

The Hidden Cost of Trade Financing: How International Banking Regulations on Illicit Money are Disrupting International Trade

Julia C. Morse[‡]

This draft: 15 November 2017

Abstract

Since the 2008 global financial crisis, world trade has stagnated. Scholars have puzzled over this trend as neither domestic policy nor decreases in demand can fully account for the lack of growth. But while trade structures have remained relatively constant, the institutions that oversee global finance have changed significantly. This paper argues that shifts in financial regulation – and in particular, increased implementation of measures to prevent illicit financing – can partially explain the slowing of world trade. In response to the financial crisis, countries strengthened cooperation in this issue area through domestic regulation and enforcement, and an international “blacklist” of non-compliant states. Such policies raised the costs for banks of doing business with low-yield customers and high-risk countries. As a result, exporters in developing countries have increasingly had trouble financing trade. I test this argument through several quantitative analyses, showing that the non-complier list is associated with a 40.9 percent decrease in exports. I probe the causal mechanism for this relationship, finding evidence that listing has the strongest effect on countries with a high risk of expropriation or other contractual violations. These findings provide new evidence for a link between bank regulation, trade financing, and trade flows. They also suggest international efforts to combat illicit financing have generated unexpected consequences and potentially damaged growth in developing countries.

*Post-Doctoral Fellow, Christopher H. Browne Center for International Politics, University of Pennsylvania. Email: julia.morse@gmail.com.

[‡]Prepared for presentation at the International Political Economy Society Meeting, November 2017.

1 Introduction

Since the 2008 global financial crisis, international trade has slowed. Although G-20 leaders were successful in preventing a return to protectionist policies, real trade as a percent of gross domestic product (GDP) has essentially been flat since the crisis. This is in contrast to the previous fifteen years of nearly constant growth.¹ Scholars have puzzled over this trend { world leaders successfully avoided a rise of protectionism during the financial crisis, and decreases in demand can explain only some of the stagnation. But during this same period, the institutions that oversee global finance have changed significantly. This paper argues that shifts in financial regulation { and in particular, increased implementation of measures to prevent illicit financing { are partially responsible for the slowing of world trade. In response to the financial crisis, countries strengthened cooperation in this issue area through domestic regulation and enforcement, and an international "blacklist" of non-compliant states. Such policies raised the costs for banks of doing business with low-yield customers and high-risk countries. As a result, exporters in developing countries have increasingly had trouble financing trade. The financial consequences of this process are significant { a recent survey by the Asian Development Bank suggests the gap in the global trade financing is around 1.5 trillion US dollars annually (Di Caprio, Kim and Beck, 2017).

Although trade financing is a key facilitator of global trade, economists have only recently begun to theorize about this relationship. Standard trade models assume an exchange of goods that is impeded by trade barriers and geography, rather than financing. In reality, however, shipping goods between countries is risky and takes time. Trade partners must agree not only on the quantity and price of goods, but also on the timing of payments. Compared to domestic exchanges, international trade creates longer lags between production and payment { Amiti and Weinstein (2011) estimate a median delay of approximately two months.²

¹For more on trends in world trade and potential causes, see <https://www.federalreserve.gov/econresdata/notes/ifdp-notes/2016/causes-of-the-global-trade-slowdown-20161110.html>.

²See Hummel (2001) or Djankov, Freund and Pham (2010) for detailed analyses of time lags in interna-

These lengthy gaps in time can create financial difficulties for exporters, particularly smaller companies that may have the operating capital to wait months for payment.

To address such challenges, importers and exporters may rely on bank financing, which is often provided in the form of a letter of credit. Typically, the bank of the buyer (importer) issues this letter, stipulating a written commitment to pay the bank of the seller (exporter) under certain conditions. This system facilitates trade because it "substitutes the creditworthiness of a bank for the creditworthiness of the buyer" (WTO, 2016, 11). With a letter of credit, exporters are able to obtain working capital from a local bank to cover production costs, and to be paid upon receipt at a future time. When the goods are delivered, the importer either pays the issuing bank immediately or at an agreed upon maturity date in the future. Although letters of credit are used across all countries and types of firms, they are particularly important for facilitating trade in times of higher default risk and uncertainty (Niepmann and Schmidt-Eisenlohr, 2017*a*). Letters of credit are also essential for firms doing business with firms in countries with poor contract enforcement (Caballero, Candelaria and Hale, 2016) { by issuing a letter of credit, banks assume the financial risk of lack of payment or failure to deliver goods.

A bank's ability and willingness to engage in global transactions like trade financing depends on financial regulation. In the aftermath of the 2008 global financial crisis, governments imposed a wide array of new rules on the international banking sector. Perhaps the most well-known is the Basel III accords, which require large banks to hold minimum amounts of high-quality, liquid assets at all times. Such measures may have unintentionally contributed to the tightening of trade financing { as banks reorganized their businesses to maintain appropriate levels of liquidity, they had less lending capital. At the same time, states also began to strengthen a second set of banking regulations designed to keep money launderers, tax evaders, and terrorists from accessing the financial system. As states around

tional trade.

the world adopted these rules, the costs of doing business overseas began to rise, leading banks to terminate many business relationships.

This paper focuses on this latter process. I highlight how international cooperation on combating illicit finance has raised the costs for banks of doing business with banks and clients in other countries, particularly developing and emerging markets. I argue that international banks have responded to these increased costs in two ways that have decreased access to trade financing: by rejecting higher risk, lower-yield customers, and by terminating correspondent banking relationships with higher risk countries.

I test this argument by analyzing how being labeled as a high-risk jurisdiction for illicit financing affects exports in the post-financial crisis era. My analysis focuses on the Financial Action Task Force (FATF), an international intergovernmental body that issues recommendations on combating money laundering and terrorist financing and monitors compliance with its recommendations. In the midst of the financial crisis, the G-20 called on the FATF to establish a new process to deal with countries that failed to cooperate on combating illicit financing. Since 2010, the FATF has issued a list of non-compliant countries. I show that being listed by the FATF is associated with a significant decrease in exports. Listed countries experience a 53 percent decline in exports a year after listing. I provide evidence that the causal mechanism for this decline is trade financing. Specifically, only listed countries where contract risk is high { i.e. those countries where banks are most likely to close correspondent banking accounts } experience a decline in exports.

This finding has important implications for understanding trade and development worldwide. From a theoretical perspective, it suggests common approaches to analyzing trade flows between countries may be missing a key variable. Bank-to-bank trade financing underpins much of global trade { the Bank for International Settlements estimates that about one third of global trade is supported by some type of bank-intermediated trade finance product (Bank for International Settlements, 2014) } yet few theoretical or empirical models take into

consideration how access to such financing may affect global trade flows. Moreover, because banking regulations directly impact trade financing, the political dynamics that affect the formulation and implementation of such policies have implications not just for global finance, but for trade as well. Perhaps most significantly, the link between international cooperation on illicit financing and trade flows has severe implications for the long-term growth patterns of poor countries.

2 Trade Financing: A Hidden Constraint

Common explanations for trade between countries highlight a mix of economic and political factors. Standard trade models focus on relative differences in factor endowment, distance, and levels of economic development. Domestic factors such as regime type have been shown to affect trade between countries (Morrow, Siverson and Tabares, 1998; Mansfield, Milner and Rosendorff, 2000), as have international factors like membership in international organizations (Goldstein, Rivers and Tomz, 2007; Mansfield and Reinhardt, 2008) and interstate war.³ Although trade financing is a well-known facilitator of trade, few trade models explicitly account for this variable or theorize about how it might impact trade flows.

Trade financing is often called the "lifeline" of international trade.⁴ Because trade is inherently risky and involves long delays between shipment and payment, about 90 percent of international trade transactions rely on some type of intermediate financing or credit (International Trade Centre, 2009). Typically, trade financing is either provided by banks, which issue credits or short-term loans, or by firms themselves through some type of contractual arrangement (Auboin and Meier-Ewert, 2003). In the former case, banks facilitate trade in

³See, for example, Long (2008), Simmons (2005), or Glick and Taylor (2010).

⁴The policy community has viewed trade financing in this way since at least the early 2000s. A 2003 publication by the WTO, for example, writes "The expansion of trade depends on reliable, adequate, and cost-effective sources of financing, both long term...and short term, in particular trade finance. The latter is the basis on which the large majority of world trade operates..." (WTO 2003)

two ways { by providing access to capital for companies to expand business relationships and by helping mitigate the risk of nonpayment. In the latter case, firms often draw on long-established business relationships to create predictable production and payment schedules.

Because trade finance is often facilitated by banks, international and domestic banking regulations can have indirect effects on international trade. The 2008 financial crisis led to severe trade financing shortages as crises spread across banks (WTO, 2016). A March 2009 survey of major banks by the International Monetary Fund (IMF) and the Bankers' Association for Finance and Trade - International Financial Services Association found that 70 percent of banks reported that the price of letters of credit had risen in the past year. Banks in both advanced economies and emerging markets also began to tighten their lending guidelines with respect to counter-party banks (Dorsey, 2009). Although such disruptions to trade finance were widespread, they largely affected firms in developing economies { a trend that has continued to 2017.⁵ Within countries, small and medium-size enterprises (SMEs) have been disproportionately hurt by the contraction of trade financing, with 58 percent of SMEs reporting that their trade finance requests were rejected (WTO Working Group on Trade, Debt and Finance, 2017).

The continuation of trade financing problems in the years since the financial crisis can be linked to changes in bank regulation. Following the financial crisis, the Basel Committee on Banking Supervision agreed to a set of reforms designed to improve the banking sector's ability to absorb future financial crises and to improve risk management practices.⁶ Key among Basel III reforms were changes in liquidity requirements, which ultimately meant that banks had less capital to lend out to clients. But the constriction of trade finance is not just the result of less lending. Around this same period, governments began to mandate

⁵There are also differences in trade financing gaps across regions, where the Asia/Pacific region is the larger source of requests for trade financing and rejections by banks (Di Caprio, Kim and Beck, 2017).

⁶For more on this framework, see <https://www.bis.org/bcbs/base13.htm>. Wilf (2016) provides evidence that Basel III was viewed as a credible and significant regulatory agreement by firms, even prior to domestic implementation.

and enforce stronger know-your-customer requirements for banks, raising the cost of overseas transactions.

The remainder of this section expands upon the relationship between banking regulation, trade finance, and trade flows. It begins by describing exactly how trade finance facilitates trade, with particular attention to exports. Exporters are sensitive to financial shocks due both to the relatively higher working capital requirements associated with international trade and the risk of default (Amiti and Weinstein, 2011). After describing how banks facilitate trading relationships, I then discuss how banking relationships themselves facilitate access to capital.

2.1 How Trade Financing Facilitates Exports

Transporting goods across borders requires time and money, and is inherently risky. Trading partners must agree not just on the quantity and price of a good, but also on a payment schedule. Exporters must find the capital to produce the goods in advance of shipment, and face the risk that an importing company will delay payment or fail to pay entirely. Importers run the risk that goods will fail to arrive on schedule or at all. Although all domestic and international transactions are subject to similar contractual problems regarding payment, financing is a particular problem for companies engaged in international trade. Regulatory and border procedures often create delays in transport (Djankov, Freund and Pham, 2010); indeed, Amiti and Weinstein (2011) estimate such procedures result in a median delay of about two months. As a result, firms that engage in international trade are likely to have higher working capital requirements than domestic firms.

To finance the time gap between production and payment, and to counterbalance such risks, companies use a range of different forms of trade financing. If the transaction takes place solely between the importer and the exporter, there are two general types of trade financing: exporter finance (open account) and importer finance (cash in advance). In an

open account arrangement, an exporter produces the goods in advance of payment and an importer pays after receiving the goods. The exporter is thus responsible for pre-financing production (either through a bank loan or through cash on hand). Alternatively, firms may agree on a cash-in-advance arrangement, where the importer pays the exporter in advance of production. Both exporter and importer finance create obvious commitment problems. For an open account arrangement, if the importer fails to pay the agreed price for the goods after receiving and selling them, the exporter will suffer a significant loss (Schmidt-Eisenlohr, 2013). For cash-in-advance, the importer is absorbing the risk that the exporter will receive payment but fail to deliver the goods.

Banks offer a variety of products to mitigate such risks. An exporter may purchase export credit insurance to protect against the risk of non-payment by a third party, or may request trade lending (also known as export working capital lending) to cover the cost of producing the goods. An exporter may use a bank product called "documentary collection" to instruct the bank to speed up the collection process of securing payment from the importer (Dorsey, 2009). Finally, the importer may request its bank issue a letter of credit { a contractual guarantee that the issuing bank will pay the contract value to the exporter if certain conditions are fulfilled. The letter of credit will be sent to the exporting company, and in most cases, to a local bank (in the exporting country), which will confirm the obligation. The local bank acts as a second-line risk mitigator { if the importing country's bank defaults, the exporter's bank agrees to still pay the exporter.⁷

Bank-intermediated trade finance (henceforth referred to as simply "trade finance") supports about one-third of global trade (Bank for International Settlements, 2014). Although firms in many countries rely on trade finance to varying degrees, firms in emerging market economies are particularly dependent on bank financing to support trade (Bank for Inter-

⁷For a more detailed discussion of trade financing and letters of credit, see Niepmann and Schmidt-Eisenlohr (2017b).

national Settlements, 2014). While most high-income countries have government-run or associated export-credit agencies to facilitate export financing and help companies manage risk, such institutions are rare among developing economies.⁸ Moreover, trade partners tend to view contractual relationships with firms in developing countries as riskier than with firms in wealthier countries, and are often only willing to engage in such transactions with some kind of bank guarantee of payment. The willingness of global banks to do business with banks in low-income countries thus becomes a key determinant of export-led growth.

2.2 The Determinants of Bank-to-Bank Relationships

Banks facilitate trade finance transnationally through bank-to-bank relationships. In many cases, banks do not have branches or subsidiaries with a physical presence in the exporting country. Instead, banks rely on *correspondent banking relationships*, whereby a bank in one country will open an account with another bank located in a different country. The system of correspondent banking is "as old as international finance itself, dating back to the earliest promissory notes and letters of credit written by banks in classical times" (*Poor correspondents*, 2014, 65).

Historically, banks have maintained broad networks of correspondent banking relationships, but this tendency has changed in recent years. In a 2015 World Bank survey, 75 percent of large global banks reported that they had withdrawn from correspondent banking relationships, and 60 percent of local banks reported such a decline (Erbenova et al., 2016). Account closures have particularly affected smaller jurisdictions in regions like Africa, the Caribbean, and Asia-Pacific. In a small country, account closures can be particularly serious because often only a small number of banks operate within the country, and therefore the termination of correspondent banking relationships is likely to raise the already-high cost of

⁸For a helpful discussion of the role that export-credit agencies play in facilitating international trade, see Blackmon (2017).

financial services, including remittances (Alwazir et al., 2017).

Why have banks suddenly begun to withdraw from these relationships? As governments have adopted new regulations that require banks to verify the identities of their customers (and increasingly their customers' customers), the costs of doing business overseas have increased. Government regulators in a number of countries have also begun to levy large fines against banks that fail to comply with such policies.⁹ To avoid such penalties and the possibility of reputational damage, banks have increasingly cut back on correspondent banking services. A recent report by the Bank for International Settlements found that banks sever ties in part because countries are perceived as too risky or because foreign banks have products or customers that are viewed as posing a higher risk of money laundering or terrorist financing (Bank for International Settlements, 2016, 1). Bank relationships that facilitate trade financing are thus tied to an entirely separate cooperation problem: combating illicit financing.

3 International Efforts to Combat Illicit Financing

While criminals have used the financial system to store and transfer money for hundreds of years, the international effort to keep illicit money out of the financial system is relatively new. In the late 1980s, as part of its larger "war on drugs," the United States became the first country to criminalize money laundering. A few years later, the US government internationalized its approach through the formation of the FATF. Created by the G-7 countries,¹⁰ the European Commission, and eight other states¹¹ in 1989, the FATF is an international standard setter and compliance monitor that works to combat money laundering and terrorist financing.¹²

⁹In 2012, for example, the US government fined HSBC 1.9 billion US dollars. Other countries that have levied large fines against banks include the UK, Australia, Singapore, Ireland, and Panama.

¹⁰Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

¹¹Australia, Austria, Belgium, Italy, Luxembourg, Netherlands, Spain, and Switzerland.

¹²The FATF expanded its mandate to include combating terrorist financing in 2001, following the 9/11 attacks. It subsequently expanded its mandate once more in 2012 to include combating the financial of

Although its initial membership was small, the FATF began to expand its membership almost immediately. Today, the FATF includes 35 member states (see Table A1 in Appendix A) and two international organizations, the European Commission and the Gulf Cooperation Council. The FATF has also expanded its influence through a network of regional affiliate bodies. As of 2017, more than 190 countries worldwide had committed to implementing the FATF recommendations.¹³

The FATF recommendations set out a comprehensive center of measures that countries should adopt in order to combat money laundering and terrorist financing. The recommendations are designed to help countries identify illicit financing risks, develop appropriate domestic policies, apply preventive measures for the financial sector, empower appropriate domestic authorities, and facilitate international cooperation.¹⁴ While many FATF recommendations directly or indirectly affect financial institutions, none has had as profound an impact on banks as the requirement to verify customer identities. Over the last decade, countries have increasingly enforced bank compliance with this recommendation. As a result, banks have undertaken costly efforts to identify customers and assess the risk they pose of money laundering or terrorist financing. Banks assess customer risk in part by considering geography, and in particular, whether they come from countries that have been included on the FATF's list of non-compliant states. The end result of these two processes is that banks have begun to terminate business relationships with banks in high-risk countries, leading to disruptions in trade finance.

nuclear proliferation. See Nance and Cottrell (2014) for a discussion of this latter mandate expansion.

¹³See <http://www.fatf-gafi.org/countries/> for a complete list of countries.

¹⁴This description is based on the lengthier set of goals set out in FATF-GAFI (2012, 7).

3.1 Know-Your-Customer Requirements

One of the FATF's core recommendations requires financial institutions to take measures to identify its customers.¹⁵ Under this recommendation, often referred to as "know-your-customer" requirements or "customer due diligence," financial institutions should take steps to identify customers and verify their identities, and understand and obtain information about the intended purpose of business.¹⁶ Financial institutions are also expected to monitor the business relationship and scrutinize transactions over time, giving additional scrutiny to customers who pose a higher risk of money laundering or terrorist financing.¹⁷

Widespread implementation of know-your-customer requirements is a fairly recent development. Although the FATF has required states to adopt laws on customer identification since the early 1990s, early implementation was haphazard. In 1999, the Basel Committee conducted an internal survey of cross-border banking and found that a large number of countries had insufficient or non-existent know-your-customer requirements (Bank for International Settlements, 2001). This trend began to shift in 2001, when the FATF added combating terrorist financing to its mandate. As a result of this expansion, many countries began to engage more seriously with efforts to protect the integrity of the financial system since such policies were now linked with counter-terrorism efforts. In the United States, for example, government regulators had discussed adopting stricter know-your-customer requirements for years prior to 9/11, but the attacks provided the political momentum to push new measures through Congress (Wojciechowska, 2017). With the passage of the Patriot Act, the US government required banks to request identifying information, including official documentation for each customer and account. More significantly, the Patriot Act also required banks to develop standardized procedures for assessing customer risk and monitoring

¹⁵FATF Recommendation 10: Customer Due Diligence and Record-Keeping (Published 2012, Updated October 2016)

¹⁶Financial institutions are also required to take steps to identify the beneficial owner of accounts where the legal title belongs to one person while property rights belong to someone different.

¹⁷For more on this recommendation and its specific requirements, see FATF (2016).

riskier customers more closely.¹⁸

9/11 spurred many states to adopt know-your-customer requirements; however, minimal compliance remained relatively common until the financial crisis.¹⁹ G-20 leaders, prompted by concern about financial contagion and a potential global recession, met in Toronto in November 2008 and committed to protecting "the integrity of the world's financial markets by...protecting against illicit finance risks arising from noncooperative jurisdictions" (G-20, 2008, 3). Shortly thereafter, the FATF established procedures for a new "blacklisting" process whereby it would publicly identify countries that failed to implement the FATF recommendations. The FATF included failure to adopt know-your-customer requirements among its core criteria for inclusion on the non-complier list, creating new incentives for states to implement the FATF's recommendation.

3.2 The FATF Non-Complier List and Country Risk

The FATF identifies countries that are eligible for inclusion on the non-complier list based on the results of their mutual evaluation reports. These 200-page reports are the result of year-long country reviews wherein a team of FATF evaluators assesses each country's compliance with the FATF's 40 recommendations. Because of the time-intensive nature of this process, each country is evaluated about once per decade. Countries that receive failing scores on at least 10 of the FATF's 16 most important recommendations are eligible for inclusion on the non-complier list.²⁰ The FATF reportedly settled on 10 as the threshold for eligibility because it represented a "preponderance of recommendations" (Author interview, 30 June 2016). Former FATF President Rodrigues, who presided over the creation of the new

¹⁸The Patriot Act codified these requirements as amendments to the Bank Secrecy Act. For more on US regulatory requirements, see https://www.ffiec.gov/bsa_aml_infobase/pages_manual/olm_005.htm.

¹⁹For example, although the FATF recommendation requires states to record large transactions, 67 countries had no laws on this subject as of 2008 (US Department of State, 2008).

²⁰This description of the FATF non-complier list procedures is based on the FATF's written procedures for its third round of evaluations. For the fourth round of evaluations, which began in 2015, the FATF modified its procedures to correspond with the updated FATF recommendations and compliance methodology.

listing process, echoed this sentiment, suggesting that FATF members \started discussing the substance and ended with ten" (Author interview, 29 March 2017). Table B in the Appendix contains a list of the FATF's 16 most important recommendations.

Based on the pool of eligible countries, the FATF then evaluates each country more closely. Countries are given up to a year to change their policies and demonstrate significant improvements { a timeline that, in practice, is difficult for most governments to achieve (Author interview with FSRB Executive Director, 30 June 2016). The FATF makes final listing determinations based on a number of different factors, including the size and integration of the country's financial sector,²¹ the risk of money laundering and terrorist financing, and failure to take substantial actions to criminalize money laundering or terrorist financing (FATF-GAFI, 2009, 11).²²

Since February 2010, the FATF has listed 61 countries under the non-complier list process. Table C in the Appendix shows all listed countries, along with the date of listing and the date of graduation from listing (where relevant). To be removed from the list, countries must address all identified deficiencies and the FATF must conduct an on-site visit to verify policy changes have taken place. To-date, the FATF has removed 47 countries from the list following significant policy change,²³ which suggests the list has been an effective tool at driving legislative action. Removal from the list, however, does not preclude the possibility of re-listing.²⁴

²¹Relative to both its region and to the world

²²Other factors include not responding to requests for international assistance, the extent to which a government has sought and implemented technical assistance, and the degree to which a government has demonstrated a willingness to address its deficiencies.

²³The FATF removed Sao Tome and Principe after deciding it was a low threat and no longer needed monitoring.

²⁴For example, Ethiopia was listed from 2010 to 2014 based on the results of its third round mutual evaluation report. In 2017, the FATF re-listed Ethiopia based on the results of its *fourth* round mutual evaluation report (FATF-GAFI, 2017).

3.3 Banks, De-Risking, and Trade Flows

Banks have reported repeatedly that the high costs of implementing know-your-customer rules have led them to close correspondent accounts in other countries or to charge higher rates to certain types of customers. Numerous studies have documented the former of these processes. A 2014 British Banking Association survey of 11 international banks found that since 2011, these banks had closed thousands of correspondent relationships (International Financial Corporation, 2016). In 2016, the Committee on Payments and Market Infrastructures published a quantitative analysis of data that tracks financial messages between banks.²⁵ Based on this data, the Committee reported that between 2011 and 2015, more than 100 countries experienced a decline in the number of active correspondent relationships (Committee on Payments and Market Infrastructures, 2016).

At the extreme, banks have engaged in "de-risking" practices, whereby they cease engaging in entire categories of higher risk activities, rather than judging the risks of clients on a case-by-case basis. In such cases, banks have decided that the cost of conducting customer due diligence on high-risk individuals or with firms in high-risk countries is simply not worth the profit, particularly if the relationships are relatively low yield. For example, a recent report from the WTO Working Group on Trade, Debt, and Finance, indicates that the implementation of know-your-customer requirements "had forced out small African banks, despite their impeccable due diligence records" and had made parts of Eastern Europe "virtually 'un-bankable'" (WTO Working Group on Trade, Debt and Finance, 2017, 2).

The end result of such practices is that firms in many developing and emerging economies have found it increasingly difficult to access the international financial system. As banks close correspondent accounts, the costs of doing business abroad rise concomitantly. Not surprisingly, the contraction of finance is likely to affect trade. While large companies may

²⁵This data was made exclusively available to the Committee by the Society for Worldwide Interbank Finance Telecommunications (SWIFT), which is a cooperative organization that manages payment messages between global banks.

be able to find alternative sources of financing, SMEs usually rely on bank financing to build export relationships. Yet for banks, the relative cost of conducting due diligence on such firms in developing countries { and the possibility of exposing themselves to regulatory risk { is high compared to the small expected financial gains. As a result, banks may close correspondent accounts or refuse financing requests from such companies. Indeed, nearly 60 percent of SMEs firms surveyed by the Asian Development Bank reported being rejected by banks when requesting trade finance (Auboin and DiCaprio, 2017, 11). The most common reason that banks reject requests for trade financing is know-your-customer obligations (Di Caprio, Kim and Beck, 2017).

3.4 Hypotheses

Banks have closed correspondent accounts and denied requests for trade financing in large part due to the cost of implementing know-your-customer obligations. Banks maintain complex risk management systems to assess the risk profile of customers, spending billions of dollars each year on such measures.²⁶ While each bank makes its own decisions about which countries and customers constitute "high risk" relationships, banks should be more likely to view countries that are on the non-complier list as higher risk, compared to non-listed countries. Banking officials find the FATF list useful for managing country risk "because it's a quantitative measure that you can put in a risk model" (Author interview with Citibank Compliance Executive, 28 August 2015). For US-based banks, the list may also be valuable because of how it is perceived by the United States and its regulators (Author interview with MSCI official, 25 September 2015). Because of the FATF's authority and credibility in this issue area, US regulators expect that banks will adjust their risk models to account for the FATF non-complier list.

²⁶In 2017, banks and other financial actors are expected to spend more than 8 billion US dollars on anti-money laundering and combating terrorist financing compliance software and programs (Pelaez, 2016).

If banks close correspondent accounts with banks in listed countries, or charge higher premiums for capital, this process is likely to reduce access to trade financing and in the long-term, to reduce exports.

- *Hypothesis 1: Countries that are listed by the FATF will be more likely to experience a decline in exports.*

Banks are likely to view some listed countries as higher risk than others, depending on the level of political institutions within each country. Banks are especially likely to "de-risk" from countries with poor regulatory implementation and enforcement, because correspondent banks in such countries cannot be counted on to fulfill their know-your-customer obligations. A lack of correspondent bank compliance raises compliance challenges for the initiating bank, because the initiating bank is expected to know its correspondent bank customer's customers (Lowery and Ramachandran, 2015). Countries that fail to implement or enforce such obligations are likely to be countries with relatively weak political institutions, particularly with respect to business. More specifically, countries with poor levels of contract enforcement should be less likely to comply with FATF standards, and thus more vulnerable to de-risking by banks.²⁷

- *Hypothesis 2: The FATF list will have the strongest impact on exports in countries with poor contract enforcement.*

4 Empirical Analysis

This paper examines the relationship between banks, trade finance, and trade flows by probing how the FATF non-complier list has affected dyad-level exports from listed countries.

²⁷Economic literature on trade finance also suggests that the effect of bank linkages on exports is likely to depend on a country's level of contract enforcement (Caballero, Candelaria and Hale, 2016).

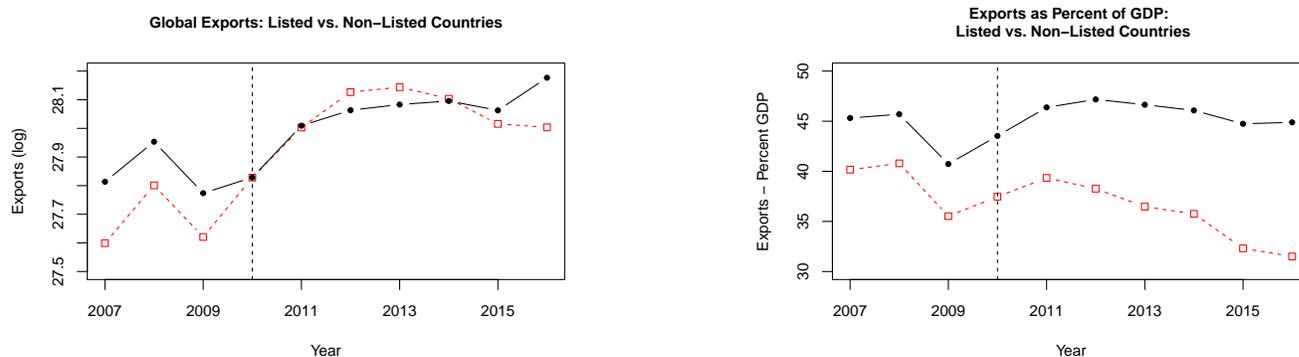


Figure 1: *Exports and Export-to-GDP in Listed v. Non-Listed Countries (2007 - 2016)* - The red, dashed lines show the average export levels of countries that were, post-2009, listed by the FATF, while the solid black lines show the average export level across all countries that have never been listed. The vertical, dashed line indicates the start of the FATF non-complier list.

I begin the analysis in 2010 because that is the start of the current non-complier list, and my data goes through 2016. Data on country listing status is collected from FATF non-complier list announcements, which are published online in February, June, and October every year. I test my hypotheses using an ordinary least squares model with standard errors clustered at the exporting country level and regional fixed effects.

Descriptive evidence is mixed as to whether listing has affected exports. Looking at the period of 2007 to 2016, I compare export levels in dyads where the exporting country was listed at some point by the FATF to export levels in dyads where the exporting country was never listed. Figure 1 shows the average export level in each group over time, where black solid lines represent dyads where exporters were never listed and red, dashed lines represent dyads where exporters were listed. The data on global exports in listed vs. non-listed countries shows no clear trend; however, the plot of exports as a percent of GDP suggests that listed countries have experienced significant declines in exports as a percent of GDP since the start of the non-complier list.

4.1 Data and Measurement

My data focuses on bilateral export flows during the period of 2010 to 2016. The full sample has 122,837 observations, of which 17 percent of dyads contain an exporter that is listed by the FATF in a given year. The sample shrinks significantly with the inclusion of additional variables and data on contract enforcement.²⁸ The smallest sample has 81,042 observations, where 16 percent of dyads contain an exporter that is listed by the FATF in a given year. The unit of observation is the directed-dyad year in order to capture how listing affects bilateral exports out of the listed country.

The dependent variable, *Exports* captures the bilateral exports to a partner country in a given year. This variable is drawn from the IMF Direction of Trade Statistics, and reflects the value of exported goods, as reported by the exporting country. I standardize values across years by dividing all values by a GDP deflator. Because the variable is highly skewed, I transform it using a log and use the logged form as the dependent variable in the analysis.

There are two main explanatory variables of interest. To test hypothesis 1, I include the variable *FATF High Risk Designation*, which indicates whether the exporting country is listed by the FATF in a given year. Data on the FATF list is collected from announcements from the FATF's International Cooperation Review Group.²⁹ Because the FATF list is updated three times a year but my data is annual, I code a country as listed if it appears on the FATF list at any time in a given year.

Hypothesis 2 suggests that countries with poor contract enforcement should be more likely to suffer declines in exports as a result of the FATF list. To test this hypothesis, I include the variable *Contract Risk*, which is drawn from the International Country Risk Guide. Contract risk reflects the risk of unilateral contract modification or cancellation

²⁸This variable is only available for a subset of 123 countries.

²⁹The FATF actually issues two sets of lists: "Improving Global AML/CFT Compliance: On-going Process" and the "FATF Public Statement." For this project, I code a country as listed if it appears on any of the FATF lists in a given year.

and, at worst, outright expropriation of foreign owned assets" (The PRS Group, 2017). It ranges from 0 to 4, where 0 indicates very low risk and 4 indicates high risk.³⁰

I include a number of other variables that have been shown to affect trading relationships. The standard gravity model of trade assumes that economic size is a key determinant of trade flows (Tinbergen 1962). I include the variables *GDP per capita (Exporter)* and *GDP per capita (Importer)* to account for the level of economic development in both countries. I control for differences in market size by including *Population (Exporter)* and *Population (Importer)*. All four variables are drawn from the IMF Direction of Trade Statistics and are logged to account for the skewed distribution of the data.

Geography is a potential impediment to trade. Transporting goods over long distances raises the cost of trade. Countries that are centrally located with many neighbors should have an easier time shipping goods across borders than island nations that are surrounded by water. To account for these factors, I include the variables *Distance* and *Contiguity*, both drawn from the Correlates of War project. Distance is a continuous variable that measures the distance between the two countries' capital. Contiguity is a dichotomous variable that is coded 1 if the two countries share a border and 0 otherwise.

Political institutions in the exporting and importing countries may also impact the trading relationship. Mansfield, Milner and Rosendorff (2000) show that democratic dyads have more open trade relations than dyads composed of a democracy and an autocracy, while Mansfield, Milner and Rosendorff (2002) show that democracies are also more likely to form preferential trade agreements. Democratic institutions may increase trade because they reduce the ability of governments to use trade barriers for political purposes (Milner and Kubota, 2005). Within the global finance literature, scholars have also argued that investors are more favorably inclined toward democratic countries because such governments can more

³⁰The original data uses an inverse range, where 4 indicates a low risk of contract violation and 0 indicates a high risk. For ease of interpretability, I rescale this variable so that 4 indicates high risk and 0 indicates low risk.

credibly commit to repayment (North and Weingast, 1989; Beaulieu, Cox and Saiegh, 2012) { a pattern that is likely to hold for trade finance, where companies are also seeking reassurance about the fulfillment of contractual obligations. To account for these factors, I include *Democracy (Exporter)* and *Democracy (Importer)*, which are drawn from the Polity IV project. I also include the variable *Democratic Dyad*, which is a dichotomous variable coded 1 if both countries in a dyad are democracies in a given year.

I analyze the impact of the FATF non-complier list on exports by pooling observations and estimating an ordinary least squares (OLS) regression model with standard errors clustered at the exporting-country level and regional fixed effects. This allows me to examine how listing affects countries compared to their regional peers. Controlling for regional differences is important primarily because regions differ significantly in the degree to which they depend on trade financing. Regional fixed effect also control for differences in bank networks and in geography that might otherwise impact trade flows.

In all regressions, I include a time cubic polynomial to model time dependence, as recommended by Carter and Signorino (2010). I also lag all explanatory variables by one year to account for the possibility of simultaneity, which would make it difficult to observe the relationship between FATF listing and exports.

4.2 Results

The results provide strong support for both hypotheses. Table 1 shows the results of the analysis examining the direct effect of the FATF non-complier list on exports in a basic model and several fuller specifications that include more covariates. Across all specifications, the FATF non-complier list has a negative and statistically significant effect on exports. In model 3, the FATF non-complier list is associated with a 40.9 percent decrease in exports, compared to other countries in the region. In line with expectations, economic size, population, contiguity, and shared democracy all have strong positive and significant effects on

<i>Dependent variable: Exports (log)</i>			
	(1)	(2)	(3)
FATF High Risk Designation - Exporter	-0.293*	-0.347**	-0.409**
	(0.152)	(0.160)	(0.160)
GDP Per Capita - Exporter (Log)	1.296***	1.393***	1.389***
	(0.078)	(0.079)	(0.079)
GDP Per Capita - Importer (Log)	0.862***	0.888***	0.883***
	(0.036)	(0.027)	(0.027)
Population - Exporter (Log)	1.135***	1.128***	1.154***
	(0.038)	(0.040)	(0.047)
Population - Importer (Log)	0.824***	0.850***	0.955***
	(0.027)	(0.022)	(0.018)
Distance		-0.0002***	-0.0002***
		(0.00001)	(0.00001)
Contiguity		2.933***	2.899***
		(0.167)	(0.170)
Democracy - Exporter			0.011
			(0.017)
Democracy - Importer			0.002
			(0.008)
Democratic Dyad			0.355***
			(0.127)
Time	-0.060***	-0.058***	-0.064***
	(0.007)	(0.008)	(0.009)
Observations	122,837	121,936	108,355
Adjusted R-squared	0.3998	0.4754	0.4927

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 1: *The FATF Non-Complier List and Trade Flows* - All models show the results of an OLS regression with regional fixed effects and standard errors clustered at the exporter level.

exports, while distance has a negative and significant effect. The time trend variable suggests there has been a significant decline in exports over this period, as has been noted by many economists.

Table 2 shows the results of an analysis examining whether the FATF non-complier list's effect on exports is moderated by a country's level of contract enforcement. The results suggest that the FATF list impact on exports is centered on countries with poor contract enforcement. More specifically, listing has a negative and statistically significant effect only on those countries with some level of contract risk. As contract risk increases, listing is likely to lead to larger declines in exports. These results support the argument that the FATF non-complier list is affecting exports through trade finance. International banks are more likely to terminate relationships with banks in countries with poor contract enforcement, and firms

<i>Dependent variable: Exports (log)</i>			
	(1)	(2)	(3)
FATF High Risk Designation * Contract Risk	-0.580*** (0.223)	-0.619*** (0.228)	-0.597*** (0.231)
FATF High Risk Designation - Exporter	0.409 (0.379)	0.428 (0.386)	0.378 (0.391)
Contract Risk - Exporter	-0.027 (0.119)	-0.040 (0.118)	-0.031 (0.124)
GDP Per Capita - Exporter (Log)	1.164*** (0.105)	1.248*** (0.108)	1.265*** (0.107)
GDP Per Capita - Importer (Log)	0.913*** (0.038)	0.925*** (0.028)	0.904*** (0.028)
Population - Exporter (Log)	1.101*** (0.046)	1.087*** (0.048)	1.110*** (0.049)
Population - Importer (Log)	0.882*** (0.024)	0.902*** (0.020)	0.968*** (0.019)
Distance		-0.0002*** (0.00001)	-0.0002*** (0.00001)
Contiguity		2.889*** (0.181)	2.818*** (0.182)
Democracy - Exporter			-0.010 (0.021)
Democracy - Importer			0.002 (0.008)
Democratic Dyad			0.392*** (0.131)
Time	-0.098*** (0.011)	-0.095*** (0.012)	-0.097*** (0.012)
Observations	89,625	89,246	81,996
Adjusted R-squared	0.5259	0.6109	0.6191

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 2: *The FATF Non-Complier List, Contract Risk, and Trade Flows* - All models show the results of an OLS regression with regional fixed effects and standard errors clustered at the exporter level.

in such countries will have difficulty gaining access to alternative, non-bank-intermediated forms of financing due to contract risk.

To put these numbers into context, consider a country like the Philippines, which was listed by the FATF from 2010 to 2013. The Philippines' contract risk rating during this period ranged from 1.0 in 2010 to 1.49 in 2012. Based the estimates in model 3, the FATF list would have resulted in a 22 percent decrease in exports in 2010, compared to a non-listed country with a similar level of contract risk. In 2012, however, the FATF list would have resulted in a 51 percent decrease in exports compared to a similar non-listed country, due to the increase in contract risk.

5 Conclusion

For fifteen years prior to the financial crisis, real trade grew on average twice as fast as real GDP (Freund, 2016). In recent years, however, trade has slowed to about the same pace as GDP. Economists have offered a variety of explanations for this trend, including decreases in demand, too much saving and too little investment, the shortening of supply chains, and (the focus of this paper) changes in the availability of trade financing. Trade financing is often referred to as the 'lifeline' of trade because it enables firms to take on the risk and time-delays of cross-border transactions. Recent scholarship hints at a link between banks, trade financing, and exports (Cetorelli and Goldberg, 2010; Amiti and Weinstein, 2011; Caballero, Candelaria and Hale, 2016), but these analyses fail to offer an underlying explanation for the decline of trade financing.

This paper aims to fill this gap by highlighting how international cooperation on combating illicit financing has affected trade flows. In addition to providing context for understanding the increased implementation of know-your-customer obligations worldwide, I provide evidence that when countries are included on the FATF non-complier list, they experience a 41 percent decline in exports. Although I am unable to test directly whether this decline is due to a drop in correspondent banking relationships, a second empirical analysis supports this mechanism by showing that listing has the strongest effect on exports in countries with poor contract enforcement { i.e. those countries where banks would be most likely to terminate correspondent relationships.

The relationship between international cooperation on illicit financing and trade flows has severe implications for the long-term growth of poor countries. When banks drop correspondent relationships or begin to charge higher premiums for capital, firms in such countries find it increasingly difficult to gain access to financing. The worldwide gap in trade financing is estimated to be about 1.5 trillion US dollars annually, with emerging economies facing

the biggest shortfalls. More troubling, banks report that 74 percent of rejections are toward micro, small, and medium-sized enterprises (Di Caprio, Kim and Beck, 2017). Given that such firms contribute 80 percent of total employment and almost 40 percent of total exports" (International Financial Corporation, 2016) in developing countries, the inability of such firms to access trade financing is likely to have long-term negative effects on economic growth in these countries.

Appendix A FATF Members and Associate Members

Members	Associate Members: FATF-Style Regional Bodies
Argentina	Asia/Pacific Group on Money Laundering (APG)
Australia	Caribbean Financial Action Task Force (CFATF)
Austria	MONEYVAL (Council of Europe)
Belgium	Eurasian Group (EAG)
Canada	Eastern and Southern Africa Anti-Money Laundering Group (ESAAMLG)
China	Financial Action Task Force of Latin America (GAFILAT)
Denmark	Inter Governmental Action Group against Money Laundering in West Africa (GIABA)
<i>European Commission</i>	Middle East and North Africa Financial Action Task Force (MENAFATF)
Finland	Task Force on Money Laundering in Central Africa (GABAC)
France	
Germany	
Greece	
<i>Gulf Cooperation Council</i>	
Hong Kong, China	
Iceland	
India	
Ireland	
Italy	
Japan	
Korea	
Luxembourg	
Malaysia	
Mexico	
Netherlands	
New Zealand	
Norway	
Portugal	
Russia	
Singapore	
South Africa	
Spain	
Sweden	
Switzerland	
Turkey	
United Kingdom	
United States	

Table A1: The table shows FATF members and associate members. Italicized members are regional organizations. Most member states belonging to FATF-style regional bodies are not FATF members.

Appendix B FATF 16 Key & Core Recommendations

The FATF has identified 16 of its "40+9" recommendations on combating money laundering and terrorist financing as being the highest priority recommendations for states. In an interview, a FATF regional body official described the core recommendations as the "building blocks of the AML/CFT regime, without which anything else would be pointless," while the key recommendations are "extremely important, but to a lesser extent" (Interview, 27 January 2015). The general topics covered by these 16 key and core recommendations are given below.

Core Recommendations

- Criminalization of money laundering and terrorist financing (Recommendation 1, Special Recommendation II)
- Customer identification/record-keeping requirements (Recommendations 5 and 10)
- Suspicious transaction reports reporting (Recommendation 13, Special Recommendation IV)

Key Recommendations

- International cooperation and mutual legal assistance (Recommendations 35, 36, 40, Special Recommendations I and V)
- Freezing and confiscation (Recommendation 3, Special Recommendation III)
- Financial secrecy (Recommendation 4)
- Adequate regulation and supervision (Recommendation 23)
- Functional financial intelligence unit (Recommendation 26)

Appendix C FATF Non-Complier List Countries

Country	Listed	Graduated
Afghanistan	2012	–
Albania	2012	2015
Algeria	2011	2016
Angola	2010	2016
Antigua and Barbuda	2010	2014
Argentina	2011	2014
Azerbaijan	2010	2010
Bangladesh	2010	2014
Bolivia	2010	2013
Bosnia-Herzegovina	2015	–
Brunei Darussalam	2011	2013
Cambodia	2011	2015
Cuba	2011	2014
DPRK	2007	–
Ecuador	2010	2015
Ethiopia	2010	2014
Ghana	2010	2013
Greece	2010	2011
Guyana	2014	–
Honduras	2010	2012
Indonesia	2010	2015
Iran	2007	–
Iraq	2013	–
Kenya	2010	2014
Kuwait	2012	2015
Kyrgyzstan	2011	2014
Lao PDR	2013	–
Mongolia	2011	2014
Morocco	2010	2013
Myanmar	2010	2016
Namibia	2011	2015
Nepal	2010	2014
Nicaragua	2011	2015
Nigeria	2010	2013
Pakistan	2010	2015
Panama	2014	2016
Papua New Guinea	2014	2016
Paraguay	2010	2012
Philippines	2010	2013
Qatar	2010	2010
Sao Tome and Principe	2010	2013
Sri Lanka	2010	2013
Sudan	2010	2015
Syria	2010	–
Tajikistan	2011	2014
Tanzania	2010	2014
Thailand	2010	2013
Trinidad and Tobago	2010	2012
Turkey	2010	2014
Turkmenistan	2010	2012
Uganda	2014	–
Ukraine	2010	2011
Vanuatu	2016	–
Venezuela	2010	2013
Vietnam	2010	2014
Yemen	2010	–
Zimbabwe	2011	2015
Total	57	46

Table C2: *Countries listed by the FATF (Feb 2010 - June 2016)* - Table shows the countries included on the non-complier list, the year of listing, and the year of graduation (where relevant). Countries that graduate are removed from FATF monitoring due to significant policy change (with the exception of Sao Tome and Principe, which the FATF decided was a low threat and no longer needed monitoring).

References

- Alwazir, Jihad, Fazurin Jamaludin, Dongyeol Lee, Niamh Sheridan and Patrizia Tumbarello. 2017. "Challenges in Correspondent Banking in the Small States of the Pacific." *IMF Working Paper* pp. 1{29.
- Amiti, Mary and David E Weinstein. 2011. "Exports and Financial Shocks." *The Quarterly Journal of Economics* 126(4):1841{1877.
- Auboin, Marc and Alisa DiCaprio. 2017. "Why do Trade Finance Gaps Persist: And Does it Matter for Trade and Development?" *WTO Working Paper* pp. 1{27.
- Auboin, Marc and Moritz Meier-Ewert. 2003. *Improving the Availability of Trade Finance during Financial Crises*. Geneva, Switzerland: WTO Publications.
- Bank for International Settlements. 2001. "Customer due diligence for banks." pp. 1{23.
- Bank for International Settlements. 2014. "Trade finance: developments and issues." *CGFS Papers* 50:1{67.
- Bank for International Settlements. 2016. Correspondent banking. Technical report.
- Beaulieu, Emily, Gary W Cox and Sebastian Saiegh. 2012. "Sovereign Debt and Regime Type: Reconsidering the Democratic Advantage." *International Organization* 66(04):709{738.
- Blackmon, Pamela. 2017. *The Political Economy of Trade Finance: Export Credit Agencies, the Paris Club, and the IMF*. New York, NY: Routledge.
- Caballero, Juan, Christopher Candelaria and Galina Hale. 2016. "Bank Linkages and International Trade." *Federal Reserve Bank of San Francisco Working Paper Series* pp. 1{41.
- Carter, David B and Curtis S Signorino. 2010. "Back to the Future: Modeling Time Dependence in Binary Data." *Political Analysis* 18(03):271{292.
- Cetorelli, Nicola and Linda S Goldberg. 2010. "Global Banks and International Shock Transmission: Evidence from the Crisis." *IMF Economic Review* 59(1):41{76.
- Committee on Payments and Market Infrastructures. 2016. *Correspondent banking*. Bank for International Settlements.
- Di Caprio, Alisa, Kijin Kim and Steven Beck. 2017. 2017 Trade Finance Gaps, Growth, and Jobs Survey. Technical report Asian Development Bank, Manila, Philippines Manila, Philippines: .
- Djankov, Simeon, Caroline Freund and Cong S Pham. 2010. "Trading on Time." *The Review of Economics and Statistics* 92(1):166{173.

- Dorsey, Thomas. 2009. "Trade Finance Stumbles." *Finance and Development* 46(1):18{19.
- Erbenova, Michaela, Yan Liu, Nadim Kryiakos-Saad, Alejandro Lopez-Mejia, Giancarlo Gasha, Emmanuel Mathias, Mohamed Norat, Francisca Fernando and Yasmin Almedia. 2016. The Withdrawal of Correspondent Banking Relationships: A Case for Policy Action. Technical Report SDN/16/06.
- FATF. 2016. *International Standards on Combating Money Laundering and the Financial of Terrorism & Proliferation*. Paris, France: FATF-OECD.
- FATF-GAFI. 2009. ICRG Co-Chairs' Report. Technical report.
- FATF-GAFI. 2012. International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation. Technical report.
- FATF-GAFI. 2017. "Improving Global AML/CFT Compliance: Ongoing Process - 24 February 2017."
- Freund, Caroline. 2016. "The Global Trade Slowdown and Secular Stagnation."
- G-20. 2008. Declaration of the Summit on Financial Markets and the World Economy. Technical report.
- Glick, Reuven and Alan M Taylor. 2010. "Collateral Damage: Trade Disruption and the Economic Impact of War." *The Review of Economics and Statistics* 92(1):102{127.
- Goldstein, Judith L, Douglas Rivers and Michael Tomz. 2007. "Institutions in International Relations: Understanding the Effects of the GATT and the WTO on World Trade." *International Organization* 61(01):37{67.
- International Financial Corporation. 2016. "De-Risking by Banks in Emerging Markets - Effects and Responses for Trade." *EMCompass* 24:1{6.
- International Trade Centre. 2009. *How to Access Trade Finance: A guide for exporting SMEs*. Geneva, Switzerland: ITC.
- Long, Andrew G. 2008. "Bilateral Trade in the Shadow of Armed Conflict." *International Studies Quarterly* 52(1):81{101.
- Lowery, Clay and Vijaya Ramachandran. 2015. "Unintended Consequences of Anti-Money Laundering Policies for Poor Countries." *CGD Working Group Report* pp. 1{100.
- Mansfield, Edward D and Eric Reinhardt. 2008. "International Institutions and the Volatility of International Trade." *International Organization* 62(04):621{46.
- Mansfield, Edward D, Helen V Milner and B Peter Rosendorfer. 2000. "Free to Trade: Democracies, Autocracies, and International Trade." *American Political Science Review* 94(2):305{321.

- Mans eld, Edward D, Helen V Milner and B Peter Rosendor . 2002. "Why Democracies Cooperate More: Electoral Control and International Trade Agreements." *International Organization* 56(3):477{513.
- Milner, Helen V and Keiko Kubota. 2005. "Why the Move to Free Trade? Democracy and Trade Policy in the Developing Countries." *International Organization* 59:107{143.
- Morrow, James D, Randolph M Siverson and Tressa E Tabares. 1998. "The Political Determinants of International Trade: The Major Powers, 1907-90." *American Political Science Review* 92(3):649{661.
- Nance, Mark T and M Patrick Cottrell. 2014. "A turn toward experimentalism? Rethinking security and governance in the twenty- rst century." *Review of International Studies* 40:277{301.
- Niepmann, Friederike and Tim Schmidt-Eisenlohr. 2017a. "International trade, risk and the role of banks." *Journal of International Economics* 107:111{126.
- Niepmann, Friederike and Tim Schmidt-Eisenlohr. 2017b. "No guarantees, no trade: How banks affect export patterns." *Journal of International Economics* 108(C):338{350.
- North, Douglass C and Barry R Weingast. 1989. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England." *The Journal of Economic History* 49(4):803{832.
- Pelaez, Christopher J. 2016. "AML Compliance Costs - How Much is Enough?".
URL: <https://www.globalradar.com/aml-compliance-costs-how-much-is-enough/>
- Poor correspondents. 2014. *The Economist* 411(8891):65.
- Schmidt-Eisenlohr, Tim. 2013. "Towards a Theory of Trade Finance." *Journal of International Economics* 91(1):96{112.
- Simmons, Beth A. 2005. "Rules over Real Estate: Trade, Territorial Conflict, and International Borders as Institution." *Journal of Conflict Resolution* 49(6).
- The PRS Group. 2017. "Guide to Data Variables."
- US Department of State. 2008. *International Narcotics Control Strategy Report: Volume II*. US Department of State.
- Wilf, Meredith. 2016. "Credibility and Distributional Effects of International Banking Regulations: Evidence from US Bank Stock Returns." *International Organization* 70(4):763{796.
- Wojciechowska, Iza. 2017. "What is KYC and why does it matter?".
URL: <https://n.plaid.com/articles/kyc-basics>

WTO. 2016. *Trade Finance and SMEs: Bridging the gaps in provision*. World Trade Organization Secretariat.

WTO Working Group on Trade, Debt and Finance. 2017. "Expert Group Meeting on Trade Finance - 29 March 2017." pp. 1{3.