 2015.[51] After the breakup of the

[47] Natalia Tsivadze, "Export Diversification in Georgia: Intensive and Extensive Margins," (Master's Thesis, International School of Economics in Tbilisi, 2011), 15

[48] Katrin Elborgh-Woytek, "Of Openess and Distance: Trade Developments in the Commonwealth of Independent States, 1993-2002," IMF Working Paper (International Monetary Fund, 2003), https://ideas.repec.org/p/imf/imfwpa/03-207.html, 10

[49] Ibid, 22

[50] Papava and Beridze, "Industrial Policy and Trade Regime in Georgia."

[51] "The Jobs Challenge in the South Caucasus – Georgia," Text/HTML, *World Bank*, accessed April 10, 2016, http://www.worldbank.org/en/news/feature/2015/01/12/the-jobs-challenge-in-the-south-caucasus---georgia

Soviet Union, Georgia retained much of its wine-production technology: It preserved its vineyards, seeing a fall in production in only 16% as compared to Russia and Moldova, for whom wine production fell 60% as the result of destroyed infrastructure.[52] The *qvevri*-based production process for wine, a traditionally used clay storage vessel, continued through the fall of the USSR, notably distinct from wine production processes in other wine-exporting countries. As Georgian wine is unique, the efficiency of the technology production processes are less important than the quality produced,[53] but, simultaneously, this limits viability in unacquainted markets. The Russian market demands relatively high volumes of traditional Georgian agricultural production such as vegetables, citruses, tobacco, tea and wine[54] partially due to less "stringent" goods standards and more accommodative consumer habits.[55] Between 1995 and 2005, 75% of Georgian wine export earnings originated in Russia, rising to 90% when combined with Ukraine.[56] Other nearby markets such as Turkey also have historical exposure to Georgian products that fuel demand there as well. Mostly, however, Georgian wine and other agricultural products are competitive in post-Soviet countries, namely, Russia.

Another sector in which Georgia has a comparative advantage is transit. Georgia sits at a critical location between Eurasia and Europe, allowing it to generate profits by

[52] Anderson, "Is Georgia the next 'New' Wine-Exporting Country?" 7

[53] Ibid, 7

[54] Рафаэль Ултанбаев, "Россия и Страны Закавказья: Реальность и Стратегии Экономического Сотрудничества," *Центральная Азия и Кавказ*, no. 1 (37) (2005), http://cyberleninka.ru/article/n/rossiya-i-strany-zakavkazya-realnost-i-strategii-ekonomicheskogo-sotrudnichestva.

[55] Malysheva, "Международные факторы российско-грузинских отношений."

[56] Anderson, "Is Georgia the next 'New' Wine-Exporting Country?" 3

transferring goods through the ports of Batumi and Poti.[57] Being the only alternative transit sector for gas and oil flows to Europe also has allowed for the development of pipelines through Georgia such as the 2001 Baku-Tbilisi-Erzurum natural gas pipeline through Georgia from Azerbaijan or the 2005 Baku-Tbilisi-Ceyhan pipeline. Georgia is also a transit zone for cargo flows between Turkey and Armenia, and its transit flows would weaken if trade barriers resulting from regional political disputes were to lift.[58] Regional transit is a service that Georgia's geography makes comparatively advantageous.

Heavy and light industry, while less covered in the literature on Georgian exports,[59] also constitute areas of Georgian comparative advantage. Rail lines connecting Georgian and Azerbaijani factories are still intact at time of writing, which reduces the costs of production of capital- and input-intensive goods such as steel even if not used optimally.[60] Manufactured products such as ferroalloys, railway parts, slag, iron and steel, and other industrial products became some of Georgia's largest exports to CIS and Black Sea Economic Cooperation (BSEC) countries by 2006 such as Turkey, Russia, Turkmenistan and Armenia.[61] Georgian metallurgy, a leftover from the Soviet era, is a prominent regional

[57] Caucasus Research Resource Center, "Study of Economic Relations Between Georgia and Armenia: The Development of Regional Trade Related Growth in Samtskhe-Javakheti," September 2007, available at http://www.crrc.ge/uploads/files/reports/Study_of_Economic_Relations_Between_Georgia_and_Armenia_Report.pdf, accessed April 5, 2016, 33

[58] Polyakov, *Changing Trade Patterns after Conflict Resolution in the South Caucasus*, 18

[59] Interview with Economist at the American Chamber of Commerce in Georgia George Welton, Interview conducted by James N. Janison on August 8th, 2015

[60] Ibid

[61] Georgian Department of Statistics (GeoStat). *2006 External Trade of Georgia.* Tbilisi: 2007. Web. March 24, 2016, 113, 114, 116, 117

export in addition to manganese, despite the initial downturn in overall production of the early 1990s.[62]

This section has reviewed drivers of Georgia's export growth that emerged in the late 1990s and continued through the mid-2000s. The next section discusses how the objectives of Georgian and Russian policymakers diverged, signaling fissures between the two countries.

STATE AGGRESSION HITS GEORGIA AND ITS ECONOMY, 2000-2012

Structural reform, Euro-Atlantic integration, and economic liberalization propelled Georgian growth between 1996 and 2008, especially after the revolutionary overhaul of the Rose Revolution in 2003. This propelled growth in Georgia's sectors of comparative advantage on the international level. The prospect of Georgia integrating with the European Union or NATO did not acquiesce to Russia's interest in regional supremacy, however. Below, I discuss the fomentation of Russian interest in regional assertion in the South Caucasus. Namely, I show that the agricultural embargo in 2006 established a critical juncture for the implementation of Russian state aggression on Georgian exports. While the Georgian economy continued to grow despite the embargo in this timeframe, the market shutdown in 2006 and invasion in 2008 establish how Russia's attempts at regional control harmed the Georgian economy.

[62] Ivars Indans, "Relations of Russia and Georgia: Developments and Future Prospects," http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?lang=en&id=31593, accessed March 23, 2016, 137

The Advent of Strong Russian Foreign Policy in the South Caucasus, 2000-2006

Though not necessarily a pivotal year in Georgian political life, Vladimir Putin was elected presidency of Russia in 2000 with the support of his United Russia party. This signaled the beginning of a Russian administration with interest in making the Russian state a player in regional and international political affairs. For instance, the Russian Foreign Policy Concept of 2000 outlines "the development of bilateral and multilateral coordination with the member-states of the CIS," in order to achieve "the deepening of regional cooperation of members" that have the "vast potential for integration in different spheres."[63] A deepening of coordination through post-Soviet space, then, by preserving CIS ties, affirms Russia's position as a regional leader on a range of topics. Chairman of RAO UES, Russia's public integrated electricity company, coined the phrase of a Russian "liberal empire,"[64] in which Russia leads regional market developments to tie post-Soviet economies together, especially in the economic sphere. The Putin Administration's foreign policy sought to make Russia into a regional power.[65]

This general vision among Russian policymakers translated into establishing political influence in the South Caucasus. Russia believed these three states should be members of the Commonwealth of Independent States (CIS),[66] which Georgia never joined. Military bases, according to this policy, needed to be present throughout the region,

[63] "MFA of Russia | 07/10/2000 | FOREIGN POLICY CONCEPT OF THE RUSSIAN FEDERATION," accessed March 23, 2016, http://archive.mid.ru//Bl.nsf/arh/1EC8DC08180306614325699C003B5FF0?OpenDocument.

[64] Vladimer Papava, "Russia's Economic Imperialism," *Project Syndicate*, January 17, 2006, http://www.project-syndicate.org/commentary/russia-s-economic-imperialism

[65] Indans, "Relations of Russia and Georgia," 132

[66] Cornell and Starr, "The Caucasus: A Challenge For Europe," 51

partially to guard Russia against its potential adversaries, Iran and Turkey.[67] This policy showed to have ramifications for Russian security policy in response to Georgia's unwillingness to join the CIS: In 2001, for instance, Russia cut electricity as well as gas supplies to Georgia as part of a dispute "regarding allegations that Georgia was allowing Chechen guerrillas to operate out of its Pankisi Gorge."[68] Chechen guerillas here were ostensible terrorist threats to Russia in the aftermath of two wars in Chechnya in the 1990s. A policy of consolidated Russian influence throughout post-Soviet space led to an increase in influence over national security concerns.

Russian influence extended into South Caucasus economic life through the absorption of state assets and large regional corporations. For instance, in 2002 Russia executed a $93 million debt-for-equity swap of Armenian sovereign debt in exchange for ownership in major public industries such as utilities. In 2003, Russia's state electricity monopoly Inter RAO acquired a 75% stake in Telasi, Tbilisi's electricity grid company, along with half of all high voltage power lines in Georgia. This gives the Russian electricity monopoly a dominant position of leverage over Georgian power distribution.[69] Subtle though this method is, a Russian state-run monopoly maintaining control of key Georgian utilities gives the Russian government significant decision-making power regarding essential Georgia services. Analysts agree that the Russian ownership here is not simply a business-driven acquisition.[70]

---

[67] Indans, "Relations of Russia and Georgia," 139

[68] Ibid

[69] Vladimer Papava, "Экономическая составляющая российско-грузинского конфликта," 769; Courtney Doggart, "Russian Investments in Georgia's Electricity Sector: How Georgia's Institutional Framework Encouraged High Levels of Russian Investment," 2009, doi:10.2139/ssrn.1526205, 39

[70] Papava, "Russia's Economic Imperialism."

Relations between Tbilisi and the Moscow worsened quickly after Saakashvili took office in 2003, namely, the due to the prospect of regime change in Russia's 'near abroad.' Georgia moving into NATO and the West more broadly would undermine Russia's prominence as a regional hegemon.[71] The next section discusses how this relationship led Russia to embargo Georgian wines and other agricultural products, a critical juncture for further acts of state aggression.

The 2006 Agricultural Embargo: All but Health-Related

There are several explanations as to why Russia imposed a ban on Georgian agricultural products in 2006; the public health concerns touted by Russian bureaucrats is not one of them.[72] Gazprom had announced in 2005 an interest in privatizing Georgia's gas pipeline system, which distributes gas locally and internationally.[73] The United States at this point urged Georgian officials away from selling Gazprom a gas pipeline connecting Russia to Armenia through Georgia. Some analysts argue that the ban ensued when Georgia complied with Western officials instead of Russia's state-owned gas monopoly.[74] Another explanation is that the ban occurred as punishment to Georgia for arresting four Russian spies on September 27th, 2006; Russian troops were put on "high alert" and to

[71] Daniel Treisman, *The Return : Russia's Journey from Gorbachev to Medvedev* (New York, n.d.), 111

[72] Alain Perusset, "Can the South Caucasian States Succeed in Establishing Themselves as Independent Actors on the International Stage, rather than Objects of Other Countries' Policies?," n.d.; Papava, "Russia's Economic Imperialism"; "Грузинское вино и российское эмбарго," *Иносми.ру*, accessed January 13, 2016, http://inosmi.ru/caucasus/20121013/200865119.html; Vasile Rotaru, "Russia's 'Contribution' to the Inception of the Eastern Partnership," *Studia Politica : Romanian Political Science Review* 14, no. 2 (2014): 221–41; Mamuka Tsereteli, "Banned in Russia: The Politics of Georgian Wine," *Central Asia-Caucasus Analyst* 19, no. 4 (2006), http://leader.viitorul.org/public/218/en/Banned%20in%20Russia%20-%20The%20politics%20of%20Georgian%20wine.doc

[73] Indans, "Relations of Russia and Georgia," 137

[74] Papava, "Russia's Economic Imperialism."

"shoot to kill if provoked" to defend military bases in Georgia. Further, Russian Foreign Minister Sergei Lavrov said that Russia will insist to the UN Security Council to assess "Georgia's activities as subversive" in Georgia-Abkhazia disputes.[75] No other country to whom Georgia exported reported similar health concerns; many argue that the quality of Georgia's products are higher than Russia's.[76] Moldovan wine in Russia also received a shutdown in Russia due to stated health concerns due to Moldova's own Euro-Atlantic integration.[77] While the precise catalyst is debated, banning Georgian wine was intended to hurt Saakashvili's domestic standing[78] by pressuring the Georgian economy.

There is no question among regional experts that the embargo was politically motivated, not driven by the health concerns that the official line touted: The events of the implementation of the embargo demonstrate that banning imports from Georgia occurred in a spat of hostile political disputes between the two states. On July 8th, the Georgian-Russian border checkpoint at Verkhniy Lars was closed, violating the "Agreement on Border Checkpoints" between Georgia and Russia from 1993. On September 28th, Georgia ejected Russian Ambassor Vyacheslav Kovalenko,[79] the day after Georgian authorities arrested the Russian spies. By October 2nd, Russia suspended air, railroad, sea and postal ties with Georgia and stopped issuing entry visas to Georgian citizens, banning trade from Batumi or Poti to Sochi, Russia. On October 5th Georgia threatened to block Russia's bid to join the WTO: That same month, Russia forbade ships with the Russian flag to enter

[75] Indans, "Relations of Russia and Georgia," 131

[76] Tsereteli, "Banned in Russia."

[77] Rotaru, "Russia's 'Contribution' to the Inception of the Eastern Partnership," 233

[78] Ibid, 234

[79] Livny et. al, "Impact of Russian sanctions on the Georgian Economy," 17, 9

Russian seas, and internally, 130 Georgians were accused of immigration offense charges in Moscow and Georgian businesses were shut down.[80] On March 15th, 2006, Russia issued a ban on wines, wine products, brandy, and champagne: The Chief Sanitary Inspector of Russia, Genadi Onishchenko announced concerns about alleged contaminants in the liquids; his office subsequently banned Georgian mineral water, Borjomi and Nabeghlavi, from entering Russia on May 5th and 6th after finding "several large consignments of fake Borjomi."[81] The timeline of the events suggests that the import restrictions deepened in a spat of tit-for-tat acts of hostility between Georgian and Russian policymakers.

While the specific action of Georgian policymakers that was the catalyst for the agricultural embargo is debatable, the embargo's clear goal was to punish Georgia for its steps toward Euro-Atlantic integration. This asserted control over a regional sphere of influence where the United States and European Union had emerged as challengers. Georgia did not respond with counter-measures at all, alleged to demonstrate to international stakeholders such as the EU that it is capable of abiding by WTO norms and principles.[82]

War and Georgia's Continued Westward Political-Economic Trajectory, 2008-2012

In August 2008, Russia invaded Georgia after Saakashvili initiated an attack on South Ossetia, its rebellious northern province. A longer-term justification for the invasion was to resolve the long-standing conflicts in Georgia's South Ossetian region, discussed

[80] Ibid, 9

[81] Livny et al., "Impact of Russian Sanctions on the Georgian Economy," 9

[82] Denis Cenusa et al., "Russia's Punitive Trade Policy Measures towards Ukraine, Moldova and Georgia," *CEPS Working Documents*, no. 400 (2014), http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2507195, 7

earlier.[83] The Russian invasion was not an act of humanitarian intervention, however: It was a response to Georgia's Europe-ward direction, and subsequently damaged EU-Russian relations.[84]

The war hurt the Georgian economy for the subsequent year. Before 2008, GDP growth expectations of the Georgian Central Bank exceeded 10%; after the war, they dipped to 6%.[85] The Bank of Georgia share price fell on the London Stock Exchange, infrastructure was destroyed, and Georgia's trade imbalance worsened to the point that imports exceeded exports by a multiple of four.[86] Intended FDI inflows of over $1 billion were withdrawn as Clear Stream Holding and Kazakhstan's Kazmunaigaz and cancelled expansion projects.[87] Georgia's 2009 Letter of Intent to the IMF lamented the contraction in growth across sectors, driving a reduction in the third business quarter to -3.9% with further expectations of contraction by -1.8%.[88] The war without a doubt pushed economic contraction.

Despite the hurt to Georgia's political standing and economy, neither invasion nor embargo reduced Georgia's Euro-Atlantic integration ambitions. Saakashvili, for instance, framed Russian sanctions as an abject failure to "dent the country's rapid economic growth rate."[89] The EU responded to the war not by staying out Georgia, but with efforts to

---

[83] "The Russia-Georgia War: Causes and Consequences - Centre for World Dialogue," accessed March 29, 2016, http://www.worlddialogue.org/content.php?id=439

[84] Gogogashvili, "The Conflicts in the South Caucasus and Their Impact on the Eastern Partnership," 10

[85] Havlik and Astrov, "Economic Consequences of the Georgian-Russian Conflict."

[86] Burduli, "Economic Transitions in Georgia," 39

[87] Narmania, "Economic Policy in Georgia," 117

[88] Government of Georgia, "Letter of Intent and Memorandum of Understanding," March 10, 2009, available at https://www.imf.org/external/np/loi/2009/geo/031009.pdf, accessed April 10, 2016, 1

[89] "Relations of Russia and Georgia: Developments and Future Prospects," 134

facilitate visa processes and quickly establish a free trade agreement.[90] As of July 2010, an Association Agreement signed with the European Union declared a foreign policy objective: "to achieve greater economic and regulatory harmonization with the EU via political association and economic relations."[91] Western business groups such as the American Chamber of Commerce argue that Georgia continued in this time period to improve its business climate, facilitating international trade transactions.[92] Any hope of acquiescence from Georgia after which Putin may have sought was not achieved. To this extent, the invasion and embargo signaled an inevitable divergence in policy objectives between Georgia and Russia despite increasingly aggressive tactics.

EMBARGO REPEAL: ATTEMPTS TO BALANCE REGIONAL INTERESTS, 2012-2014

2012 saw the end of Saakashvili's administration: Georgian billionaire Bidzina Ivanishvili put together a coalition known as the Georgian Dream (GD) Party that replaced the UNM in the Georgian Parliament and was appointed Prime Minister. One facet of the GD's platform was repairing relations with Russia: Through negotiation, the administration had the embargo lifted, leading to a rapid rise in exports into Russia.[93] The government "abandoned its anti-Russian rhetoric" and instead made "numerous goodwill gestures toward Moscow," raising speculations among opposition leaders about how

[90] Burduli, "Economic Transitions in Georgia," 45

[91] USAID Hydro Power and Energy Planning Project (HPEP), "Energy Policy White Paper: Energy Policy Directions for Georgia," October 2013, 2

[92] Caucasus Research Resource Center, "Study of Economic Relations Between Georgia and Armenia," 29

[93] Cenusa et al., "Russia's Punitive Trade Policy Measures towards Ukraine, Moldova and Georgia," 8

Ivanishvili's business ties to Russia might influence his party's policymaking.[94] In terms of economic ambitions of the country, GD attempted to attract FDI into the country have incentivized Russian oligarchs to invest in the Georgian economy, further bolstering suspicions of the regime's pro-Russian orientation.[95] Regardless of the speculation over his affiliations, the Ivanishvili-led Georgian Dream coalition spearheaded a direction toward re-kindling Georgian-Russian economic ties.

The result of the removal of the embargo a deepening of Georgian-Russian economic ties, as evinced by the massive trade flows to Russia that ensued. In 2013, Georgian wine exports more than doubled, and for the first eight months of 2014 Russia alone was the destination for more than 70% of Georgia's total wine exports.[96] Hazelnut sales expanded, and mineral water exports increased by 55% between 2012 and 2013.[97] Altogether, Georgia's largest export partners became Azerbaijan (19%), Armenia (10%), Russia (10%), and Turkey (8%) by 2014. Of this, agricultural products such as hazelnuts, wines, fruits and vegetables accounted for 26% of Georgian exports, alongside exports such as passenger cars (18%) and ferroalloys (10%).[98] This exposure, however, proved a worrying sign to some Georgian policymakers: A 2014 Letter of Intent argued that over-exposure to the Russian market, which contracted that year, presented dependency risks in

---

[94] Marek Matuslak, "Georgia- between a Dream and Reality. OSW Commentary No. 133, 15.04.2014," Policy Paper, (April 2014), http://www.osw.waw.pl/en/publikacje/osw-commentary/2014-04-16/georgia-between-a-dream-and-reality

[95] Ibid

[96] ISET Policy Institute and German Economic Team Georgia, "Georgia's Agricultural Exports," accessed April 11, 2016, http://www.get-georgia.de/publications/policy-papers/, 5

[97] Lali Chagelishvili-Agladze, "European Association Agreements And Some Aspects Of Georgia Economics," *European Scientific Journal (Kocani)*, November 1, 2014, 14-16

[98] "Two Years in Government: Georgian Dream's Performance Review," *Green Alternative*, accessed April 11, 2016, http://greenalt.org/news/two-years-in-government-georgian-dreams-performance-review/

the future.[99] As Russia rapidly joined Georgia's neighbors as a top export destination, economic links re-expanded between the two countries.

At the same time, however, the Georgian Dream government made strides toward deeper relations with the European Union.[100] In 2014, the government signed an Association Agreement that includes the creation of a Deep and Comprehensive Free Trade Area, easing tariff and customs duties pressures, including "competition and transparency provisions, intellectual property rights." An accompanying EU study predicted that the agreement would raise Georgian exports to the EU by 12% and its GDP potentially by 4%.[101] By 2014, the European Union was a large Georgian export destination, receiving 22% of exports.[102] Georgian trade policy, in this light, was not just oriented toward better relations with Russia or Europe alone, but intended to avoid over-dependence on any particular target market. According to the Deputy Minister of International Economic Relations, "if the Russian market likes Georgian product… we can sell this product to the Russian market but nothing more. It [does] not mean that we need some Deep and Comprehensive Agreement with the Russians."[103] The Turkish and American markets are also potential markets for Georgian goods as well, according to this perspective.[104] While the Georgian government in this timeframe has pursued rekindling relations with Russia,

---

[99] Government of Georgia, "Letter of Intent and Memorandum of Understanding," July 15, 2014, available at https://www.imf.org/external/np/loi/2014/geo/071514.pdf, accessed April 8, 2016, 1-3

[100] Lali Chagelishvili-Agladze, "European Association Agreements And Some Aspects Of Georgia Economics," 16; "Российско-грузинские отношения."

[101] "EU-Georgia Deep and Comprehensive Free Trade Area," European Commission Press Release Database, available at http://europa.eu/rapid/press-release_MEMO-13-705_en.htm, accessed April 8, 2016

[102] "Two Years in Government."

[103] Interview with Director of the Department of International Economic Relations at the Ministry of Foreign Affairs of Georgia Alexander Khvtisiashvili, interview by James N. Janison, June 23, 2015

[104] Ibid

its general Westward trajectory remains a priority and an influence on Georgia's future export trajectory.

CONCLUSION

The embargo of 2006 signaled a critical juncture at which Russian regional political and economic interests directly targeted Georgian exports, an overt act of state aggression. After brewing tensions, this signaled that Moscow was willing to use force to assert control over the region, later resorting to war, creating persisting hostility between governments that lasted largely until 2012. Simultaneously, Georgia's economy adopted liberal market reforms that integrated it with Russia, the EU and its neighbors, almost continuously pushing for deeper Euro-Atlantic integration while causing substantial economic growth. The timeframe 1996-2014 allows me to analyze effects of state aggression on Georgian export decisions by seeing export flows occurring both with and without an embargo. With this background in mind and critical juncture formulated, Chapter Four analyzes the impact of the embargo on Georgian export volume in order to understand how this act of state aggression alters market processes of export decisions.

CHAPTER FOUR
SUBSTITUTION IN GEORGIAN EXPORTS: POST-SOVIET CONNECTIONS

Chapter Three argued that the Russian agricultural embargo forms a critical juncture of state aggression, after which point the Georgian economy and government became the subject of aggressive geopolitical pressures to stay within Russia's sphere of influence. Having established this, this chapter answers the following question: By what market processes did Georgian firms change their export practice in response to the Russian agricultural embargo, an act of state aggression? To answer this question, I perform a macroeconomic analysis of the effects of the Russian market shutdown on Georgian exports to non-Russian markets.

One preliminary question that arises is: Why do an analysis of total Georgian exports to Russia and other countries? The link between an analysis of Georgia's export volume on a country level and my primary research question, how state aggression affects firm export decisions, may at first seem tenuous. That said, there are three primary reasons

for a country-level analysis. First, this country-level analysis helps me establish a broader context for firm-level decisions. I.e., by determining a larger trend, I determine if the firms whom I interview in Chapter Five about their risk-averse behavior are outliers or among exporters for their decision-making process surrounding exports. Secondly, firm-level data with export volume indicated per firm in the necessary timeframe are not available for analysis. As such, the next closest quantifiable metric for modeling export decisions is total export volume. Although this does not address possible behavioral discrepancies between small and large firms, productive and unproductive firms or other market slices, it does identify commonalities across exporters in terms of the factors that drive them to alter or drop their export practices. Lastly, an analysis of Georgian exports to Russia and non-Russian markets allows me to identify similarities in Georgian export patterns across markets, allowing for an assessment of common factors between Russian and non-Russian markets that drive export decisions.

The next section of the chapter describes the data and methodology of the analysis. The section after that hypothesizes that product familiarity and business networks throughout the former Soviet Union should attract demand through non-Russian markets during the embargo and then presents the results. Using an instrumental variable regression analysis of Georgian exporters to Russia, I conclude that a substitution effect occurred for Georgian exports in certain former Soviet markets, but not for others, likely as a result of business networks and product familiarity in these markets. This means that the Gravitationalist analysis of what drives exports is indicative of the drivers of export decisions when firms are faced with an act of state aggression.

HYPOTHESES

This section presents several hypothesized effects of the embargo on Georgian exports. First, I draft several hypotheses concerning a possible substitution effect (Hypothesis 1 and its sub-groups), in which exporters that can no longer access Russia export to new destinations instead. Second, I hypothesize about the magnitude of this substitution effect to see if the embargo caused total agricultural exports to fall in Hypothesis 2.

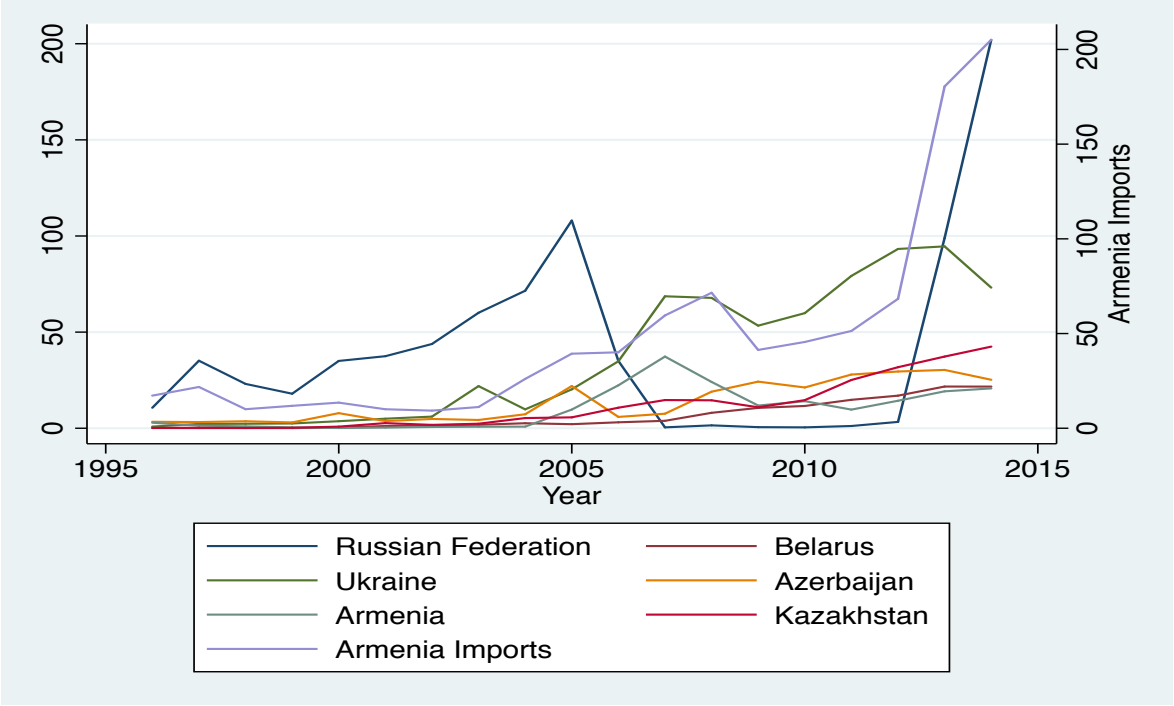
HYPOTHESIS 1: SUBSTITUTION EFFECTS

The first consideration is whether a substitution occurs from Georgian agricultural export flow originally going to Russia into other countries. Possibly, upon confrontation with the Russian market shutdown, agricultural firms export goods to non-Russian alternatives, which are second-best to the Russian market in terms of profitability. The embargo, after all, did not change exporting firms' productivity, scale of operation, or other factors that might impel them to export in the first place. It would be reasonable, then, to think that firms would look for alternative markets as long as they could not access the Russian one. For the duration of the embargo, therefore, they might substitute what would be exports to Russia into non-Russian markets. This is the logic behind Hypothesis 1, below:

Hypothesis 1: Do Georgian exporters substitute their goods to new markets?

This substitution effect, on first glance, seems to have empirical support. Figure 4.1 below presents Georgian agricultural exports visually, comparing exports to Russia with exports to other destinations:

Figure 4.1: Agricultural Export Volume to Russian Federation and Other Destinations. Values in millions USD, both scales.



Source: Data from UN Comtrade Database. Available at http://comtrade.un.org/

In Figure 4.1 above, the right-hand side of the y-axis indicates total export volume in US dollar equivalent of the value exported in millions of US dollars. The left-hand side indicates the amount of Georgian imports from Armenia, which is a control variable to indicate Georgian overall macroeconomic health. This indicates imports into Georgia from Armenia, not Armenian imports of Georgian products. Export destinations are indicated by color-coding and are indicated by the name of the country in question.

At first glance, exports to Russia seem to switch off with exports to non-Russian markets. Figure 4.1 shows how, between 2006 and 2012, agricultural exports to Russia are negligible, indicating that there was a market shutdown. In that time, however, exports to Ukraine increased. These exports dip around 2008 at the same time that imports from Armenia decrease, which is likely indicative of the Great Recession and global economic downturn. Additionally, export destinations such as Azerbaijan, Belarus and Kazakhstan

begin to increase in 2006. With the exception of Kazakhstan, agricultural exports taper off in 2013 to those markets, when the embargo was repealed. Agricultural exports to Ukraine even slump between then and 2014. Visually, the data suggests that there is a negative relationship between exports to Russia and other markets, suggesting Hypothesis 1 possesses some merit.

An alternative scenario is also plausible, however, in which firms do not substitute goods into new markets. In this case, flows previously directed toward Russia just drop off altogether. Former exporters to Russia lose revenue streams and therefore shrink operations. This behavior could even change depending on the firm in question: For instance, it is plausible that only large firms are able to substitute effectively. This is beyond the scope of this analysis because such an analysis would rely upon firm-level data, which I do not have. That said, an analysis of the overall export volume can determine whether a substitution effect occurs at all.

There are further specifications motivating Hypothesis 1. Namely, if exporters do substitute, *how* do they do it? What factors determine whether a market becomes a substitution destination? I formulate some possibilities in Hypotheses 1a and 1b.

Hypothesis 1a: Gravity Factors for Substitution

Some factors that might affect the decision to export to a particular destination are gravitational: Transportation costs, i.e. distance, might determine whether exports flow to a particular nearby country. On the other hand, the size of a new export market might also matter: Larger demand from perhaps more distant markets could also determine the viability of substituting to a new market. These considerations lead to Hypothesis 1a:

Hypothesis 1a: Do Georgian goods substitute into regional markets in which access costs might be low, or more distant but potentially larger markets such as Germany in Europe?

One the one hand, Georgian exporters might by and large export to neighboring markets such as Turkey, Azerbaijan and Armenia. In fact, implementations of the Gravitational Theory of Trade –as discussed in Chapter Two– indicate that proximity is a strong determinant of Georgian export flows.[1] Furthermore, regional integration into multilateral economic organizations such as the Black Sea Economic Cooperative (BSEC) has led to higher trade volume between member states, providing Georgia with reason to deepen ties with its Black Sea neighbors.[2] Given the market shutdown in Russia, we might expect Georgian exports that cannot go to Russia to redirect to other neighboring countries, where they already seem to do business.

On the other hand, regional knowledge also suggests that a substitution effect might have occurred toward Europe, rather than toward Georgia's neighbors, namely, to Central Europe.[3] The embargo forced Georgian winemakers to improve quality of goods in order to penetrate these new markets. A Marketing Manager at the Georgian Wine Association, a lobbyist organization representing numerous Georgian wine producers, for instance argues that the embargo entailed that "export destinations have grown 4-5 times," clarifying that "economically [the embargo] was bad, but in terms of quality development and growth of export destinations it was good."[4] This created a push for greater

[1] Azer Dilanchiev, "Empirical Analysis of Georgian Trade Pattern: Gravity Model," *Journal of Social Sciences* 1, no. 1 (May 30, 2012): 75–78

[2] "Determining Factors Of Trade Flows In Blacksea Economic Cooperation (BSEC) Region: A Panel Gravity Model."

[3] Davit Narmania, "Economic Policy in Georgia: Liberalization, Economic Crisis and Changes," 119

[4] Interview with Marketing Director at Georgian Wine Association Georgie Apkhazava, by James Janison, July 20th, 2015 over email.

concentration in markets such as Central and Eastern Europe: Between 2005 and 2009, 90% of wine exports from Georgia went to Central and Eastern Europe in addition to the rest of the CIS. Notably, this area accounts for less than 7% of global wine imports, demonstrating significant concentration of Georgian exports there.[5] Some argue that the Russian market was less important for Georgian exports by 2013, when the embargo was repealed, in comparison to when the embargo was first implemented in 2006.[6]

This suggests that, as the Gravitational Theory of Trade also implies, size might matter for substitution markets. The Turkish, Armenian, and Azerbaijani economies are much smaller than the German economy, measured in GDP.[7] Size might limit the ability of these economies to absorb greater volume of Georgian goods as compared to larger economies such as Germany. Considering that Georgian goods already flow to these markets, demand might reach a saturation point. In other words, there is only so much more Georgian wine that Turkish or Armenian consumers might want, given its increased availability. In further but larger markets such as Germany, however, there could have been potential demand for Georgian products not filled prior to the embargo. Georgian wine could get absorbed almost endlessly into the European markets, given how much bigger Europe is than Georgia.

---

[5] Kym Anderson et al., "Georgia-the Cradle of Wine-Is Looking to Rock the Export Scene," 2014, http://search.informit.com.au/documentSummary;dn=256101373578566;res=IELAPA, 4

[6] Economic Policy Research Center, *Focus on Russia: Georgia under Russian Expansionism and Financial Crisis*, accessed April 9, 2016, http://georgianreview.ge/wp-content/uploads/2015/07/Russia_A5_WEB.pdf, 15

[7] "GDP at Market Prices," World Bank. Available at http://data.worldbank.org/, accessed April 1, 2016. German GDP has been larger than Turkish, Armenian, and Azerbaijani GDPs for the entire timeframe, 1996-2014.

As such, the Gravitational Theory of Trade gives two alternative thoughts, motivating Hypothesis 1a: Exports substitute to large but distant markets or proximate but smaller markets.

Hypothesis 1b: Soviet Legacy Effect

Another possibility is that ties throughout former Soviet space influence whether a market becomes a substitution destination. This is Hypothesis 1b formalized below:

Hypothesis 1b: Do exporters substitute into other former Soviet countries in which they have historical, preexisting ties?

There are three reasons why Soviet ties might matter. First, export flow to Post-Soviet countries sharing a border with Russia could be transit on its way to Russia. An interview with a Georgian agricultural exporter, namely, a producer of hazelnuts, suggests this might occur. This exporter attested that Georgian exporters exported to Russia via Azerbaijan during the period of the embargo: "During the custom border closed… some of the Georgian product passed through Azerbaijan, they changed the papers and they exported to the Russian market like that."[8] "Changing papers" here refers to switching the label on a product or officially changing who owns the product in question to mask the good's original origin from Georgia. This shows that, due to high demand for Georgian agricultural goods in Russia, that firms might export their goods to Russia's neighbors, i.e., Former Soviet states, in order to access Russia.

Second, business networks throughout the Former Soviet Union impel Georgian firms to export their goods through the region. By business network, I mean an affiliation of businesspeople or firms that can lead to the exchange of goods or services between then.

[8] Interview with CEO of Anka Fair Trade Ali Kizildag, interview by James Janison, July 28, 2015 over Skype.

There are two key reasons for the development of such networks: The first is the legacy of firm leaders living in the same country, the Soviet Union, and the second is geographical, determined as a result of Georgia's location between the Black and Caspian Seas. In the immediate wake of the Russian agricultural embargo, "first attempts were directed towards finding partners at the Ukrainian and Baltic markets as to them, as to the composing part of the former Soviet Union market, Georgian wine was well known."[9] Furthermore, a common Soviet tie "bequeathed the South Caucasus an integrated transport and communications network,"[10] facilitating cross-country communication partially through the establishment of a regional *lingua franca*, Russian. The historical ties between Georgia and other Former Soviet countries has facilitated conversations and connections in the region, leading to integrated business networks that impel exports.

Third, taste for Georgian products and culture through Post-Soviet space is another driver of agricultural exports. Years of historical coexistence and a general interest in Georgian culture throughout the Former Soviet Union, create a strong familiarity with Georgian products among consumers throughout the CIS and Eastern Europe, as discussed in Chapter Three. These demand factors explain why the demand for Georgian agricultural production is regionally based. Consumers throughout the CIS demand a "unique style of cheap semi-sweet red wine" that Georgia has supplied "for centuries" and because these consumers are familiar with the Georgian products.[11] Meanwhile, the OECD and other "lucrative" high-income markets "know little about Georgian wine because they have no

[9] Dimitri Japaridze, "Trends and Changes in Project Environment in Georgia, 2006," 17

[10] Thomas De Waal, "A Broken Region: The Persistent Failure of Integration Projects in the South Caucasus," *Europe-Asia Studies* 64, no. 9 (November 1, 2012): 1709–23, doi:10.1080/09668136.2012.718416, 1719

[11] Anderson et al., "Georgia-the Cradle of Wine-Is Looking to Rock the Export Scene," 5

tradition of consuming the sorts of wine that Georgia traditionally produces."[12] Georgian wine exporters affirm that the "stable [long-lived] quality"[13] that they provide to the Russian market drives demand for their products: In its Former Soviet and regional export markets, "our production is already well-known."[14] A history of interaction between Georgians and other FSU countries has created product familiarity.

Not only are former Soviet regional consumers familiar with Georgian products, but many exporters and suppliers of Georgian agricultural products see positive view of of Georgian culture and traditions throughout the region as an amplifier of regional demand for its exports. Georgian food in general is present in Russia for instance: The cuisine is known among Russians and manifests itself in Georgian restaurants throughout Russia.[15] For instance, many Russian tourists neglected Russian government-issued statements on terrorism risks associated with Georgia in planning vacations, due to high levels of enjoyment of the culture, cuisine and geography.[16] Because of the cuisine's and culture's regional popularity, the Georgian Wine Association pursues marketing of the country's name to additional destinations in order to combat major issues for Georgian wine including "low awareness" through "various events, receptions, tastings, fair

[12] ISET Policy Institute and German Economic Team Georgia, "Georgia's Agricultural Exports," 6-7

[14] Interview with Tifliss Wine Cellar, January 25t, 2016. «*Стабильное качество…. На этих рынках наша продукция уже известна*» Translated from Russian by James Janison.

[15] ISET Policy Institute and German Economic Team Georgia, "Georgia's Agricultural Exports,"

[16] "Tbilisi's Soft Power of Wine, Smiles and Tourism | Opinion," *The Moscow Times*, accessed March 13, 2016, http://www.themoscowtimes.com/opinion/article/tbilisis-soft-power-of-wine-smiles-and-tourism/469579.html

participations."[17] This enjoyment of Georgia is, therefore, a factor that only drives exports in those countries that are familiar with the country's agricultural products.[18]

Transit effects, product familiarity and business networks have impelled Georgian exports throughout post-Soviet space. This suggests that, given the absence of a Russian market, exporters might substitute goods to other former Soviet countries such as Ukraine, Kazakhstan, or Azerbaijan.

HYPOTHESIS TWO: WILL TOTAL EXPORTS FALL?

Another area of interest is whether exporters were, in sum, hurt by the embargo. Namely, this questions how significant the results from above hypotheses were for overall Georgian exports. Hypothesis 2, therefore, reads:

Hypothesis 2: Does total export volume fall? If there is a substitution effect, does this account for less than 100% of potential export flow to Russia?

The immediate reasoning behind Hypothesis 2 is intuitive: Embargoes shut down markets, therefore decreasing trade, to which the case of Russia and Georgia is no exception. As established in Chapter Three, Russia is and has been a natural destination for Georgian products, which means that Georgia lost out on some volume of agricultural exports between 2006 and 2012. As such, Russia could have been so profitable for wine exporters that no other market could replace it fully. In other words, even if Hypothesis 1 proves true and some exporters start new business in Ukraine, Germany, et al., the substitution effect could only account for less than 100% of the natural trade with Russia that would have

[17] Interview with Marketing Manager of the Georgian Wine Association Georgie Apkhazava, interview by James Janison, July 20, 2015.

[18] "Georgia's Economic Advantages and Disadvantages," *Lincoln Mitchell*, accessed March 13, 2016, http://lincolnmitchell.com/georgia-analysis/2015/2/2/georgias-economic-advantages-and-disadvantages

occurred in the absence of an embargo, under Hypothesis 2. When netting the new trade that Georgia gained from substitution and the trade lost from the embargo, this hypothesis posits that Georgia experienced a net loss.

METRICS AND MECHANICS OF THE EXPORT FLOW ANALYSIS

Data

The data for this part of the study is export volume of distinct goods from Georgia to different export markets, including former members of the Soviet Union, Turkey, Germany, and the United States. The original data, accessed through a publically available database of the United Nations Comtrade website,[19] was broken down by UN 4-Digit Harmonized Systems codification.[20] This codification system organizes goods by their industry or type and distinguishing functions or qualities within their industry. I aggregated this data into industry-level categories such as "industrial products," referring to Georgian industrial goods and processed materials such as pipes or fertilizer and "agriculture," referring to beverages, fruits and vegetables, alcoholic beverages, and other agricultural goods. The timeframe for the data is 1996 through 2014 with annual volumes reported. The data itself refers to the dollar equivalent of the value of total goods of a certain type exported.

Despite possible concerns about data reliability within post-Soviet space, this data is reliable. Comtrade aggregates data on countries from their own national reporting

[19] Comtrade, "UN Comtrade Database," available at http://comtrade.un.org/data/ Accessed March 9th, 2016.

[20] United Nations, "Trade Statistics Coding Systems," available at http://unstats.un.org/unsd/tradekb/Knowledgebase/Trade-Statistics-Coding-Systems?Keywords=Coding+system Accessed March 9th, 2016

services. In the immediate wake of the fall of the USSR, many former Soviet countries faced the problem of poor or inaccurate statistics,[21] as discussed in Chapter Three. That said, personal correspondence with regional experts has indicated that the Comtrade data, which for Georgia is aggregated from Georgia's own statistics service, GeoStat, is reliable to the point of useful for academic purposes.[22] To this extent, despite reason for concern over the accuracy of economic data, I am able to affirm that it is useful for this study.

METHODOLOGY

To answer the question of how Georgian companies changed their export practices around the embargo, I use a differences-in-differences framework and instrumental variable (IV) regression, both of which I define below. The differences-in-differences framework allows me to answer Hypothesis 1-1b by analyzing how the embargo may have caused exports to increase to non-Russian markets as a substitution effect. The instrumental variable regression allows me to scale the effects of the embargo on Georgian export volume effectively, answering Hypothesis 2. I discuss assumptions of the IV model, and explain why I use this method instead of potentially simpler alternatives.

[21] Åslund, *How Capitalism Was Built*, 93

[22] Email correspondence with International Trade Economist at the International School of Economics in Tbilisi Michael Fuenfzig, June 9th, 2015.

Shortcomings of Simple OLS for This Study: The Embargo as a Shock

One result we would expect from a substitution effect is for exports to Russia to decrease while exports to non-Russian markets increase. An OLS regression of this relationship, however, is insufficient to understand how the embargo might have affected Georgian trade with other countries. Equation 1 below presents this regression:

Ordinary Least Squares (OLS) Regression of Substitution

$$non\_Russia\_Exports_{s,t} = \alpha + \beta Russia\_Exports_{s,t} + \gamma Sector_s + \epsilon_{s,t} \quad (1)$$

β is a coefficient that indicates the modeled dollar-per-dollar change in exports to non-Russian markets as a result of changes in export volume to the Russian market. α is a constant, and $\epsilon_{s,t}$ is an error residual, i.e., an estimate of the error term. Subscript "s" refers to the sector of a given export flow, in this case, either agricultural or industrial, and subscript "t" refers to year. The variable indicating exports to Russia is therefore denominated with both subscripts because each volume of export flows refers to a specific sector in a given year. The "non-Russia export" term refers to flows of goods by sector and year to non-Russian markets. It can indicate export flow to any specific market to which Georgia might substitute exports away from Russia, be it a country, a group of countries, or the rest of the world. "Sector" is a control variable that take the value 1 for agricultural good flows or 0 for industrial flows, denominated only with "s" because it does not change based on year. This variable helps account for across-the-board changes in Georgian exports as the result of exogenous shocks to the Georgian economy such as the 1998 Russian financial crisis and economic downturn of 2008.

Although Equation 1 may seem to model substitution effects, it cannot accurate test for the effects of the embargo. The embargo is not the only factor that affecting export volume to Russia. Based on the analysis of Georgian economic relations with the European

Union in Chapter Three, for instance, we might expect Georgian exporters to increase exports gradually to the EU over time because of reduced customs barriers. This might divert exporter interest away from Russia as a result. Results from implementing Equation 1 might reflect this "trade off" effect of purely market factors, even though it is not the result of the embargo. It is therefore not clear from Equation 1 whether the embargo or some other factor determines a substitution effect from Hypothesis 1. This means that Hypothesis 1 cannot answer my research question.

I consider Equation 2 below as a way to isolate the effects of the embargo on exporters to non-Russian market:

Reduced Form (RF) Regression of Embargo on Non-Russian Exports

$$Non\_Russia\_Exports_{st} = \partial + \theta embargo_{st} + psector_s + \varepsilon_{st} \qquad (2)$$

The dependent variable is exports to non-Russian destinations denominated by sector *s* in year *t*, indicated in its subscript. ∂ is a constant and ε_{st} refers to the error residual, denominated with subscripts *s* and *t* as well. The embargo variable is 0 for non-agricultural (industrial) export flow in all years, and for agriculture it is 1 in the years in which the embargo is in effect, 2006-2012. For all other years, it is also 0 for exports in the agricultural sector. Because *embargo* varies over time and across sector, it is denominated $embargo_{st}$. $Sector_s$ is the same as in Equation 1. Equation 2 specifically examines the relationship between the embargo and the exports to other countries, with θ as the degree to which the presence of an embargo impacts exports to non-Russian markets. It is a better tool than Equation 1 because it centers the embargo. This regression does have some issues measuring the scale of the effect of the embargo, threatening its ability to test Hypothesis 2. I address this later.

Difference-in-Difference: Using the Embargo as a Shock

This general framework of Equation 2 allows me to treat changes in Georgian exports as a differences-in-differences experiment. A differences-in-differences experiment entails observing two separate study groups: The first receives a "treatment," in this case, absorbing the shock of the embargo, while the second group does not. In the years prior to the embargo, both groups follow the same trajectory. When confronted with the embargo, they follow different paths,[23] allowing me to attribute causality for this divergence to the shock itself. Table 4.1 presents how I use the export volume data:

Table 4.1: Form of the Imputed Data and Controls for Embargo

Year	Sector (0 if industry, 1 if agriculture)	Embargo Indicator (1 if Yes, 0 if No)	Exports to Russia	Exports to Non-Russian Market, e.g., Ukraine
2004	1	0	$A	$S
2004	0	0	$B	$P
2005	1	0	$C	$Q
2005	0	0	$D	$R
2006	1	1	$E	$S
2006	0	0	$F	$T

The export volume to Russia in the fourth column indicates A through F just as stand-ins for actual export volume, just as S through T are given as stand-ins for export volume to Ukraine. Export flows in the two sectors analyzed, industry and agriculture, are separated. The above chart –for simplicity– also just indicates export volumes from 2004 through 2006, but the actual years examined are 1996 through 2014. The embargo indicator ticks 1 for agricultural goods between 2006 and 2013, as described for Equation 2. The data treated in the analysis has additional columns that indicate other potential substitute

[23] Marianne Bertrand, Esther Duflo, and Sendhil Mullainathan, "How Much Should We Trust Differences-in-Differences Estimates?," *The Quarterly Journal of Economics* 119, no. 1 (2004): 249–75, 249

markets, such as Estonia, Kazakhstan, Latvia, and Turkey, that have the same form as the rightmost column, but for simplicity Equation 2 represents this as "Exports to Non-Russian Markets."

The "treatment" group in Equation 2 is agricultural export volume, because it receives the shock of the embargo in 2006. While it is intuitive that agricultural export volume to Russia drops after the embargo, the effect on the rest of Georgian agricultural exports is my interest: It is not immediately clear if the embargo affects exports to non-Russian destinations as well as to Russia. Industry exports to Russia and non-Russian markets continue on their past trajectories because these exports were unaffected by the embargo. As such, I observe divergent patterns in trade flows across sectors that are attributable to the critical juncture of the embargo.

Scaling Tool: The Instrumental Variable Regression

Equation 2 addresses Equation 1's inadequacies. That said, to test for Hypothesis 2, I need to know the impact of the embargo on non-Russia exports as a *percentage* of exports that would have flowed to Russia. This new scaling allows me to see, on a total basis, whether total exports fell because of the embargo. For this purpose, I conceive of Equation 2 as the Reduced Form regression in an instrumental variable (IV) analysis, which I explain below.

The IV regression works in two steps. First, it conducts a simple linear regression of exports to Russia on the instrumental variable, the embargo. An instrumental variable is a variable that is "uncorrelated with the model's error, but correlated with the endogenous

regressor."[24] The "endogenous regressor" is exports to Russia. Equation 3 shows this first-stage regression:

First-Stage Regression: Russian Exports on the Embargo Variable

$$Russia\_Exports_{s,t} = \zeta + \lambda embargo_{s,t} + qsector_s + \eta_{s,t} \qquad (3)$$

The variables $Russia\_Exports_{s,t}$, $embargo_{s,t}$, and $sector_s$ are the same as they were in Equation 2, denominated by industry and year as appropriate. Constant ζ and residual $\eta_{s,t}$ also affect exports to Russia. λ is a coefficient indicating the magnitude by which the presence of the embargo hinders export to Russia. This regression shows export volume to Russia changing in response to the embargo.

Second, the IV regression scales the regression from Equation 2 by the effects of the embargo on exports to Russia in Equation 3. The IV model factors the λ coefficient from Equation 3 above into the Reduced Form regression in Equation 2:

IV Regression of Non-Russia on Russia Exports (Endogenous Regressor)

$$Non\_Russia\_Exports_{s,t} = \kappa + \left(\frac{\theta}{\lambda}\right) Russia\_Exports_{s,t} + \psi sector_s + \upsilon_{s,t} \qquad (4)$$

In Equation 4, $Russia\_Exports_{s,t}$ is the 'endogenous regressor,' whose coefficient is determined by the embargo instrument. $\frac{\boldsymbol{\theta}}{\boldsymbol{\lambda}}$ is the value of the coefficient of $Embargo_{s,t}$ in Equation 4, θ, divided by the coefficient of the instrument on the endogenous regressor, λ in Equation 3. $\frac{\boldsymbol{\theta}}{\boldsymbol{\lambda}}$ scales the amount to which the embargo effects exports to non-Russian markets by the degree to which it limited Russia exports. To test for Hypothesis 2, it essentially gives the amount of trade volume substituted to non-Russia destinations as a percentage of the export flow that would have naturally gone to Russia in the absence of an embargo. In the event of a substitution effect, the value of λ is negative and θ is positive,

[24] Marno Verbeek, *A Guide to Modern Econometrics* (Southern Gate, Chichester, West Sussex, England Hoboken, NJ, n.d.), 133

since the embargo decreases Russia exports but increases exports to other countries. $\frac{\boldsymbol{\theta}}{\boldsymbol{\lambda}}$ is therefore hypothesized to be negative under Hypotheses 1-1b.

Assumptions and Threats to the IV Model

The final differences-in-differences model and instrumental variable regression I use to test Hypotheses 1-2 rest on three assumptions. First, this framework assumes that industrial exports are a suitable control group. In the next section, I show that it provides a suitable basis for the treatment empirically. In Chapter Five, I consider if and how risk-averse behavior due to the embargo might affect export decisions of firms not in the embargoed sector. This consideration, however, does not necessarily entail a drop-off in export volume due to the embargo, which I discuss in the next chapter.

Second, the differences-in-differences model assumes that the embargo was effective, i.e., that a negligible amount of goods passed into Russia by illegal or informal practices. While this assumption is largely true, it is worth noting that there are a few firms that managed to continue exporting wine to Russia by navigating a re-registration process.[25] I show that the total volume of trade that made it through the embargo is negligible, however, in Figure 4.1. This means that, for all practical purposes, agricultural export volume constitutes a good treatment group to understand the effects of market shutdown.

Finally, my framework assumes that there no other exogenous shocks influenced agricultural exports to potential substitute markets in 2006. As discussed in Chapter Three, the European Neighborhood Policy (ENP) was established with the EU in 2006, a policy

[25] Interview with General Director of Tifliss Wine Cellar Petru Ataman by James Jansion on January 20, 2016.

that could have bolstered EU-Georgian trade. This could mean that the embargo control variable might absorb effects of this change. There are two reasons this is not a concern. First, because the ENP affects Georgian exports across-the-board, the "sector" variable accounts for the exogenous shock. Second, the embargo variable ends after 2012, while any boost effects from continued easing of trade restrictions would continue to support Georgia's European exports in the subsequent years, in 2013-2014. The continuous growth of Europe-bound exports occurs for both embargo periods and non-embargo periods. As such, these changes do not distort the embargo variable itself.

RESULTS

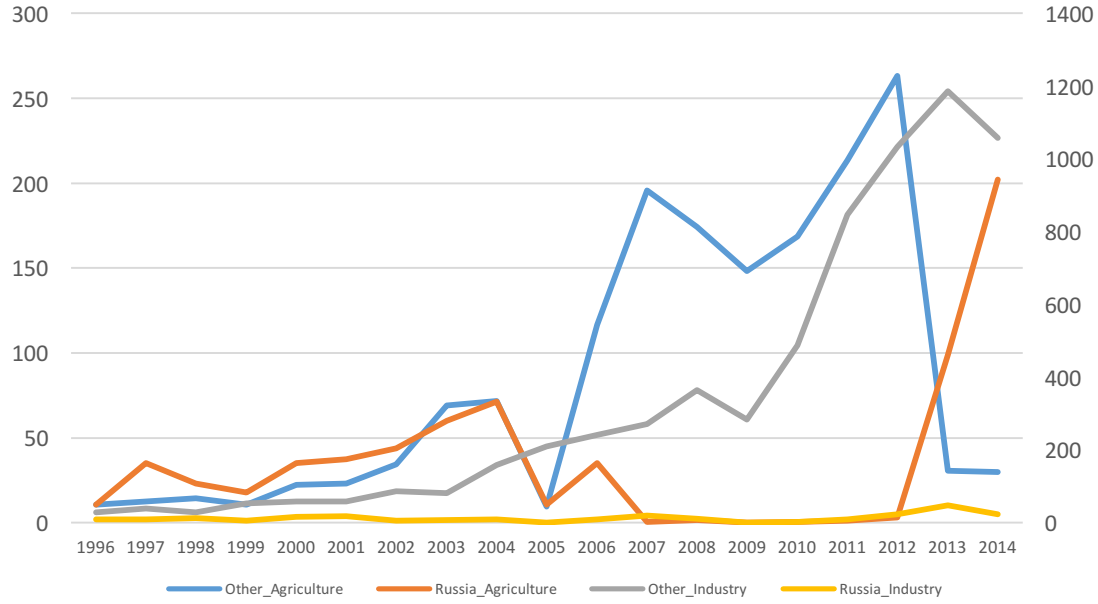
The results conditionally confirm the substitution hypotheses: Gravitational factors such as size, distance, and colonial ties seem to affect whether Georgian exporters substitute to a given market. Hypothesis 2 proved to be false; substitution to non-Russian markets indicated approximately an 100% offset. Below, I confirm the treatment basis, present results for the IV regression analysis, and discuss the results in light of my hypotheses.

Treatment Basis Confirmation

The assumption that a differences-in-differences model is useful for Georgian export volume is justified by at a preliminary look at the data. Figure 4.2 presents export volume to Russia and non-Russian destinations for industrial and agricultural exports over

time:

Figure 4.2: Differences-in-Differences Model for Agricultural and Industrial Export Volume. In Millions USD.



Source: Data from UN Comtrade Database

The right scale indicates agricultural export volume to Russia and the rest of the world, "other." Industrial sector export volume is similarly presented on the left side. Agricultural exports to Russia clearly drop to zero during the embargo years, while between 2006 to 2007 agricultural exports to the rest of the world increase sharply. Between 2008 and 2010 there appears to be the effects of the economic downturn due to the invasion and global recession. While there is sizeable growth in the industrial sector to non-Russian destinations –and very little industrial export to Russia at all– the changes in export flow volume seem to follow Georgia's general growth trajectory as described in Chapter Three, with no particularly noteworthy change at the onset of the embargo in 2006. This shows that industrial export flow appears unaffected by the embargo, while agricultural export flow increases to non-Russian markets.

REGRESSION RESULTS

Table 4.2 below shows how the regressions suggest a substitution effect in certain markets, but not all of them:

Table 4.2: Results table for First Stage, Reduced Form, and Select IV Regressions. Observation Number *N* is 38 for all regressions. Embargo, sector and constant values in millions.

Regression Type	First Stage	Reduced Form	IV	IV	IV	IV	IV
Dependent Variable	Russia Exports	Non-Russia Exports	Non-Russia Exports	Ukraine Exports	Turkey Exports	Germany Exports	Azerbaijan Exports
Russia Export	———	———	-1.82	-0.81**	-0.001	-0.06*	-0.17
			(2.6)	(0.36)	(0.22)	(0.04)	(1)
Embargo	55.9***	102	———	———	———	———	———
	(15)	(136)	———	———	———	———	———
Sector	48.9***	-265*	-176	50.7***	-27**	0.23	-91.9 *
	(11.6)	(105)	(125)	(16.9)	(10.4)	(1.73)	(47.1)
Constant	13.1*	346***	370*	19.5*	29.9 ***	5.86***	112***
	(7.22)	(65.5)	(78.6)	(10.6)	(6.53)	(1.09)	(29.7)
F-test	10.82	3.31	2.83	4.69	5.28	4.17	3.28
R^2	0.38	0.16	0.017	——	0.23	0.19	0.14

***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

On the left-most side of Table 4.2 in bold are the coefficients measured: Russia exports – in the case of the IV regressions– the embargo variable for the reduced form and first stage regressions, a sector control, and a constant. The type of regression, either first stage, reduced form, or IV, is given at the top with the dependent variable for that regression given directly below. I give the coefficient measurements with standards of error underneath in parentheses. I also include the F-test value for each regression, which measures statistical significance of the entire regression and the R^2 value, a correlation coefficient where 0 indicates no correlation and 1 indicates a perfect correlation. If a

coefficient is statistically significant, it is marked in the key below the table at which confidence interval level it is significant.

The first stage regression shows the embargo eliminating exports to Russia, by which the IV regressions are scaled. The reduced form and IV regressions for the effects of exports to non-Russian markets in total were insignificant. For the reduced form, this is likely because of the large standard of error for the embargo coefficient (136). Specifying the market to which exporters might substitute, however, seems to reveal a substitution effect. For instance, "IV Ukraine" in Table 4.2 indicates an offset of about 80%, measured by the Embargo coefficient. There is no substitution to Turkey or Azerbaijan, suggesting that immediate proximity does not matter as suggested by Hypothesis 1a. The alternative under Hypothesis 1a was that export would increase to Germany, but the magnitude of the coefficient is slight and only significant on a 10% confidence interval. The reduced form corresponding to each of the specific IV regressions above is attached in Table 4.2A in Appendix.

Full Offset: Export Flows to Eastern European FSU Markets

The positive results in Ukraine seem to suggest merit to Hypothesis 1b. I conduct IV regressions for exports to all Former Soviet markets, presented in full in Table 4.3A in the Appendix. Table 4.3 below presents statistically significant results for Eastern European FSU markets:

Table 4.3: Application of Equation 4 to Western Former Soviet Markets. Sector and constant values given in millions.

Export Market	Substitution Coefficient (θ/λ)	Sector Coefficient (ψ) (in millions)	Constant (κ) (in millions)
Ukraine	-0.81**	50.7***	19.5*
	(0.36)	(16.9)	(10.6)
Moldova	-0.05*	3.22**	0.98
	(.03)	(1.34)	(0.88)
Belarus	-0.1	8.65***	1.78
	(0.06)	(2.99)	(1.89)
Estonia	-0.01*	0.49**	0.14
	(0.004)	(0.19)	(0.14)
Latvia	-0.025*	1.89***	0.69
	(0.01)	(0.63)	(0.42)
Lithuania	-0.05	2.53	3.06**
	(0.04)	(1.89)	(1.21)
All of the Above Aggregated	-1.04*	37*	56.6
	(0.56)	22.7	(29.6)

***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

The columns indicate the variable coefficients for different destination markets. The standard of error is in parenthesis underneath the coefficient. While these markets indicate some statistical significance, the magnitude of each individual market's substitution effect is very small, with the exception of Ukraine. This limited substitution effect is not too surprising, considering the small size of these markets: While their substitution coefficients are approximately that of Germany's (6%, as seen earlier in Table 4.2), each country here is much smaller than Germany. This suggests that the above markets might absorb Georgian products in a scale commensurate with the size of domestic demand.

In order to observe a total substitute effect, I aggregate the export flows to these markets and regress them on the embargo. This is the "All of the Above Aggregated" regression at the bottom of Table 4.3. The P>|t| value of 0.076 for the embargo variable, inferred from a t-value calculated by dividing the substitution coefficient measurement by the standard of error in parenthesis, indicates marginal significance across these countries for an offset from Russia. Because this embargo variable is instrumented on Russia exports, as discussed earlier for justifying Equation 4, the coefficient of -1.04 indicates an approximate full offset of exports diverted from Russia. So while each individual non-Ukrainian western FSU market has a small substitution coefficient, the total effect indicates that exporters fully replaced their Russia exports across these markets.

Hypothesis Confirmation and Rejection: Embargo Influence on Exports

The results confirm certain facets of Hypothesis 1-1b overall, but were unexpected under Hypothesis 2. Table 4.4 presents these hypotheses systematically:

Table 4.4: Hypothesis Results from Analysis

Hypothesis	Indicated Answer Based on Results	Oddities / Unexpected Outcomes	Rationale for Oddities; Additional Notes
1. *Do Georgian exporters substitute their goods to new markets?*	Yes. A substitution effect occurs in the data.	Particular destinations / substitute market dynamics mattered for whether Georgian exporters substitute to that market.	Analyzed under Hypothesis 1a and 1b.
1a. *Do Georgian goods substitute into regional markets in which access costs might be low, or more distant but potentially larger markets such as Germany in Europe?*	Regional markets with lower total consumption are substitute destinations, but not where they are already saturated.	Neighboring Turkey, Azerbaijan, were not significant substitute destinations, but nearby Ukraine, among others, became a prime export destination.	Likely, any possible substitution to immediate neighbors overwhelmed by the natural trade volume. Market likely cannot already be saturated to become substitution destinations.
1b. *Do exporters substitute into other former Soviet countries in which they have historical, preexisting ties?*	Yes. Observed substitute markets are exclusively former USSR members, suggesting that this commonality matters.	———	Substitution to these markets like is the result of dynamics of the Georgian wine sector, namely, its regional popularity. This drives export through the channels of product familiarity and lasting business networks.
2. *Does total export volume fall? If there is a substitution effect, does this account for less than 100% of potential export flow to Russia?*	No. Substitution effect accounts for approximately 100% of export flow originally aimed at Russia.	Georgian exporters managed to replace the Russian agricultural market, which I did not expect due to the sheer size of demand for Georgian products in Russia.	———

Table 4.4 presents each hypothesis, whether results prove these hypotheses, oddities and unexpected outcomes, and rationales for the unpredicted results. The answer to Hypothesis 1 is "yes," but only to certain markets. For Hypothesis 1a, I find that regional markets such as Ukraine are substitution destinations but larger economies such as Germany and the United States are not. If proximity matters, however, we would expect substitution into Armenia and Azerbaijan. This expectation is likely violated due to the market saturation discussed in the Hypothesis section. Proximity seems to matter, but it is not the only factor determining substitution location.

The answer to Hypothesis 1b is "yes." While Georgia does not export to every non-Russian FSU market as a result of the embargo, the countries to which it substitutes are all post-Soviet. Lasting business networks and product familiarity likely persist in certain Soviet markets such as Ukraine, but not others, such as Turkmenistan. Georgia's immediate neighbors also share a Soviet past, but, as explained above, I attribute their lack of substitution to general market saturation. The full offset contradicts the intuition behind Hypothesis 2, indicating stronger-than-expected demand.

The results therefore present mixed proof of my original hypotheses, but indicate that exports substituted to Eastern European Post-Soviet markets as a result of the embargo. Notably, these destinations contain a variety of aspects of gravitational factors: They are relatively proximate, the magnitude of the substitution coefficient seems to reflect market size, and they share colonial legacies. While all these factors drove substitution, such factors did not do so elsewhere, e.g. Central Asia or Azerbaijan and Armenia. It seems that, in order for markets to become substitute destinations, they need to contain a *balance* of

gravitational factors: They need to be large and close, but neither so large or nearby as to be saturated already. They need to share colonial legacies, but these ties need to be persistent enough to have created budding market opportunity, as in Ukraine. This speculation has an underlying intuition.

A limitation of using export volume here as a variable to measure export decisions is that volume does not help analyze intra-industry dynamics. As far as an export volume-based analysis is concerned, the substitution effect could be limited exclusively to a few large firms or many small firms within the agricultural industry. The next step would be to introduce inter-firm dynamics into the analysis: I.e., to analyze the export processes of firms organized by size, productivity, industry, and other factors to determine which firms within a given industry substitute and how. In terms of understanding how firms across the board respond to a market shutdown in Georgia, however, the current analysis is sufficient to show that market forces impel exporters to substitute into new markets.

CONCLUSION

This chapter has presented a differences-in-differences framework to understand how Georgian exporters adapted their export practices in response to the embargo. I have shown that firms responded to the embargo by substituting goods into alternative markets as long as the Russian one was inaccessible: Soviet legacies, potential untapped demand, and other gravitational factors seem to determine the markets to which Georgian exporters substitute. This establishes the market process by which firms respond to state aggression. This model, however, does not discuss how risk-aversion or fear of instability might affect export decisions on the level of the firm: Rather, I have established an sector-wide export

trend among agricultural exporters. The next section analyzes how the market factors that impel firms toward exporting interact in a fluid dynamic with firm propensities to risk-aversion to cause export decisions.

CHAPTER FIVE
MECHANICS OF THE FLUID DYNAMIC OF MARKET FACTORS AND POLITICAL OUTLOOK

The previous chapter found that the market process by which firms respond to state aggression is substitution of goods into new markets, namely, to markets in which firms appear to have business networks, product familiarity, and expandable regional demand. Having explained the market process whereby firms respond to state aggression, in this chapter, I answer my other sub-question outlined in the introduction: How do firms factor political instability and the resulting risk into their export decisions in response to state aggression? The first section of this chapter reviews firm statements on their export practice made over email or in-person interviews and identifies four "risk-types," i.e., ways by which firms consider Russian state aggression risk and political concerns. The second section shows that my sample's export decisions result from a fluid dynamic between firm-level perceptions of Russian market instability and market factors that impel exports. These market factors that influence a firm's perception of risk include business networks and past

export experience, but, notably, sector and size do not increase risk-aversion. The last section before the conclusion shows how this analysis of firm export processes critiques HST2's intuitive claim that stability is central for trade.

INTERVIEW SUMMARY AND CATEGORIZATION OF APPROACHES TO RISK

One Highly Risk-Averse Firm: CaucasTransExpress

The first strand of logic exhibited by one firm was a high degree of risk-aversion, such that the uncertainty created by Russian state aggression was enough to deter market entrance altogether. The firm in question, CaucasTransExpress, is a freight forwarding / logistics company based in Tbilisi, Georgia. Freight forwarding entails arranging "storage and shipping of merchandise on behalf of its shippers."[1] Freight forwarders provide storage, transportation tracking, arranging freight charges, and provide other insight on the logistics of moving goods from one place to another. In the Georgian case, freight forwarders move goods through the country from one foreign destination to another by way of Georgia, giving these companies exposure to and insight into the factors that affect international trade to and from Georgia.

For this study, I spoke with Giorgi Gamtsemlidze, Sales Director at CaucasTransExpress. The interview was conducted on July 7th, 2015 in the firm's Tbilisi office in English, at the request of Mr. Gamtsemlidze. Gamtsemlidze described himself as the "number two" in the company's managerial decision-making capacities in his current position, with five years of experience at the company altogether. He described the

[1] "What Is Freight Forwarder? Definition and Meaning," *BusinessDictionary.com*, accessed February 28, 2016, http://www.businessdictionary.com/definition/freight-forwarder.html

company as one of the top three biggest logistics companies in Georgia. As logistics is an "element which is moving the economy," his industry fluctuates around larger macroeconomic changes such as Georgian GDP growth, currency value changes. His business is "very sensitive to politics," noting how, after the election of the new Georgian government in 2012, clients decided to wait and see what changes would take place in the country before sending their freight through. CaucasTransExpress has clientele in the former Soviet world, including but not limited to Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan).

Initially after the embargo, the firm foresaw risks associated with entering the Russian market as a result of Russian state aggression in the region. While CaucasTransExpress was unaffected by the embargo, as it does not operate with or have ties to the Russian market, Gamtsemlidze demonstrated profound risk-aversion. He recalled the initial decision *not* to enter the Russian market as soon as the embargo on agricultural products was lifted:

> After they opened the market for the Georgian wine and the products, we decided we would not go in[to] Russia. It would not be our core market. We know that it's Russia, it's very unstable, and they can close the market, you know….[2]

The consideration that the market *could* close at any moment was enough to convince the leadership at CaucasTransExpress that the policies of the Russian government could detrimentally impact their business. The lifting of the embargo, notably, was not enough to alleviate their concerns about market penetrability: The legacy of the embargo was that Russian state policies were to be read as unpredictable, potentially malicious, and therefore an undesirable export market.

[2] Interview with Sales Director at CaucasTransExpress Giorgi Gamtsemlidze by James Janison, July 7, 2015.

This position shows that the decision not to enter the Russian market both at the time of the interview in 2015 and after the embargo was lifted in 2012 was that an act of state aggression, among other factors, alerted Gamtsemlidze and his colleagues to the view that Russian import policy was unstable and therefore the market was not worth the risks associated with entering the market. When asked to specify, he affirmed that the current policy of avoiding the Russian market was indeed based on avoiding the "instability" of the country. In other words, Gamtsemlidze demonstrated that CaucasTransExpress was maintaining its initial decision not to enter the market by the time of interview. Notably, CaucasTransExpress operates in countries with similar drivers of demand to Russia as described in Chapter Four, i.e., the rest of the former Soviet Union. As such, CaucasTransExpress is able to benefit from those drivers of demand for Georgian products and products that travel through Georgia *without* the same risks of being targeted by Russian state aggression. To this extent, the rest of the former Soviet space serves as a "substitute" market for Georgian goods and services, a zero-risk equivalent. Gamtsemlidze therefore outlines a strand of logic among Georgian firms in which the risk of market shut-down in Russia is enough to avoid exporting there altogether.

Risk-Averse, But Not Without a Plan

The next category of firm is risk-averse, but ultimately state aggression itself has not been a significant encumbrance in their experience and so does not deter them from exporting to Russia. These firms are keen to note the unstable policy-making capacity of the Russian market and factor this into their decision-making process: That is, they *do* believe that there are risks associated with the market, but ultimately state aggression itself

has not been an issue for them and they do not favor avoiding the Russian market, as it is profitable.

The first firm in this category is Rustavi Steel, LLC, formerly known as Rustavi Metallurgical Plant. A former Soviet plant established in 1948 originally, the company was purchased by a British-Georgian private company in 2006 and operated privately from that time on, beginning rehabilitation and modernization of its production technologies.[3] Rustavi Steel is one of the country's "largest industrial enterprises," and its metallurgical complex is the largest "in the entire Caucasus region,"[4] i.e., among Georgia, Armenia and Azerbaijan. It produces steel, slag, ferroalloys, pipes, and other metallurgical and industrial products. Dr. Farooq Siddiqui, Deputy General Director / Central Operations Officer participated in this study both by filling out a questionnaire over email on July 16th, 2015 and speaking in an in-person interview on July 17th, 2015, both in English. He has additional work experience in Russia and Ukraine. Having been Central Executive Officer of Rustavi Steel from 2012 through 2014, likely his position and experience indicate that he has significant insight into and decision-making power over the company's export practice.

In terms of export strategy, Siddiqui described the company's success as determined by the strength of the products themselves, and that the product strength is the primary driver of business connections. He finds that "the networking is relatively easy if the product satisfies the customer." Weakness in the company's performance is the result of a larger "nose dive" in the steel industry. The company exports to Azerbaijan, China,

[3] "History & Heritage," Rustavi Metallurgical Plant website, accessed February 27, 2016. Available at http://www.rmp.ge/en/about-us/history-heritage/

[4] "Company Profile," Rustavi Metallurgical Plant website, accessed February 27, 2016. Available at http://www.rmp.ge/en/about-us/company-profile/

Ukraine, Turkey, Iran, Switzerland, Armenia and Sri Lanka, in addition to the Russian market; the firm has particularly "good networking with Ukraine and Turkey [and] other FSU countries." That said, due to the "crisis in Ukraine" their Ukrainian partners who produced pipe units "went south" and came to a "halt," and the firm has decided to "start production and sale by ourselves." The strategy here, then, is a straightforward practice of creating a competitive product and allow export networks to develop based on that product's strength.

While risks pertaining to government regulations and procedures were a consideration of his, Siddiqui did not indicate that Russian state aggression affected his company's export practice to Russia at all. The answer provided to the question "What are the biggest challenges your company faces regarding international relations considerations?" indicates that Russian state aggression did not come to mind for him at all. Namely, he identified the opacity of the workings of the Azerbaijani government and issues with shipment across Azerbaijan to Iran and Kazakhstan as primary international political issues. The "unpredictability" of the Azerbaijani government "plays a havoc in development of this potentially lucrative trade route, very important for Georgia," he argues. While this answer demonstrates that foreign states' opaque, unpredictable policies generate uncertainty over the business climate of a partner country, he declined the opportunity to mention the Russian market as particularly problematic because of the uncertain actions of the Russian government. In this sense, Rustavi Steel's decisions are risk-averse, but not to state aggression.

Further, not only does the company have regional ties with Russia that have made it a long-held export destination, the firm also had plans to "sell large diameter seamless

lines and casing pipes to Russia in larger quantities starting late this year [2015]." With past work with Russian companies "for consultation works [and] purchases of consumables," he noted that Russian companies were initially hesitant to work with Rustavi after the takeover of the Georgian Dream government in 2012, but was not an issue beyond that initial uncertainty. Having worked in Russia and Ukraine for "long periods," he noted that the work there "gets done in spite of corruption. However, economy of scales plays a very big role in these countries, which unfortunately Georgia does not have." In short, he notes that the opacity of corrupt business deals does *not* generate uncertainty for him because he is familiar with the markets and the productive capabilities of the countries in question. Risk is present among Georgia's neighbors, according to his view: In Russia and Ukraine corruption is an issue, and in Azerbaijan, future transit policies are uncertain, but this does not inhibit the profitability of his business ventures throughout the region.

The second firm that is aware of risk from unclear state policies and other political factors but is not ultimately deterred by risk is the Poti Free Industrial Zone. The Poti Free Industrial Zone was founded in 2008 by the Ras al Khaimah Investment Authority (RAKIA), an investment arm of the United Arab Emirates (UAE) government.[5] RAKIA established a 100% owned subsidiary RAKIA Georgia, under whose supervision the Poti Free Industrial Zone falls. This firm is particularly distinct from others because while it is a for-profit enterprise, its profit comes from generating the conditions for export and growth of *other* enterprises. In this sense, its duties might entail keeping a greater watch over macroeconomic factors affecting the Georgian economy than most companies in Georgia. One could argue that this indicates that the Poti Free Industrial Zone is not

[5]"Introduction" Poti Free Industrial Zone website, accessed February 27th, 2016. Available at http://www.potifreezone.ge/index.php?a=main&pid=6&lang=eng

representative of firm decision-making in Georgia, as its decision-making process is therefore unique. In response, I argue that the relatively high exposure of Poti Free Industrial Zone to macroeconomic changes and decisions of policymakers makes it a prime example of a firm that has the opportunity to consider political instability and the risk of market shutdown when determining how to maximize profit and therefore offers much to learn about risk-aversion among Georgian enterprises. While this firm does not export a particular good, it does in fact develop an export strategy, in that it cultivates a hub from which Georgian firms may export.

Joseph Nibladze, Deputy General Director of Commercial Issues, described the "free zone as a regional hub for manufacturing business, for processing-related business, for trading business, import/ export" as well as for "logistics and associated services" in an in-person English-language interview conducted on July 9th, 2015 in Tbilisi. He has been with the company for six years, joining shortly after its foundation. He explained that companies registered within the free zone are exempt from "import / export taxes, VAT, property tax, tax on dividend and corporate profit tax and excise tax on imports." This helps them retain higher earnings and facilitates their customs procedures and transportation needs. The company serves to supply goods to countries throughout the region, such as Azerbaijan, Armenia, and Central Asian countries across the Caspian Sea.

Nibladze described the Russian market as so lucrative that Georgia cannot develop exports without Russia. Market familiarity contributes to this scenario, in his opinion, since "every single Russian knows Georgian wine, Georgian Borjomi [a brand of mineral water], whatever." After the embargo was repealed, Nibladze points out, ""Huge number of Georgian winemakers jumped into the Russian market. Why? Because it is easy. Don't

need to bring that brand identity there." In contrast, however, the "lack of knowledge" of Georgian products in Western markets presents a critical issue for Georgian exporters trying to enter those markets. He argues that the "Russian market is a must, is a need for Georgian entrepreneurs… Georgia *needs* Russia. For exports, for imports, for money transfers. Why Georgia's currency has devaluated? [Low] price of oil, because of Russia, US dollar getting stronger…" Nibladze greatly stressed how critical the Russian market is for Georgian exporters, arguing that additional money flows between the two countries, such as imports and money transfers, indicate how intertwined the economic life of both countries are. From the perspective of profitability exclusively, the Russian market is so lucrative and so integral to Georgia that it cannot have an export future without Russia.

That said, the market itself has presented extreme risks, he argues, prompting an additional need for diversification among Georgian firms. Market shutdown is a realistic possibility at any moment: "Maybe Russia will stop [imports from Georgia] again." He condemned the "greed" of some wine companies that moved 100% of their export practice to Russia after the embargo was repealed on the grounds that "Russia is politically unstable partner and is "unpredictable." He noted at this point that the common thought throughout the business world of Georgia was, essentially, that "maybe Russia will stop again Georgian exports" even though this has not yet come true. In light of this uncertainty, Nibladze argues that "you cannot diversify enough to leverage over the Russian sales." By this, he means that he hopes to see more Georgian firms expanding their export practices to Europe, throughout the rest of the former Soviet Union, or to other countries that do not pose the same risks that Russia has. Poti Free Industrial Zone's outlook on Russia is that

Georgia must have a diverse array of export destinations while also benefiting from the extreme profitability of the Russian market.

While both firms have strategies that are averse to risk, they both are willing to support export to Russia on the basis of extreme profitability from the country while also monitoring relevant risks. For Rustavi Steel, instability does have a deterrent effect upon the firm's decision to export, but Siddiqui does not specifically address Russian state aggression as an issue that falls into this category. In terms of understanding why the embargo was not a warning sign of market shutdown while the opacity of the Azerbaijani government was a primary concern, the firm considers relevant risks to their particular business practices but does not see such risk as an automatic deterrent. Rather, alerts to risk are factors that one must consider alongside other factors, such as high market demand. There is a similar thought process on the part of Poti Free Industrial Zone: Georgian exporters should diversify their markets of operation, but they should not avoid the Russian altogether. Poti and Rustavi share a mentality on how to navigate political uncertainty. They prefer environments in which state aggression and uncertainty do not exist, but as long as those risks are manageable and business leadership focuses on healthy growth, these risks do not outweigh the profitability of exporting to Russia and other markets. In the case of Poti Free Industrial Zone, this means continuing to develop Georgian export practices to Russia while also searching for non-Russia export destinations; for Rustavi Steel, monitoring risks means following policymaking developments as closely as possible while also watching out for corruption. In neither case, however, does the firm allow for risk to undermine their export practices.

Non-Risk Averse Firms: The "Nothing You Can Do About It" Mentality

The next type of firm has at some point encountered the instability associated with the Russian market but resigns itself to this instability as an inevitability. In other words, the firm determines its strategy by arguing that, since the firm cannot influence or change Russian state policies, it needs to disregard the instability issue in order to evaluate its export potential based exclusively upon market factors. Both firms in this category have had difficulties exporting due to changes in Russian import policy for agricultural products, yet neither weighs this a benchmark for future consideration of whether to export to Russia. Being in the wine industry does not intensify risk-averse behavior.

The first firm in this category is Tbilisi Wine Cellar, a producer of wine and wine products such as Chacha, a spirit distilled from grapes. The firm was established in 1996. I corresponded with Petru Ataman, the General Director of the company, over email as representative of this firm. He filled out a questionnaire over email on January 20th, 2016 in Russian. The market factors that determine the strength of Georgian wine's exportability that he indicated included a reliably high quality for the company's wine products, a significant variation in product brands, competitive pricing and price flexibility regarding market conditions, and the ability to deliver goods and fulfill contracts in a timely and reliable manner. The company exports throughout the former Soviet Union and former Socialist states, namely, Ukraine, Russia, Kazakhstan, the Baltic countries, Poland and Belarus, with additional export practices in the USA, Canada, Israel and Germany.

Tbilisi Wine Cellar sees Russia as one of its "fundamental markets,"[6] noting that this is a commonality for all Georgian producers of wine and grape products. The market

[6] Interview Email interview, January 20th, 2016. Russia is *«одним из основных наших рынков сбыта»*. Translation from Russian by James Janison

is sufficiently large, Ataman argues, that consumers are familiar with the whole range of famous Georgian wine brands, such as Mukuzani and Saperavi. As such, the company has no need to support their products with marketing efforts, and the markets provide established, fair sales prices. The company felt the effects of the wine embargo by finding that more "stringent" requirements were put in place for the sale of their products in Russia: Between 2006 and 2012, the company had a harder time gaining certification for their goods in terms of quality and safety. As this tightening of regulatory practice was an act of state aggression as established in Chapter Three, this experience constitutes exposure to the changes in state policy that prompted uncertainty and fear of instability for other firms.

In contrast to the risk-averse firms described earlier, Russian assertions of power "do not influence our export decisions." Ataman points to the experience of the company in the past as a reason not to be afraid of future stringent regulation: By acquiescing to the new Russian requirements, they were able to proceed with their exports without further delay. Ataman says that, in this respect, "In the history of our company there has not been any event of rejection from the requirements of the Russian supervisory bodies."[7]

The other company in this category is Wine Company Shumi, a firm established in 1995 that cultivates grapes, grapevines, processes grapes and sells alcoholic beverages from grapes, i.e., wine and chacha. I corresponded with Commercial Director Georgi Kurdiovanidze, who filled out a questionnaire over email on January 25th, 2016. The company, similarly to Tbilisi Wine Cellar, attributes their export success to "reliable

[7] Email interview, January 20th, 2016. *«В истории нашей компании не было случаев отклонения от требований российских надзорных органов, соответственно, наша продукция не возвращалась обратно.»* Translation from Russian by James Janison

quality,"[8] noting that the same reasons for sales, namely, that high quality of the product in question, drive exports in the same way that high quality drives domestic demand for the firm's products. The firm exports to other former Soviet countries such as Ukraine and Moldova as well as to other markets including the United Kingdom and Japan. In terms of its Russia practice, it started exporting to the Russian market in 2001 and has "not changed" its desire to export to Russia at all in that period. Kurdiovanidze at this point noted that the Russian market is "always timely" for the firm's products as with all Georgian wine producers.[9] In his responses, he made no indication that neither risk of subsequent market shutdown nor other uncertain changes in policy inform his firm's decision to export to Russia.

Both firms have had experience with the difficulties posed by an act of state aggression, import restriction, and yet neither see the legal changes as a worrying sign for their current export strategy. Wine Company Shumi argued that the regulation of alcohol is decided on the federal level of the Russian Federation and is not a matter for the individual firm to think about:

> The well-known events about the restriction [of Georgian wine imports] are subsequently reflected in the volume of sales [to Russia]. Questions of regulation of alcohol imports in Russia are decided on the federal level.[10]

This response indicates that regulation has indeed impacted Wine Company Shumi's practice, but it more importantly indicates the Commercial Director's view of policy as an exogenously given decision that his firm cannot change. Similarly, for Tbilisi Wine Cellar,

---

[8] Email interview, January 25, 2016. In response to *По-вашему, что создает спрос на ваши товары? «Стабильное качество.»* Translation from Russian by James Janison.

[9] Ibid. *«Российский рынок всегда актуален для всех производителей.»*

[10] Ibid. *«известные события по ограничению соответственно отразились на объемы продаж. Вопросы регулирования импорта алкоголя в России решаются на федеральном уровне.»*

all that tighter restrictions on Russian imports indicated was that they had more legal hoops to jump through in order to meet Russian demand. As such, these firms have experience with the negative effects of state aggression but, in seeing policy as a matter over which they have no control, they do not allow risks to influence their export decisions.

Non-Risk Averse Firms: Not Even a Thought to Instability or Uncertainty

The final category of firms not only does not deem uncertainty or instability stemming from Russian state aggression to be a significant matter for consideration, it does not think about risk *at all*: This type of firm is in no capacity averse to risk. The first firm in this category is Anlex Logistics, a small freight forwarding company with offices in Tbilisi and Poti. Its website describes a mission of providing "international shipments transportation by sea, by ground and by air to any country in the world."[11] Managing Director Zaza Khoshtaria met with me for an in-person interview in Russian on July 8th, 2015 at the firm's Tbilisi office. Khoshtaria founded the firm in 2001 after having gathered experience working in transportation and logistics since 1996. The foreign markets with which the firm works, largely, are the rest of the "Transcaucasian" region, i.e., neighboring Armenia and Azerbaijan.

Khoshtaria made no indication that risk was a consideration in his thoughts about new markets to which he would like to see his company export. He expressed an interest in expanding into Russia, China, Europe and Central Asia, although he expressed lack of

[11] "About Us," Anlex Logistics website. Author's translation from Georgian. Accessed February 27th, 2016, available at http://www.anlex.ge/index.php/ka/2013-03-22-16-20-47

clarity at any one particular direction for the firm.[12] The principle reason for not working in Russia was that "we have no connections, nothing" as far as that market was concerned.[13] He noted that the 2008 Russian invasion of the country had caused negative effects for his When asked to clarify his desire to export to Russia, he said, "Why not? We are a transportation company, businessmen."[14] He then stated that if a client wanted cargo to go to Russia, he would make the effort to service the client's needs. When asked about whether he considers political instability a factor at all, he simply responded that it was not a concern. The potential for a Russian import shutdown in the industries in which he works had not been a motivating factor to decide whether he would export there; the only reason for not entering the market was lack of connections or the right opportunity for business.

The other firm that falls into this category is MnChemical Georgia LLC, a plant that creates Manganese products such as Manganese Dioxide (MnO2), which is used in batteries, as well as Manganous Oxide (MnO), used for food additives and fertilizers. It is a relatively large company with 51-100 workers, initially founded in the early 1980s by the Spanish company Cegasa to supply MnO2 for batteries across the Soviet Union. Production ceased in the 1990s due to the general economic downturn in Georgia after the fall of the USSR, but the company started production again in 1997.[15] In addition to Russia, the company exports to Hungary, Germany, the Netherlands, and France. Commercial

[12] Interview, July 8, 2015. *«Я не знаю, может быть мы в основном работали с Европой, с Китаем. Может быть российский бизнес в общих сторонах… мы не работаем [там], я не знаю.»* Translation from Russian by James Janison.

[13] Ibid. *«С Россией… мы не работали. У нас нет связей, ничего.»*

[14] Ibid. *«Почему нет? Мы транспортная компания, бизнесмен.»*

[15] "Company Profile," MnChemical Georgia LLC website, accessed February 27th, 2016. Available at http://www.mnchemical.ge/profile.php

Manager Vano Mchedlishvili corresponded over email in English on January 8th, 2016 in a single email describing his company, relations with the Russian market and export practice.

In his email correspondence, Mchedlishvili made no indication that his firm had either fear of or thought about political uncertainty as the result of the Russian embargo or other acts of state aggression. The company began exporting MnO to Russia in 2009, which at this time became their "main product." He described his firm as a "We are lucky company and our product was not limited on Russian market, because of Mr. Putin's decision [to limit Georgian wine imports]."[16] A decision not to export to Russia, in this mindset, comes exclusively from being prohibited from doing so directly by the law: The firm does not anticipate such shutdown or worry about the potential of a shutdown. This response indicates that state aggression is not only not an issue for them, but that the possibility of future acts of state aggression such as market shutdown are not even a consideration. With no exposure to the effects of the embargo, he sees no reason to be averse to exporting to Russia.

This type of firm is not only unfazed by political instability, uncertainty, and state aggression: it has not even considered such political factors for its final export decision whatsoever. Any guiding principle or strategy of risk-aversion that was held by firms described earlier is completely alien to this strand of thinking. The driving factors that motivate export decisions into the Russian market are those of market viability, then; the predictability or degree of certainty provided by foreign states does not affect these firms' decisions.

[16] Email correspondence dated January 8, 2016.

THE FLUID DYNAMIC OF MARKET FACTORS AND POLITICAL OUTLOOK

The above section presented the responses of Georgian firms on their export strategies, market involvement with Russia, thoughts about how political instability and Russian state aggression affects their business and the impacts of these factors on their decisions to export to Russia. I argue in this section that the lack of firm consensus on instability, uncertainty and risk indicates that a fluid dynamic between idiosyncratic political outlooks and key market factors determines how state aggression affects their export decision.

NO SINGULARITY AMONG RISK-TYPING

Within my sample, the political outlook that determines a firm's reaction to state aggression depends upon the firm in question– there is no ubiquitous tendencies to infer market risk from state aggression or think about risk in any single manner. The above section presented four main approaches to the political instability due to Russian state aggression exhibited by the firms interviewed: 1) that the possibility of market shutdown at all is a deal-ender 2) that political uncertainty is an issue, but does not rule out exporting to Russia per se 3) that there is instability, but that this instability does not matter and 4) that political instability and the ensuing risk is a non-factor altogether, not considered until the firm is made to think about it.

Figure 5.1 shows the different threads of firm-level logic dictating these conclusions:

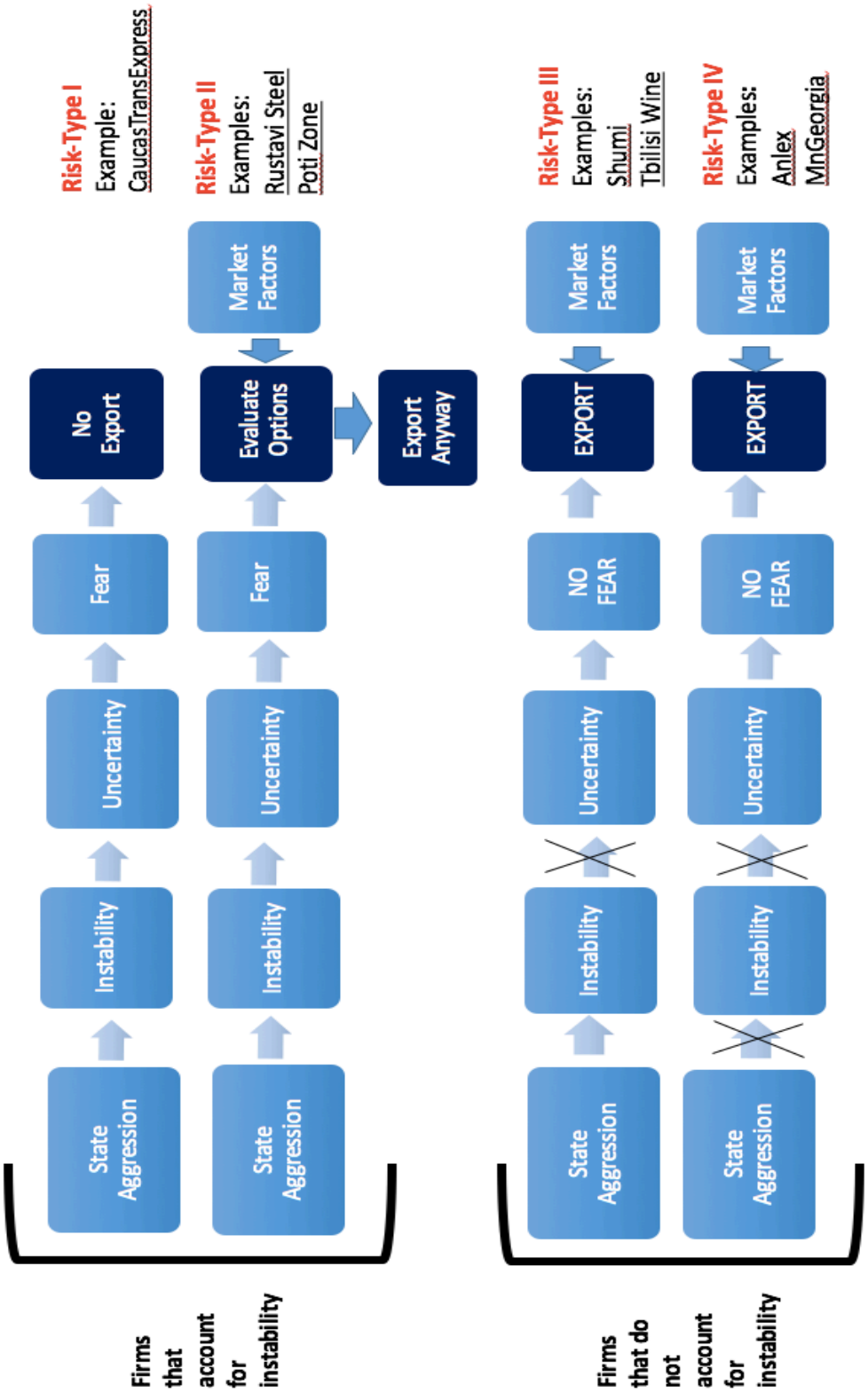


Figure 5.1: The Four Risk-Types of Export Decision Processes

In Figure 5.1, firms are broken down into four risk-types, i.e., categories based on how firms described risk affecting their export decisions. The brackets dividing them into subcategories indicate whether the firms' export decision accounts for instability at all. For risk-type I, the instability of Russian policies prompts enough uncertainty to be afraid of entering the Russian market. For risk-type II, instability and uncertainty prompt fear, but the favorability of the Russian market makes them weigh this fear against the favorable business opportunities in Russia. In the second bracket, neither risk-type of firm has fear of a market shutdown. Risk-type III has observed the instability caused by state aggression but sees this risk as given by government policy and therefore not something it can worry about; instability does not cause them to act with uncertainty. Risk-type IV neither accounts for uncertainty nor does it even think about state aggression as a business concern. To this extent, Russian state aggression has not prompted any perception of significant instability to the Russian export market for risk-type IV.

Far from prompting a uniform response among firms, the sample indicates that state aggression only affects their decisions through the intervening variables[1] of *perceived* instability, *perceived* uncertainty and the resulting fear. This process, furthermore, only appears to link state aggression to final export decisions for some firms. This means that firm-level thought processes is an intervening variable that determines whether state aggression matters for export decisions. Given the differences between risk-types, the interviews do not affirm a uniform effect of state aggression on export decisions. Next, I analyze market factors that, albeit based on a limited sample, indicate trends among risk-typing.

[1] Stephen Van Evera, *Guide to Methods for Students of Political Science*, 11. Van Evera defines an intervening variable as "a variable framing intervening phenomenon included in a causal theory's explanation."

THE INFLUENCE OF MARKET FACTORS ON RISK-TYPE

The above section argued that divergence among risk-types of Georgian exporters creates different outcomes for their export decisions. In this section, I examine different market factors that impel firms toward exporting and argue that, while many market factors have no influence on perceptions of risk, the strength of a firm's business networks influences its perceptions of instability and its risk-type categorization. I conclude from this analysis and the risk-typing above that a fluid dynamic between key market factors for export and firms' individual political outlooks shape perceptions of instability of the Russian market and determine firm export decisions.

While size does not influence risk-type, business networks, buoyed by experience exporting, influence a firm's risk-assessment of Russia. Table 5.1 presents information from interviews with each firm:

Firm Name	Industry / Background	Market Factors For Export	Outlook on Russian Market	Non-Russian Export Markets	Embargo Experience	Outlook on Risk / Propensity toward Risk-Aversion	DV: Final Export Decision to Russia
CaucasTransExpress	**Logistics / Transportation**	Macroeconomic factors of Georgian economy and export destination; strength of contact relationships	————	Rest of Former Soviet Union, e.g. Central Asian countries	No entrance into Russian market; **no direct embargo exposure**	Instability of Russian market deters entrance; **Category I Risk-Type**	**NO**
Rustavi Steel	**Manufacture; Heavy metals**	Good networking, product strength; strength of contacts	Goal to expand operations in Russia, large customer base; **Positive outlook**	Azerbaijan, China, Ukraine, Turkey, Iran, Switzerland, Armenia, Sri Lanka	Non-embargoed industry within Russian market; **no direct embargo exposure**	Instability not as much of an issue as corruption and uncertainty on part of Russian clients; **Category II Risk-Type**	**YES**
Poti Free Industrial Zone	**Logistics / Transportation**	Brand familiarity, massive scale of demand for Georgia, a small country	Russia a necessity for Georgian products but not too much; **mixed outlook**	Global reach, with focus on regional distribution, e.g. Armenia, Azerbaijan, Central Asian countries	Businesses serviced experienced difficulties with Russian market; **direct embargo exposure**	Instability an issue, to be a concern / monitored in business practice, but not a deterrent; **Category II Risk-Type**	**YES**
Shumi Wine Company	**Agriculture / wine**	Brand familiarity, product strength	Constant demand from Russia makes it a strong market; **positive outlook**	Ukraine, Moldova, Japan, United Kingdom	Unable to export during time of embargo; **direct embargo exposure**	Instability given by federal policy, not a concern of the firm on its own; **Category III Risk-Type**	**YES**
Tbilisi Wine Cellar	**Agriculture / Wine**	Brand familiarity, product strength, large volume of demand;	Russia is a core / fundamental market; size and constant demand make it strong source of export revenue; **positive outlook**	Ukraine, Belarus, Kazakhstan, Baltic countries, Poland, US, Canada, Israel, Germany	Health standard for goods raised. Acquired permits to trade with Russia; **partial embargo exposure**	Changes in Russian import policy not an issue as long as the company plays along; **Category III Risk-Type**	**YES**
Anlex Logistics	**Logistics / Transportation**	Network strength;	Favorable; regional area of potential interest; **Positive outlook**	Armenia, Azerbaijan	No entrance into Russian market; **no direct embargo exposure**	Changes in Russian policy not a concern at all; **Category IV Risk-Type**	**NO**
MnGeorgia	**Manufacture; Chemical processing**	Close business ties;	Plans to do future business in Russia; **Positive outlook**	Hungary, Germany, Netherlands, France	Non-embargoed industry within Russian market; **no direct embargo exposure**	Change in Russian policy not a concern at all; **Category IV Risk-Type**	**YES**

Table 5.1: Results of Firm Correspondences: Factors and Final Export Decision.

Table 5.1 presents the firm name, sector, relevant data regarding exports, and information on the firm's exposure to market shutdown and instability. The final column indicates whether the firm exports to Russia, indicated with "YES" or "NO." This synthesizes data gathered across different forms of correspondence and conversation.

Factors that do Not Heighten Risk: Size and Aggression-Targeted Sector

HST2 suggests that agricultural firms might perceive the Russian market as unstable, as they have been exposed to the effects of a market shutdown in the past and would operate with some memory of that. Either they are deterred from exporting or they altogether avoid doing so, in this formulation. According to Table 5.1, however, being in an embargoed sector does not seem to make a firm more risk-averse: Interviewed wine exporters fall within the category of risk-type III, exhibiting no hesitance about entering the Russian market. Risk-types I and II were primarily within logistics and heavy metals sectors, however. There seems to be substantial divergence in risk perception within certain sectors, such as logistics / transportation. In this sector, firms are straddled across three different risk-types: CaucasTransExpress is risk-type I, Poti Free Industrial Zone is risk-type II and Anlex Logistics is risk-type IV. This suggest that embargo exposure across sector does not make firms the most perceptive of or averse to risk *per se*.

The dynamics of the Georgian wine sector here might present an alternative: As established in Chapters Three and Four, the Russian market is lucrative for Georgian wine exporters, positing that firms might overlook risk for profit. In this view, being in the agricultural sector does matter to determine a firm's risk-type. Although managers did not express this view in their responses, they might have accepted the potential for market

shutdown as so clearly inevitable that it would not be worth discussing, since they are pigeon-holed by regional constraints for wine demand. In any event, however, for the interviewed agricultural exporters, being in a sector that has been exposed to an embargo does not *increase* risk-aversion, as an application of HST2 suggests: Instead, being an agricultural exporter might make firms less risk-averse due to how lucrative the Russian market is. This position, then, does not support HST2's intuition that they might consider market risk in more depth.

The data from Table 5.1 also does not indicate that a firm's size –measured in terms of turnover, employees, or capital intensity– determines or influences the risk-type to which it belongs. While the sample of interviewed firms exhibits little variation in size – most are medium- or large-sized firms– from what variation does exist, there is no indication that differences between firm sizes result in more risk-averse perceptions of the Russian market. Anlex Logistics, a small firm, for instance belongs to the same risk-type as MnChemical Georgia, a larger company. Large firms, e.g. Rustavi Steel, CaucasTransExpress and MnChemical Georgia all belong to different risk-type categorizations, indicating no clear trajectory of large firms toward any one approach to risk. The variation according to size is limited, but from what data is available, there is no reason to believe that differences in size matter to determine the risk-type to which a firm belongs.

Business Networks and Experience Shape Risk Outlook

While some circumstances of a firm's practice do not determine the risk-type of a firm *per se*, the strength of business networks and export experience to the Russian market can influence how unstable –and therefore risky– they perceive the Russian market to be. An unknown market with the potential for shutdown at any moment presents uncertainty; a country with unpredictable export policy but strong networks impels firms to account for less risk. Namely, for risk-type I, CaucasTransExpress indicates that the company's practice is "based to the other countries [aside from Russia, such as Central Asian countries]," since the time of the embargo. The firm whose Russian export decision is determined entirely by its perception of instability does *not* have networks established in Russia. In contrast, Rustavi Steel sees elements of unpredictability in the Russian market, as in neighboring Azerbaijan. Rustavi, however, has both firmly established customers and colleagues in Russia and, being a former Soviet production facility, has extensive experience operating across the former Soviet world, including Russia. As a result, it foresees less instability in its long-term business ties in the country.

Experience and business networks are not clearly separable market drivers of success in of how they inform a firm's perception of the Russian market. Experience entails a history of working with specific customers or clientele, which in turn strengthens networks: Access to that network, then, creates experience. In any event, however, the combination of these two factors in the empirical data plausibly shape firms' risk-type categorizations in addition to the non-market factor of idiosyncratic political outlook, which varies across firms.

The influence of market factors on risk are not unilateral rules of firm behavior, but rather factors that *can* influence firm decisions, as evinced by my interview data. Business networks and export experience do not exclusively determine perceptions of instability, but they can influence idiosyncratic political outlooks to inform an overall picture of how risky a firm believes the Russian market to be. The next section synthesizes this analysis of market factors with the previous section's categorization of firm-level differences in political outlook.

A FLUID DYNAMIC OF FACTORS SUGGESTS NUANCE TO HST2

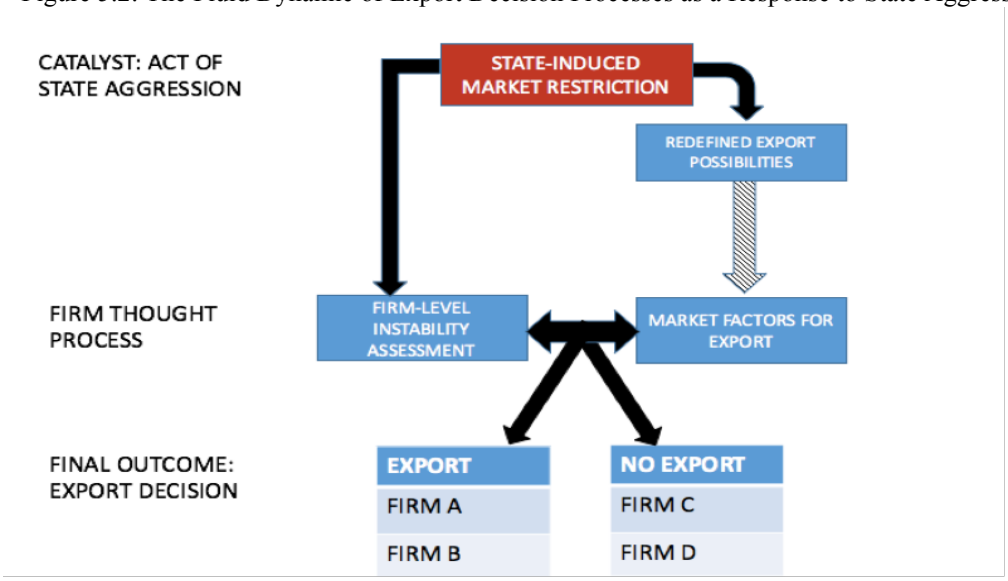
In my sample, firm political outlook determines its risk-type in combination with market factors to determine a final export decision. This central thesis is critical in adapting existing Hegemonic Stability Theory's explanation of how firms factor instability into their export decisions. Instead of observing a single risk-type for all Georgian exporters, deterred from entering the Russian market due to instability, this is only one outcome out of several, explained in part by market factors and in part by differences in firms' perceptions of political instability.

The variety of risk-types adds nuance to the model of the risk-averse firm that which HST2 predicts. Namely, according to HST2, we would expect state aggression to suggest instability, prompting uncertainty and general market fear. In this event, firms behave in a pattern consistent with risk-types I or II. Either they avoid exporting to the risky Russian market or they are deterred to some degree from the market. The provision of risk-types III and IV, however, suggest that this logic might not be a universal

characteristic of firms, and that a combination of market factors with idiosyncratic political beliefs might actually influence how firms perceive risk.

Below, my full model does not refute the general logic of HST2: Rather, it presents a fluid dynamic between market factors and individual perception of risk that helps systematize why certain firms follow the implication of HST2 while others do not. Examining an array of risk-types shows that firms make decisions by a fluid dynamic between their individual political outlooks on instability and market factors that impel them to export, as presented in Figure 5.2:

Figure 5.2: The Fluid Dynamic of Export Decision Processes as a Response to State Aggression.



State aggression triggers a firm-level assessment of instability: This model works for any of the causal processes shaping risk-types in Figure 5.1. This instability assessment can also include the process of reconsidering market opportunity for firms whose goods are or were embargoed as they make their export decision. Figure 5.2 also includes the firms that do not respond at all to state aggression. State aggression affects the 'market factors' box because firms consider export market availability as a result of the embargo for their export

decisions, analyzed in Chapter Four. The model presented above, however, give a full image of the effects of state aggression by showing that it is a catalyst for risk consideration as well. An act of state aggression prompts individual firms to form political outlooks on their own and weigh opportunities, such that some form in-depth opinions about state aggression while others barely analyze the subject. This assessment of instability causes them to look at the market factors and weigh risks against business opportunities. Then, market factors for export such as business ties and export experience –conditional on market availability, as analyzed in Chapter 4– influence the process of assessing instability. The interviews indicate that precisely this two-way thought process in which market factors *interplay* with perceptions of instability that firms generate their final export decisions.

CONCLUSION

This chapter argues that, for my sample of exporters interviewed, a fluid dynamic between market factors and firm-level instability assessment shapes how state aggression influences export decisions from Georgia to Russia. This adds nuance to the position of HST2 on the point that stability is a condition for export, instead positing that perceptions of stability engage with and respond to market factors to generate different export outcomes among different firms. Further, because stability is intuitively more conducive to trade than state aggression, this research requires a subtler deployment of this intuition as an explanatory practice. The next chapter draws implications for existing political economy of international trade by urging further scholarship toward an international political economy of the firm.

CHAPTER SIX
TOWARD A FULLER INTERNATIONAL POLITICAL ECONOMY OF THE FIRM

Explaining state aggression as unilaterally risk-inspiring for exporters overlooks the fluid dynamic of market factors and political outlook at the firm level. At the beginning of this thesis, I posited that countries trade in what appear to be substantial volume even in spite of histories of (inter)-state aggression, contradicting common wisdom's consensus on stability. The answer I have provided lies in the differences between firms, for whom both market factors and idiosyncratic political outlooks shape differences in final export outcomes. Firms have different resources, sectors, perspectives, connections, and constraints. On the one hand, their behavior is systematic and predictable as a function of market factors, both through quantitative and qualitative analysis; on the other, a firm's approach to risk is contingent on political perspectives that can be unique to the firm in question.

This thesis answers the following questions: What are the non-market conditions under which countries trade, i.e., when firms export? This leads me to then ask, how does state-aggravated market shutdown influence or shape firm export decisions? I examine two sub-processes: First, how does an overt act of aggression such as market shutdown affect the exporters who were directly hit? And secondly, how does the act of state aggression initiates a firm-level thought process that considers risk alongside market factors to determine export decisions? While common wisdom argues that stability is a condition for international trade and therefore state aggression necessarily deters exports, I present a framework that adds nuance to common wisdom by showing that stability influences export decisions conditionally, namely, through a fluid dynamic between firm's perception of instability on the one hand and market factors and opportunities on the other. This framework adapts the concept of risk-aversion from Behavior Economics and integrates this adapted approach to risk with export factors analyzed in International Trade Theory.

FINDINGS

This thesis has shown the effects of state aggression on exports in two ways. In Chapter Four, I presented evidence that a substitution effect occurred as a result of the embargo, proving that Georgian agricultural exporters for whom the Russian market was shut down altered their export patterns accordingly. I did so by using a differences-in-differences economic model in which the embargo-targeted group, agricultural exports, dispersed substantially through Western Former Soviet republics for the duration of the embargo while industrial exports did not. In Chapter Five, I presented interview data that shows that firms divide into risk-type categories, each of which possesses a distinct thought

process for thinking about the effects of the embargo on their particular business processes. The key findings are below:

- Chapter Four presented tentatively telling results, affirming the key logic under my hypotheses.
    - Georgian exporters substituted goods to certain non-Russian markets in the wake of the embargo of 2006.
    - A balance between proximity to Georgia, market size and market saturation likely contribute to whether exporters substitute their Russia exports to a particular market.
    - Substitution was strongest in countries with Post-Soviet histories, suggesting that critical factors such as business networks and product familiarity –legacies of the USSR– determined patterns of export substitution.
    - The magnitude of this substitution effect indicated a full offset, i.e., 100% of exports previously heading to Russia switched into different markets in 2006 for the duration of the embargo.
- Chapter Five affirmed my framework of a fluid dynamic between political outlook and key market processes.
    - Firms displayed a variety of risk-types, or logics of considering state aggression, which indicates that deterrence from exporting depended on the firm and perception of risk was not unilateral.
    - On the one hand, market factors, such as size, or prior market conditions, such as past exposure to the embargo, do not heighten a firm's perception

of the Russian market as unstable, as evinced by discrepancies in risk-type for firms.

- On the other hand, certain market factors, such as the strength of business networks, market opportunity availability, and experience, can influence interviewed firms' overall assessment of how risky entering the Russian market –or other markets– is for them, shaping their risk-type categorization.

The quantitative economic findings establish that the embargo was a palatable, serious alteration of firm export practices, and that substitution was a critical process by which state aggression altered Georgian exports. The process-tracing analysis of interview data shows that firms' assessment of the riskiness of the Russian market is the result of a fluid dynamic between a firm's political outlook and key market factors. Export decisions in response to state aggression in sum result from this fluid dynamic.

IMPLICATIONS FOR GEORGIA AND EURASIA

Russian state aggression is a timely and critical issue for Georgian national security and economic development. Within a larger geopolitical frame, hostilities between the Kremlin and the West have grown to a point that Russian Prime Minister Dmitri Medvedev says recalls a new Cold War.[1] Further, Russia gives no indication of any plans to relinquish the regional authority it has established along the way. After the annexation of Crimea in 2014 and subsequent invasion of mainland Ukraine, Russia has extended its territorial

[1] Anton Troianovski and Laurence Norman, "Russian Premier Calls Entanglements a 'New Cold War,'" *Wall Street Journal*, February 14, 2016, sec. World, http://www.wsj.com/articles/russias-medvedev-says-world-is-fighting-a-new-cold-war-1455358705.

control of South Ossetia further into Georgia, conveniently including part of a British Petroleum-owned pipeline into Russian territory.[2] Economic downturn in Russia in 2014-2015 has in turn hurt Georgia through critical vulnerability points: Inflation, weakened remittance flows from Georgians living in Russia, and a depreciating currency show that Georgia's economic dependence on Russia is a present problem for the welfare of its citizenry.[3] At the same time, the tendencies among Georgian exports toward the Russian market have persisted even despite historical memory of market shutdown, as I show in Chapters Four and Five. Economic ties with Georgia's northern neighbor therefore grants political leverage to the Russian state, which it has used in the past. As such, understanding the effects of Russia wielding its economic prowess will continue to be a critical area for policymakers in Georgia to understand, as the critical issues in Georgian-Russian political relations this thesis discusses show no signs of dissipating.

Similar issues of state aggression, instability, and the political economy of trade have ramifications for the rest of the Post-Soviet world. Political instability in recent years has stifled GDP growth is stifled in Ukraine.[4] It is common regional knowledge that energy exports, and the complex politics that follow, determine the livelihood of the Kazakh, Turkmen, and Azerbaijani peoples, for better or worse. Market shutdown has had substantial consequences for the livelihoods of Moldovan wine exporters to Russia; small

[2] "The Creeping Russian Border in Georgia - Al Jazeera English," accessed April 3, 2016, http://www.aljazeera.com/indepth/opinion/2015/07/creeping-russian-border-georgia-south-ossetia-abkhazia-150722111452829.html; Paul Salopek, "Vladimir Putin's Mysterious Moving Border," *Politico Magazine*, accessed April 3, 2016, http://www.politico.com/magazine/story/2016/04/georgia-border-russia-vladimir-putin-213787

[3] *Georgia's Vulnerability to Russian Pressure Points*, accessed April 3, 2016, http://www.ecfr.eu/publications/summary/georgias_vulnerability_to_russian_pressure_points312

[4] "World Bank Keeps Forecast for Ukraine's GDP Growth in 2016 at 1%," *Interfax-Ukraine*, accessed April 3, 2016, http://en.interfax.com.ua/news/economic/334916.html

post-Soviet economies continue to be dependent upon Russia for trade.[5] And finally, the push for Euro-Atlantic integration for many Eastern European countries continues, even despite challenges from the Russian and European perspectives at time of writing.[6] Instability and political conflict matter in this region, raising the question of how policymakers should craft international economic policies in response. Beyond Georgia specifically, the political economy of trade is a pressing and relevant topic for the variety of national economies through the Post-Soviet world.

At the same time that the political consequences of trade show warning signs for Georgia, the results of this thesis also suggests some good news: Firms seem capable of managing risky market outlooks. The full offset results I present in Chapter Four show that Georgian agricultural export flows were able to adapt around the constraints Russia placed on their opportunities by substituting export flows elsewhere. By forcing exporters to drop their Russia practices, in some ways the embargo was an accidental push to diversify export destinations, creating potential future business opportunities where there had been none before. In terms of risk-aversion, while some firms have avoided business with Russia as a result of the potential for market shutdown, the interviewed firms are capable of analyzing and navigating political risks as they come up. State aggression hurts markets, but firms are not without strategies for adapting to it.

[5] Åslund, *How Capitalism Was Built,* 89

[6] "Let Georgia Join NATO," *Foreign Affairs*, April 13, 2016, https://www.foreignaffairs.com/articles/georgia/2016-04-12/let-georgia-join-nato.

THE FIRM AS AN ACTOR IN THE INTERNATIONAL POLITICAL ECONOMY

Beyond this specific case and context, we cannot have a full political economy of international trade without an international political economy of the firm. In relatively recent years, international trade theory has introduced the firm to fore as an object of analysis in export decisions, analyzing productivity heterogeneities and brand differentiation among other factors. Political economy of trade literature, however, has begun to analyze uncertainty on the firm level, but it does not analyze schisms between *types* of firms. While my framework reinforces the fundamental principle that state aggression inspires risk and the alteration of export flows processes in general, it provides us more nuance in analyzing *how* this occurs depending on the market constraints around different sets of firms. By understanding this process, we can explain why countries trade even despite interstate aggression and other threats to stability.

My point here is not to dismiss or belittle current political economies of trade or the firm, but rather to provide empirical support for a more precise application of existing theories of how stability impacts markets. Indeed, the literature on the political economy of risk-aversion and political shocks, as I have discussed in Chapter Two, is rich in insight. But within this international trade literature, a political economy that analyzes distinctions between categories of firms such as risk-types that are informed by firm personal experience and market factors all at once does not yet exist. Just as it does not make sense to assume that firms all behave the same way in international economics, given their different conditions and properties, it does not make sense to assume that they all belong to the same political economy of trade, given different conditions and properties. For this reason, we need to move toward a view of the firm that posits it as an actor within the

international political economy, able to perceive events in international politics and alter their market outcomes according to particular practices.

Methodologically, an international political economy of the firm following my framework offers a way to incorporate unpredictability into international trade theory. I have shown how differences in political outlook between firms matters for their risk-typing. From a mathematical economic perspective, however, these differences are plausibly random and must be taken as part of statistical discrepancy. Mathematically, one can only systematize what data is predictable and non-random. With mathematical models, it is very difficult to account for political events that have unclear, imprecise, or widely variant outcomes depending on a wide range of unique circumstances. This is where my mixed methods framework for understanding state aggression helps: By analyzing qualitative interview data, I am able to at least approximately understand how factors unique to each firm, such as political outlook, influence their decisions. I am then able to incorporate this into an analysis of market dynamics. By examining how the complexities of firm dynamics as motivated by fluidly interacting factors, my framework offers international trade theory a way to dissect differences between firms that are otherwise impossible to speculate upon. Firms are constructed, then, as both profit-maximizing entities *and* organizations of people that grapple with the unclear political realities around them. My mixed methods approach as such allows us to answer future questions on the political economy of the firm.

FURTHER RESEARCH

There are at least two areas for future research to build on my findings. The first entails further research to overcome the limitations of my data, both quantitative and qualitative. For one, the conclusions I am able to draw about patterns of Georgian export substitution in response to the embargo would benefit from further breakdown of the export volume data. In particular, being able to break down total export flows by different firm characteristics might lend insight into how different factors influence a firm's ability to substitute exports for the duration of an embargo: Analyzing differences in substitution patterns to other former Soviet countries along lines of firm size, productivity, age, or distance to Russia is a place to start this process in the Georgian case. For another, a similar qualitative study with a larger sample of firm interviews would allow for more definitive and absolutely conclusive results. On the firm level, I observed a fluid dynamic between idiosyncratic political outlook and market factors for exports that determined risk-types. Additional market factors that might influence risk-typing, however, might come to light given a larger sample. Insight from periodic and repeated interviews with the same sample of firms over a set of years would also provide additional useful data. While this thesis's limitations due not prevent me from drawing conclusions about the data I consult, the conclusions would be more definitive with additional data.

The second further area of research would develop the international political economy of the firm by investigating how historical factors might influence changes in perceptions of instability. The Georgian case provides fruitful opportunity to analyze firms, state aggression, and drivers of trade volume with Russia, but any one case has its limitations of its particular, historical context. The historical context of Russian-Georgian

relations might not be the same as other countries that trade despite political tensions. These two countries were once part of a unifying Soviet Union, have had centuries of exposure to one another, and share linguistic and cultural connections, all of which have had influence on key sources of Georgian-Russian trade, as I have analyzed throughout this thesis. This could affect how some Georgian firms perceive instability in Russia in contrast to other potentially fruitful yet unstable markets, since firms might have particular cross-cultural affinities, knowledge, or skills. This raises the question: Do differences across historical and market contexts create different responses to the same instability shock among firms?

To examine this, a comparison of firm behavior in the Georgian-Russian case to firms in other regions or at other points in time could be useful to isolate the effects of historical context on firm-level risk outlook. While examining one country case, as I have done, presents some results at the firm level, we might be able to learn more about how firms approach risk by comparing the Georgian example to another country that has been the target of state aggression or other forms of political instability. This comparative framework would allow further research to see if stability across cases and contexts is necessarily a deterrent among firms, or if specific historical contexts can cause exceptions to this general intuition.

CONCLUSION

Georgia is not the first country to be embargoed, nor is it the only small country that struggles with poverty while also in dispute with an aggressive neighbor. To the extent that export markets can help economies grow by presenting firms with opportunities to

produce higher volumes than otherwise available, so is exporting critical for small, poor countries, looking for critical ways to bring wealth into the country. In these countries, as anywhere, political adversities can alter or hurt market outcomes, a phenomenon to which the realm of international trade is no exception. Moreover, international power dynamics between states have subtleties and cause unclear, messy outcomes that do not equally affect all people, firms, sectors, or organizations.

To provide insight into that sphere, this thesis found that a fluid dynamic of political outlook and market factors shape different categories of Georgian firms' responses to state aggression. Economic integration with Russia and Russian state interests show no sign of letting up their influence on the Georgian economy. When the political does affect the market, as it does in Georgia, this thesis offers steps toward a fuller political economy of the firm to understand what instability means for that country's economic welfare.

APPENDIX: Data Analysis Tables

Table 3.1: Basic Macroeconomic Indicators for the Republic of Georgia between 1991 and 2014. All Data from the World Bank. Blank spaces indicate data that is unavailable.

Year	GDP Growth rates, annual %	Inflation, GDP Deflator	FDI Inflows (millions USD)
1991	-21.1	62.2	-
1992	-44.9	1,310.30	-
1993	-29.3	15,444.40	-
1994	-10.4	6,041.60	-
1995	2.6	162.7	-
1996	11.20	43	-
1997	10.52	6.5	242.50
1998	3.10	6.9	265.30
1999	2.87	9.7	82.30
2000	1.84	4.7	131.23
2001	4.81	5.4	109.84
2002	5.47	5.9	160.21
2003	11.06	3.4	334.65
2004	5.86	8.4	492.33
2005	9.60	7.9	453.11
2006	9.38	8.5	1,170.29
2007	12.34	9.7	1,865.78
2008	2.31	9.7	1,583.34
2009	-3.78	-2	647.41
2010	6.25	8.5	866.28
2011	7.20	9.5	861.33
2012	6.18	1.2	425.89
2013	3.32	-0.7	705.36
2014	4.77	3.8	1,647.34

Table 4.2A. Full Results of Reduced Form Regression Coefficients with Standards of Error below. Regressions follow form of Equation 2 in Chapter Four. Markets grouped regionally. All numbers in millions.

	Possible Substitution Market	Embargo Coefficient (θ)	Sector Coefficient (p)	Constant (∂)
Eastern Europe Former SSRs				
	Ukraine	58.1**	8.43	20.7
		(16.6)	(14.9)	(11)
	Moldova	2.83**	0.77	0.28
		1.16	0.92	0.59
	Belarus	5.39**	3.93	0.52
		(2.4)	(1.86)	(1.16)
	Estonia	0.36***	0.19	0.05
		(0.13)	(0.11)	(0.08)
	Latvia	1.39***	0.68**	0.36*
		0.38	0.3	0.2
	Lithuania	3.07*	-0.15	2.34***
		1.56	1.22	0.77
	All of the Above Aggregated	58.1***	8.43	20.7*
		16.6	14.9	11
Neighbors				
	Turkey	0.7	-27***	29.8***
		12.2	9.45	5.88
	Azerbaijan	9.45	-100**	110***
		54.9	42.6	26.5
	Armenia	14.2	-52.4***	57.2***
		24.1	18.7	11.6
Central Asian Former SSRs				
	Kazakhstan	9.21	-3.54	11.8***
		(10.1)	7.84	4.88
	Kyrgyzstan	1.10	-0.98	1.63***
		0.87	0.71	0.47

	Tajikistan	0.01	-1.84***	2.16***
		0.74	0.6	0.39
	Turkmenistan	-4	-16.2**	21.4***
		9.11	7.06	4.39
	Uzbekistan	-0.11	-6.45**	6.72***
		4.12	3.2	1.99
Western Markets				
	Germany	3.48**	-2.81**	5.04***
		(1.43)	(1.11)	(0.69)
	USA	1.2	-14.2**	16.5***
		(8.15)	(6.32)	(3.93)

***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

Table 4.3A Full Table of Instrumental Variable Regression Coefficients and Standards of Error. Regressions follow form of Equation 4 in Chapter Four. Markets grouped regionally. Sector and constant coefficients given in millions.

	Possible Substitution Market	**Substitution Coefficient (θ/λ)**	**Sector Coefficient (ψ)**	**Constant (κ)**
Eastern Europe Former SSRs				
	Ukraine	-0.81**	50.7***	19.5*
		(0.36)	(16.9)	(10.6)
	Moldova	-0.05*	3.22**	0.98
		(0.03)	(1.34)	(0.88)
	Belarus	-0.10	8.65***	1.78
		(0.06)	(2.99)	(1.89)
	Estonia	-0.01*	0.49**	0.14
		(0.004)	(0.19)	(0.14)
	Latvia	-0.025*	1.89***	0.69
		(0.01)	(0.63)	(0.42)
	Lithuania	-.05	2.53	3.06**
		(0.04)	(1.89)	(1.21)
	All of the Above Aggregated	-1.04*	37*	56.6
		(0.56)	(22.7)	(29.6)

Neighbors				
	Turkey	-0.001	-27**	29.9***
		(0.22)	(10.4)	(6.53)
	Azerbaijan	-0.17	-91.9*	112***
		(0.99)	(47.1)	(29.7)
	Armenia	-0.25	-39.9*	60.5***
		(0.45)	(21.4)	(13.5)
Central Asian Former SSRs				
	Kazakhstan	-0.16	4.52	1390**
		(0.2)	(9.45)	(5.97)
	Kyrgyzstan	-0.02	-0.043	1.91***
		(0.02)	(0.91)	(0.63)
	Tajikistan	-0.0002	-1.83	2.16
		(0.01)	(0.64)	(0.43)
	Turkmenistan	0.07	-19.7	20.4
		(0.16)	(7.81)	(4.93)
	Uzbekistan	0.002	-6.54	6.69
		(0.07)	(3.5)	(2.21)
Western Markets				
	Germany	-0.06*	0.23	5.86***
		(0.04)	(1.73)	(1.09)
	USA	-0.02	-13.2*	16.7***
		(0.15)	(6.97)	(4.4)

***Significant at the 1 percent level.
**Significant at the 5 percent level.
*Significant at the 10 percent level.

WORKS CITED

Anderson, James E. "Gravity, Productivity and the Pattern of Production and Trade." Working Paper. National Bureau of Economic Research, January 2009. http://www.nber.org/papers/w14642.

Anderson, James E., and Eric van Wincoop. "Gravity with Gravitas: A Solution to the Border Puzzle." Working Paper. National Bureau of Economic Research, January 2001. http://www.nber.org/papers/w8079.

Anderson, Kym. "Is Georgia the next 'New' Wine-Exporting Country?" Working Paper. Robert Mondavi Institute Center for Wine Economics, January 2013. http://econpapers.repec.org/paper/agsmondwp/162523.htm.

Anderson, Kym, and others. "Georgia-the Cradle of Wine-Is Looking to Rock the Export Scene," 2014. http://search.informit.com.au/documentSummary;dn=256101373578566;res=IELAPA.

Arrow, Kenneth J. "The Economic Implications of Learning by Doing." *The Review of Economic Studies* 29, no. 3 (June 1, 1962): 155–73. doi:10.2307/2295952.

Åslund, Anders. *How Capitalism Was Built : The Transformation of Central and Eastern Europe, Russia, the Caucasus, and Central Asia*, n.d.

Basu, Susanto. "Returns to Scale Measurement." In *The New Palgrave Dictionary of Economics*, edited by Steven N. Durlauf and Lawrence E. Blume, 2nd ed., 141–44. Basingstoke: Nature Publishing Group, 2008. http://www.dictionaryofeconomics.com/article?id=pde2008_I000297.

Bergeijk, Peter A. G. van. *Economic Diplomacy, Trade, and Commercial Policy : Positive and Negative Sanctions in a New World Order*. Aldershot, England Brookfield, Vt., USA, n.d.

Bergeijk, Peter A. G. van, and Steven Brakman. *The Gravity Model in International Trade: Advances and Applications*. Cambridge University Press, 2010.

Bergstrand, Jeffrey H. "The Gravity Equation In International Trade: Some Microeconomic Foundations And Empirical Evidence." *The Review of Economics and Statistics* 67, no. 3 (1985): 474–81. doi:10.2307/1925976.

Bernard, Andrew B., J. Bradford Jensen, Stephen J. Redding, and Peter K. Schott. "Firms in International Trade." *The Journal of Economic Perspectives* 21, no. 3 (Summer 2007): 105–30. doi:http://dx.doi.org.revproxy.brown.edu/10.1257/jep.21.3.105.

Berthou, Antoine, and Helene Ehrhart. “Trade Networks and Colonial Trade Spillovers.” SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, December 1, 2014. http://papers.ssrn.com/abstract=2535851.

Bertrand, Marianne, Esther Duflo, and Sendhil Mullainathan. “How Much Should We Trust Differences-in-Differences Estimates?” *The Quarterly Journal of Economics* 119, no. 1 (2004): 249–75.

Bittlingmayer, George. “Output, Stock Volatility, and Political Uncertainty in a Natural Experiment: Germany, 1880-1940.” *The Journal of Finance* 53, no. 6 (1998): 2243–57.

Broll, Udo, Jack E. Wahl, and Wing-Keung Wong. “Elasticity of Risk Aversion and International Trade.” *Economics Letters* 92, no. 1 (July 2006): 126–30. doi:10.1016/j.econlet.2006.01.031.

Burduli, Tamar. “Economic Transitions in Georgia: On The Path From Shock Therapy to DCFTA,” 2015. doi:10.13140/RG.2.1.1449.9280.

Carsrud, Alan L., and Malin Brännback. *Understanding the Entrepreneurial Mind: Opening the Black Box*. Springer, 2009.

Cenusa, Denis, Michael Emerson, Tamara Kovziridze, and Veronika Movchan. “Russia’s Punitive Trade Policy Measures towards Ukraine, Moldova and Georgia.” *CEPS Working Documents*, no. 400 (2014). http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2507195.

Chagelishvili-Agladze, Lali. “European Association Agreements And Some Aspects Of Georgia Economics.” *European Scientific Journal (Kocani)*, November 1, 2014.

“Civil.Ge | Saakashvili Wants New Chief Prosecutor, Vows to Crackdown on Criminals.” Accessed April 10, 2016. http://civil.ge/eng/article.php?id=6000&search=rose%20revolution.

“Colonialism - Oxford Reference.” Accessed December 2, 2015. http://www.oxfordreference.com/view/10.1093/acref/9780199207800.001.0001/acref-9780199207800-e-230.

Comin, Diego. “Total Factor Productivity.” In *The New Palgrave Dictionary of Economics*, edited by Steven N. Durlauf and Lawrence E. Blume, 2nd ed., 329–31. Basingstoke: Nature Publishing Group, 2008. http://www.dictionaryofeconomics.com/article?id=pde2008_T000081.

Daniel, Kent, David Hirshleifer, and Avanidhar Subrahmanyam. “Investor Psychology and Security Market under- and Overreactions.” *The Journal of Finance* 53, no. 6 (1998): 1839–85.

Deardorff, Alan V. “Determinants of Bilateral Trade: Does Gravity Work in a Neoclassical World?” Working Paper. National Bureau of Economic Research, December 1995. http://www.nber.org/papers/w5377.

“Determining Factors of Trade Flows In Black Sea Economic Cooperation (BSEC) Region: A Panel Gravity Model.” Accessed December 2, 2015. http://docplayer.net/2165991-Determining-factors-of-trade-flows-in-blacksea-economic-cooperation-bsec-region-a-panel-gravity-model.html.

Dilanchiev, Azer. “Empirical Analysis of Georgian Trade Pattern: Gravity Model.” *Journal of Social Sciences* 1, no. 1 (May 30, 2012): 75–78.

Djankov, Simeon, and Caroline L. Freund. “Disintegration and Trade Flows: Evidence from the Former Soviet Union.” SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, November 30, 1999. http://papers.ssrn.com/abstract=630748.

———. “Disintegration and Trade Flows: Evidence from the Former Soviet Union.” SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, November 30, 1999. http://papers.ssrn.com/abstract=630748.

Doggart, Courtney. “Russian Investments in Georgia’s Electricity Sector: How Georgia’s Institutional Framework Encouraged High Levels of Russian Investment,” 2009. doi:10.2139/ssrn.1526205.

Durand, Robert, Rick Newby, Kevin Tant, and Sirimon Trepongkaruna. “Overconfidence, Overreaction and Personality.” *Review of Behavioral Finance* 5, no. 2 (2013): 104–33. doi:http://dx.doi.org/10.1108/RBF-07-2012-0011.

Dye, Alexander V. “Trade Barriers and Their Effects on the Consumer.” *Annals of the American Academy of Political and Social Science* 198 (July 1, 1938): 22–26.

Eaton, Jonathan, and Samuel Kortum. “Putting Ricardo to Work.” *The Journal of Economic Perspectives* 26, no. 2 (2012): 65–89.

———. “Technology, Geography, and Trade.” *Econometrica* 70, no. 5 (September 1, 2002): 1741–79.

“Economist’s View: Paul Krugman’s Nobel Prize Lecture.” Accessed November 8, 2015. http://economistsview.typepad.com/economistsview/2008/12/nobel-prize-lec.html.

Ehnts, Dirk, and Hans-Michael Trautwein. “From New Trade Theory to New Economic Geography: A Space Odyssey.” *Œconomia. History, Methodology, Philosophy*, no. 2–1 (March 1, 2012): 35–66. doi:10.4000/oeconomia.1616.

Elborgh-Woytek, Katrin. "Of Openess and Distance: Trade Developments in the Commonwealth of Independent States, 1993-2002." IMF Working Paper. International Monetary Fund, 2003. https://ideas.repec.org/p/imf/imfwpa/03-207.html.

Evera, Stephen Van. *Guide to Methods for Students of Political Science*. Ithaca, NY: Cornell University Press, 1997.

"Finance and Development." *Finance and Development | F&D*. Accessed April 13, 2016. http://www.imf.org/external/pubs/ft/fandd/1999/06/kaser.htm.

Freinkman, Lev, Evgeny Polyakov, and Carolina Revenco. "Armenia's Trade Performance in 1995-2002 and the Effect of Closed Borders: A Cross-Country Perspective." MPRA Paper. University Library of Munich, Germany, 2003. https://ideas.repec.org/p/pra/mprapa/10065.html.

Genesove, David, and Christopher Mayer. "Loss Aversion and Seller Behavior: Evidence from the Housing Market." Working Paper. National Bureau of Economic Research, March 2001. http://www.nber.org/papers/w8143.

"Georgia's Economic Advantages and Disadvantages." *Lincoln Mitchell*. Accessed March 13, 2016. http://lincolnmitchell.com/georgia-analysis/2015/2/2/georgias-economic-advantages-and-disadvantages.

Georgia's Vulnerability to Russian Pressure Points. Accessed April 3, 2016. http://www.ecfr.eu/publications/summary/georgias_vulnerability_to_russian_pressure_points312.

"German Economic Team Georgia | Policy Papers." Accessed April 11, 2016. http://www.get-georgia.de/publications/policy-papers/.

Gill, Stephen. "Hegemony, Consensus and Trilateralism." *Review of International Studies* 12, no. 3 (July 1, 1986): 205–22.

Gilpin, Robert. *The Challenge of Global Capitalism: The World Economy in the 21st Century*. Princeton, NJ, n.d.

Glick, Reuven, and Andrew K. Rose. "Does a Currency Union Affect Trade? The Time Series Evidence." Working Paper. National Bureau of Economic Research, July 2001. http://www.nber.org/papers/w8396.

Gómez-Herrera, Estrella. "Comparing Alternative Methods to Estimate Gravity Models of Bilateral Trade." *Empirical Economics* 44, no. 3 (March 28, 2012): 1087–1111. doi:10.1007/s00181-012-0576-2.

Havlik, Peter, and Vasily Astrov. “Economic Consequences of the Georgian-Russian Conflict.” *The Vienna Institute for International Economic Studies* 2 (2008). http://wiiw.ac.at/monthly-report-no-8-9-2008-dlp-175.pdf.

Hiebl, Martin R. W. “Risk Aversion in Family Firms: What Do We Really Know?” *The Journal of Risk Finance* 14, no. 1 (2013): 49–70. doi:http://dx.doi.org.revproxy.brown.edu/10.1108/15265941311288103.

Hirschman, Albert O. *National Power and the Structure of Foreign Trade*. Expanded ed. The Politics of the International Economy, v. 1. Berkeley: University of California Press, 1980.

Hopenhayn, Hugo A. “Entry, Exit, and Firm Dynamics in Long Run Equilibrium.” *Econometrica* 60, no. 5 (1992): 1127–50.

Indans, Ivars. “Relations of Russia and Georgia: Developments and Future Prospects,” n.d.

“Is China’s Growth Miracle Over?” *Economic Research*. Accessed November 9, 2015. http://www.frbsf.org/economic-research/publications/economic-letter/2015/august/china-economic-growth-miracle-slowdown/.

Japaridze, Dimitri. “Trends and Changes in Project Environment in Georgia, 2006,” 2006. http://eprints.iliauni.edu.ge/usr/share/eprints3/data/1553/1/Trends%20and%20Changes%20in%20Project%20Environment%20in%20Georgia,%202006.pdf.

Jones, Ronald W., and others. “A Three-Factor Model in Theory, Trade, and History.” *Trade, Balance of Payments, and Growth* 1 (1971): 3–21.

Kahneman, Daniel. “Maps of Bounded Rationality: Psychology for Behavioral Economics[dagger].” *The American Economic Review* 93, no. 5 (December 2003): 1449.

Kahneman, Daniel, and Amos Tversky. “On the Psychology of Prediction.” *Psychological Review* 80, no. 4 (July 1973): 237.

Kansikas, Suvi. “The Eurasian Economic Union, Russia’s Integration Policy And The Eu Challenge.” *Journal on Baltic Security* 1, no. 1 (2015): 108.

Katsikopoulos, Konstantinos V. “Psychological Heuristics for Making Inferences: Definition, Performance, and the Emerging Theory and Practice.” *Decision Analysis* 8, no. 1 (March 2011): 10–29. doi:10.1287/deca.1100.0191.

Keohane, Robert O. (Robert Owen). *After Hegemony: Cooperation and Discord in the World Political Economy*. Princeton, N.J., n.d.

Kim, Jaehwan, Greg M. Allenby, and Peter E. Rossi. “Modeling Consumer Demand for Variety.” *Marketing Science* 21, no. 3 (August 1, 2002): 229–50. doi:10.1287/mksc.21.3.229.143.

Kindleberger, Charles P. “Dominance and Leadership in the International Economy: Exploitation, Public Goods, and Free Rides.” *International Studies Quarterly* 25, no. 2 (June 1, 1981): 242–54. doi:10.2307/2600355.

———. “International Public Goods without International Government.” *The American Economic Review* 76, no. 1 (1986): 1–13.

———. *The World in Depression, 1929-1939*. Berkeley, n.d.

Krasner, Stephen D. “State Power and the Structure of International Trade.” *World Politics* 28, no. 03 (April 1976): 317–47. doi:10.2307/2009974.

Krugman, Paul R. *International Economics : Theory & Policy*. Boston, n.d.

Kuo, Jason. “Beggar Thy Neighbor.” *Yale Economic Review* 6, no. 2 (Fall 2010): 19.

Leech, Beth L. “Asking Questions: Techniques for Semistructured Interviews.” *PS: Political Science and Politics* 35, no. 4 (2002): 665–68.

“Let Georgia Join NATO.” *Foreign Affairs*, April 13, 2016. https://www.foreignaffairs.com/articles/georgia/2016-04-12/let-georgia-join-nato.

“Library - GFSIS.” Accessed April 10, 2016. http://gfsis.org/index.php/resources/library/view/4722.

Livny, Eric, Mack Ott, and Karine Torosyan. “Impact of Russian Sanctions on the Georgian Economy.” *Georgia in Transition, L. King, and G. Khubua, Eds. Frankfurt Am Main: Peter Lang*, 2009. http://iset.ge/files/russian_embargo_pdf.pdf.

Malysheva, D. B. “Международные факторы российско-грузинских отношений,” 37–45, 2014. http://istina.msu.ru/publications/article/6511164/.

Manova, Kalina. “Credit Constraints, Heterogeneous Firms, and International Trade.” *The Review of Economic Studies* 80, no. 2 (April 1, 2013): 711.

Mastel, Greg. “China, Taiwan, and the World Trade Organization.” *The Washington Quarterly* 24, no. 3 (2001): 45–56.

Matsuyama, Kiminori. “Ricardian Trade Theory.” In *The New Palgrave Dictionary of Economics*, edited by Steven N. Durlauf and Lawrence E. Blume, 2nd ed., 183–

90. Basingstoke: Nature Publishing Group, 2008. http://www.dictionaryofeconomics.com/article?id=pde2008_R000276.

Matuslak, Marek. "Georgia- between a Dream and Reality. OSW Commentary No. 133, 15.04.2014." Policy Paper, April 2014. http://www.osw.waw.pl/en/publikacje/osw-commentary/2014-04-16/georgia-between-a-dream-and-reality.

Melitz, Marc J. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity." *Econometrica* 71, no. 6 (2003): 1695–1725.

"MFA of Russia | 07/10/2000 | Foreign Policy Concept Of The Russian Federation." Accessed March 23, 2016. http://archive.mid.ru//Bl.nsf/arh/1EC8DC0818030661432569 9C003B5FF0?OpenDocument.

Milner, Helen V. "International Political Economy: Beyond Hegemonic Stability." *Foreign Policy*, no. 110 (1998): 112–23. doi:10.2307/1149280.

Mitchell, Wesley C. "The Rationality of Economic Activity." *Journal of Political Economy* 18, no. 3 (March 1, 1910): 197–216.

Mueller, Paul D. "Adam Smith, Politics, and Natural Liberty." *Journal of Private Enterprise* 29, no. 3 (Fall 2014): 119–34.

Narmania, Davit. "Economic Policy in Georgia: Liberalization, Economic Crisis and Changes." *Turkish Policy Quarterly* 8, no. 2 (2009). http://esiweb.org/pdf/esi_turkey_tpq_vol8_no2_DavitNarmania.pdf.

Nye, John Vincent. "Revisionist Tariff History and the Theory of Hegemonic Stability." *Politics & Society* 19, no. 2 (June 1, 1991): 209–32. doi:10.1177/003232929101900204.

Oliver, Christian. "Moldovan Winemakers Struggle as Russia Vies with EU for Influence." *Financial Times*, April 8, 2014. http://www.ft.com/intl/cms/s/0/53393338-bef0-11e3-8683-00144feabdc0.html#axzz3soJVwaYb.

Pahre, Robert. *Leading Questions : How Hegemony Affects the International Political Economy*. Ann Arbor, n.d.

Papava, Vladimer. "Russia's Economic Imperialism." *Project Syndicate*, January 17, 2006. http://www.project-syndicate.org/commentary/russia-s-economic-imperialism.

———. “Russia’s Illiberal ‘Liberal Empire.’” *Project Syndicate*, February 28, 2007. http://www.project-syndicate.org/commentary/russia-s-illiberal--liberal-empire.

———. “Экономическая Составляющая Российско-Грузинского Конфликта.” *Кавказ и глобализация* 6, no. 1 (2012). http://cyberleninka.ru/article/n/ekonomicheskaya-sostavlyayuschaya-rossiysko-gruzinskogo-konflikta.

“Paul Krugman, Nobel.” *Forbes*. Accessed December 2, 2015. http://www.forbes.com/2008/10/13/krugman-nobel-economics-oped-cx_ap_1013panagariya.html.

Perusset, Alain. “Can the South Caucasian States Succeed in Establishing Themselves as Independent Actors on the International Stage, rather than Objects of Other Countries’ Policies?,” n.d.

Petersen, Alexandros. *The 1992-93 Georgia-Abkhazia War: A Forgotten Conflict*, 2008.

“Politics and Trade: Evidence from the Age of Imperialism.” *VoxEU.org*. Accessed November 2, 2015. http://www.voxeu.org/article/politics-and-trade-evidence-age-imperialism.

Polyakov, Evgeny. *Changing Trade Patterns after Conflict Reslution in the South Caucasus*. World Bank Publications, 2001.

Pomery, John. Review of *Review of A Theory of International Trade under Uncertainty*, by Elhanan Helpman and Assaf Razin. *Journal of Political Economy* 88, no. 5 (1980): 1061–64.

“Power Elites in Georgia.” Accessed March 28, 2016. http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=106054.

Pressman, Steven. “Kahneman, Tversky, and Institutional Economics.” *Journal of Economic Issues* 40, no. 2 (June 2006): 501–6.

Redding, Stephen J. “Theories of Heterogeneous Firms and Trade.” *Annual Review of Economics* 3, no. 1 (2011): 77–105. doi:10.1146/annurev-economics-111809-125118.

“Relations of Russia and Georgia: Developments and Future Prospects.” Accessed March 23, 2016. http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?lang=en&id=31593.

"Revenge of the Optimum Currency Area." *Paul Krugman Blog*. Accessed December 2, 2015. http://krugman.blogs.nytimes.com/2012/06/24/revenge-of-the-optimum-currency-area/.

Ricardo, David. *The First Six Chapters of the Principles of Political Economy and Taxation of David Ricardo, 1817*. New York, n.d.

Rotaru, Vasile. "Russia's 'Contribution' to the Inception of the Eastern Partnership." *Studia Politica : Romanian Political Science Review* 14, no. 2 (2014): 221–41.

Ruffin, Roy J. "The Nature and Significance of Intra-Industry Trade." *Economic and Financial Policy Review*, no. Q IV (1999): 2–9.

"Russia Is Still Ukraine's Largest Trading Partner." *Forbes*. Accessed November 26, 2015. http://www.forbes.com/sites/markadomanis/2015/01/05/russia-is-still-ukraines-largest-trading-partner/.

Salopek, Paul. "Vladimir Putin's Mysterious Moving Border." *Politico Magazine*. Accessed April 3, 2016. http://www.politico.com/magazine/story/2016/04/georgia-border-russia-vladimir-putin-213787.

Schropp, Simon Arnd Benedikt. *Trade Policy Flexibility and Enforcement in the WTO: A Law and Economics Analysis*. Cambridge University Press, 2009.

Schuman, Michael. "China and Japan May Not Like Each Other, but They Need Each Other." *Time*. Accessed December 9, 2015. http://world.time.com/2013/12/01/china-and-japan-may-not-like-each-other-but-they-need-each-other/.

"Silk Road Papers." Accessed March 23, 2016. http://www.isdp.eu/publications/silk-road-papers.html?task=showbib&id=5679&return=.

Smith, Adam. *The Wealth of Nations*. New York, n.d.

Stiles, Kendall W. "The Ambivalent Hegemon: Explaining the 'Lost Decade' in Multilateral Trade Talks, 1948-1958." *Review of International Political Economy* 2, no. 1 (January 1, 1995): 1–26.

"Strengthening Competitiveness Can Boost Exports and Help Transform Ethiopia's Economy." Text/HTML. *World Bank*. Accessed December 9, 2015. http://www.worldbank.org/en/news/press-release/2014/07/22/strengthening-competitiveness-can-boost-exports-and-help-transform-ethiopia-economy.

Summary, Rebecca M. “A Political-Economic Model of U.S. Bilateral Trade.” *The Review of Economics and Statistics* 71, no. 1 (February 1, 1989): 179–82. doi:10.2307/1928068.

Taralashvili, Tamar, and Jakub Kraciuk. “Foreign Trade of Georgian Agricultural Products and Existing Potential of Export to the European Union Market.” *Acta Scientiarum Polonorum. Oeconomia*, no. 1 (2014): 123–34.

“Tbilisi’s Soft Power of Wine, Smiles and Tourism | Opinion.” *The Moscow Times*. Accessed March 13, 2016. http://www.themoscowtimes.com/opinion/article/tbilisis-soft-power-of-wine-smiles-and-tourism/469579.html.

The Caucasus: A Challenge for Europe. Silk Road Study Program, 2006.

“The Creeping Russian Border in Georgia - Al Jazeera English.” Accessed April 3, 2016. http://www.aljazeera.com/indepth/opinion/2015/07/creeping-russian-border-georgia-south-ossetia-abkhazia-150722111452829.html.

“The Impact of the Russia-Georgia War on the South Caucasus Transportation Corridor.” *The Jamestown Foundation*. Accessed January 6, 2016. http://www.jamestown.org/programs/recentreports/single/?tx_ttnews%5Btt_news%5D=34654&cHash=db033dd942.

“The Jobs Challenge in the South Caucasus – Georgia.” Text/HTML. *World Bank*. Accessed April 10, 2016. http://www.worldbank.org/en/news/feature/2015/01/12/the-jobs-challenge-in-the-south-caucasus---georgia.

“The Russia-Georgia War: Causes and Consequences - Centre for World Dialogue.” Accessed March 29, 2016. http://www.worlddialogue.org/content.php?id=439.

Thies, Cameron G. *Intra-Industry Trade : Cooperation and Conflict in the Global Political Economy*, n.d.

Tinbergen, Jan. “Shaping the World Economy; Suggestions for an International Economic Policy,” January 1, 1962. http://repub.eur.nl/pub/16826.

Tolley, George S., and John D. Wilman. “The Foreign Dependence Question.” *Journal of Political Economy* 85, no. 2 (April 1, 1977): 323–47.

Treisman, Daniel. *The Return : Russia’s Journey from Gorbachev to Medvedev*. New York, n.d.

Troianovski, Anton, and Laurence Norman. "Russian Premier Calls Entanglements a 'New Cold War.'" *Wall Street Journal*, February 14, 2016, sec. World. http://www.wsj.com/articles/russias-medvedev-says-world-is-fighting-a-new-cold-war-1455358705.

Tsereteli, Mamuka. "Banned in Russia: The Politics of Georgian Wine." *Central Asia-Caucasus Analyst* 19, no. 4 (2006). http://leader.viitorul.org/public/218/en/Banned%20in%20Russia%20-%20The%20politics%20of%20Georgian%20wine.doc.

Tversky, Amos, and Daniel Kahneman. "The Framing of Decisions and the Psychology of Choice." *Science* 211, no. 4481 (1981): 453–58.

"Two Years in Government: Georgian Dream's Performance Review." *Green Alternative*. Accessed April 11, 2016. http://greenalt.org/news/two-years-in-government-georgian-dreams-performance-review/.

"Ukraine's Economic Pressures." Accessed December 12, 2015. http://www.ecfr.eu/article/commentary_ukraines_economic_pressures3008.

"Updated Income Classifications | Data," July 3, 2014. http://data.worldbank.org/news/2015-country-classifications.

Verbeek, Marno. *A Guide to Modern Econometrics*. Southern Gate, Chichester, West Sussex, England Hoboken, NJ, n.d.

Waal, Thomas De. "A Broken Region: The Persistent Failure of Integration Projects in the South Caucasus." *Europe-Asia Studies* 64, no. 9 (November 1, 2012): 1709–23. doi:10.1080/09668136.2012.718416.

Wagner, Joachim. "Exports, Imports, and Productivity at the Firm Level. An International Perspective: Introduction by Guest Editors." *Review of World Economics / Weltwirtschaftliches Archiv* 144, no. 4 (2008): 591–95.

Warin, Thierry, Phanindra V. Wunnava, Optat Tengia, and Kirsten Wandschneider. "Southern African Economic Integration: Evidence from an Augmented Gravity Model." IZA Discussion Paper. Institute for the Study of Labor (IZA), 2009. https://ideas.repec.org/p/iza/izadps/dp4316.html.

Wellisz, Stanislaw. "Georgia: A Brief Survey of Macroeconomic Problems and Policies." *Russian & East European Finance and Trade* 35, no. 1 (February 1999): 6–31.

"What Is Freight Forwarder? Definition and Meaning." *BusinessDictionary.com*. Accessed February 28, 2016. http://www.businessdictionary.com/definition/freight-forwarder.html.

"Why Has Russia Banned Moldovan Wine?" *The Economist*, November 25, 2013. http://www.economist.com/blogs/economist-explains/2013/11/economist-explains-18.

"With a Little Help from My Bank: Japanese SMEs' Export Decision." *VoxEU.org*. Accessed December 9, 2015. http://www.voxeu.org/article/little-help-my-bank-japanese-smes-export-decision.

"World Bank Keeps Forecast for Ukraine's GDP Growth in 2016 at 1%." *Interfax-Ukraine*. Accessed April 3, 2016. http://en.interfax.com.ua/news/economic/334916.html.

Yalcin, Kadir Can. "Market Rationality: Efficient Market Hypothesis versus Market Anomalies." *European Journal of Economic and Political Studies* 3, no. 2 (October 1, 2010): 23.

Yarbrough, Beth V. *Cooperation and Governance in International Trade : The Strategic Organizational Approach*. Princeton, N.J., n.d.

Yin, Robert K. *Case Study Research : Design and Methods*. Beverly Hills, Calif, n.d.

"Российско-грузинские отношения: в поисках новых путей развития." *Кавказский Узел*. Accessed January 6, 2016. http://www.kavkaz-uzel.ru/articles/240382/.

связи, "Грузинское вино и российское эмбарго." *Иносми.ру*. Accessed January 13, 2016. http://inosmi.ru/caucasus/20121013/200865119.html.

Ултанбаев, Рафаэль. "Россия И Страны Закавказья: Реальность И Стратегии Экономического Сотрудничества." *Центральная Азия и Кавказ*, no. 1 (37) (2005). http://cyberleninka.ru/article/n/rossiya-i-strany-zakavkazya-realnost-i-strategii-ekonomicheskogo-sotrudnichestva.