Trade Financing: Challenges for Developing-country Exporters

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Payment methods (financing terms) in international trade

International trade is costly and risky. Shipping goods across borders takes longer than shipping domestically and thus requires more working capital. Shipping longer distances also increases the risk of damage, adding to insurance costs. In an international trade transaction the exporter faces the risk that the importer might default, and the importer faces the risk that the exporter might fail to meet the product quality specifications set out in the contract. Such risks and costs are further heightened in light of the fact that international trade involves partners located in different countries with different jurisdictions. This makes conflicts both harder and more costly to resolve.

The following examples illustrate the importance of default risk for international trade transactions.[2] An interesting anecdote involves an Istanbul-based producer of textiles, which exported knitted dresses to an importer located in Italy. The freight forwarder broke the rules of the contract and delivered the goods to the importer before the payment was made. Upon receiving the shipment the importer claimed that the goods were not in accordance with the descriptions and specifications in the order and thus refused to pay. The exporter filed a lawsuit against the freight forwarder in Turkey, and the latter against the importer in Italy. The Italian court decided that the importer should make the payment to the exporter. But the importer claimed it did not have the means to do so, as it was liquidating. The Turkish court, on the other hand, decided that the freight forwarder should make the payment to the exporter. The exporter received the payment, but five years after the date of the shipment. It is worth noting that the exporter had guarantee/insurance provided by the Turkish Exim bank. The Exim bank, however, refused to cover the exporter's losses because non-payment is a business dispute.

In another dispute, a Gaziantep-based producer exported yarn to a Greek importer. Before the full payment was settled the importer had sold the good to a retailer in Greece and received complaints about the quality of the yarn. The importer then requested the exporter to compensate for the loss incurred by the Greek retailer. The importer informed the exporter that if it did not compensate the retailer for the losses, it would file a lawsuit. Given the threat posed by the importer, the Turkish exporter decided to offer a discount on the outstanding balance.

In each transaction, trade partners have to decide who bears the risk. Financing/payment terms in international trade fall under three broad categories. Under open account (OA) terms, goods are shipped and delivered before a payment is made by the importer. Under cash-in-advance (CIA) terms, the payment is received before the ownership of the goods is transferred. If a transaction is on letter of credit (LC) terms, the importer's bank commits to make the payment to the exporter upon the verification of the fulfilment of the terms and conditions stated in the LC.[3] Each payment method places the financing burden on a different actor: the entire burden is on the exporter in a transaction on OA terms, and on the importer in a transaction on CIA terms. LC is the safest financing instrument for both trade partners: the exporter obtains a bank guarantee to secure payment, and the importer is protected against potential losses arising from exporter misbehaviour. Nevertheless, LC is a costly instrument as banks levy fees and charges for issuing LCs.

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[2] I would like to thank Hakan Guraksu, a specialist in international private law, for sharing these anecdotes.

[3] Another widely-used payment method in international trade is documentary collection. If a transaction takes place on documentary collection terms, the exporter's bank is authorised to collect the payment on behalf of the exporter. Since the bank acts only as an intermediary, without any obligation to make the payment in case of default, a documentary collection is very similar to OA terms.

There is a recent, but growing body of academic literature on the choice of financing terms in international trade. Papers in this literature such as Antràs and Foley (2013), Eck *et al.* (2012), Engemann *et al.* (2011), Schmidt-Eisenlohr (2013) show that institutional quality and financial sector efficiency are important factors in determining the choice of financing terms. In particular, a transaction is more likely to occur on CIA terms if the importer is located in a country with weak enforcement (low institutional quality) and/or with low financing costs (efficient financial sector), and on OA terms if the exporter is located in a country with weak enforcement and/or with low financing costs. If both trade partners are located in countries with weak enforcement, then the transaction is more likely to occur on LC terms. These theoretical predictions, which also receive empirical support (see, for example, Antràs and Foley 2013; Demir and Javorcik 2014), have important implications for developing countries. Given their relatively weak institutions, exporters located in such countries are likely to bear the financial burden associated with their international trade transactions. Therefore, access to cheap trade finance is particularly important for exporters located in developing countries.

The relative risk associated with each financing term is an important determinant of the choice of financing terms. One should expect trade partners to choose the financing term that minimises the default risk. Furthermore, the choice should minimise the potential losses that would result from a breach of the contract. In the two cases described at the beginning, a dispute arose from non-payment as the importer claimed that the goods shipped were not in accordance with the contract and/or the exporter had shaved the quality of the goods. Resolving such disputes takes time as verifying/refuting what is claimed is, at best, difficult. Another difficulty arises in identifying the law applicable in the event of a dispute. Such uncertainty adds to the risks associated with an international trade transaction. One way to deal with such uncertainty is to harmonise international sales law across countries. To achieve this goal, the Convention on International Sales of Goods was signed in Vienna in 1980. This treaty, also known as the Vienna Convention, came into force in 1988. As of 26 September 2013, 80 countries have ratified the Vienna Convention.[4] Its benefits can be expected to grow even further as more countries ratify the convention.

[4] http://www.cisg.law.pace.edu/cisg/countries/cntries.html.

The choice of financing terms in international trade also depends on the availability of working capital. Ideally, the party that can access financing more cheaply should finance the transaction. Trade partners may rely on their internally generated capital or seek external financing to finance their international trade transactions. Auboin (2009) estimates that 80–90 percent of global trade relies on some form of trade finance. Thus, the availability of trade finance becomes a vital determinant of international trade flows. The literature, for instance, identifies a shortage of trade finance as one of the drivers behind the Great Trade Collapse (e.g. Amiti and Weinstein 2011; Chor and Manova 2012; Felbermayr *et al.* 2012).

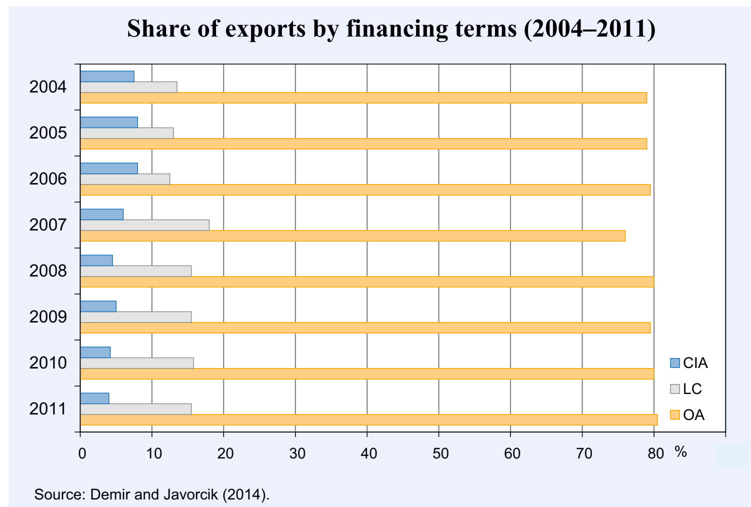
This note provides some stylised facts on the use of financing terms in international trade based on a recent study by Demir and Javorcik (2014). They use data on the universe of Turkish exports disaggregated by financing terms over the period 2004–2011. The patterns observed in the data may shed light on the factors determining the short-term financing needs of exporters and importers. Moreover, the focus on an emerging market may help design policies to effectively promote international trade in such countries.

Stylised facts on the use of financing terms

We know very little about the relative use of financing terms in international trade. In 2008/09, the International Monetary Fund (IMF) and the Bankers' Association for Finance and Trade, merged with the International Financial Services Association, (BAFT-IFSA) jointly conducted a series of surveys of commercial banks located in developed and developing countries on their perception of the use of bank-intermediation in international trade. The results of the surveys show that OA and LC terms each account for about 40 percent of international trade transactions, and the rest is accounted for by CIA terms (IMF 2011). Although the patterns presented by the IMF/BAFT-IFSA surveys are valuable, they are based only on the perception of commercial banks. In general, detailed data on the use of financing terms are not available, and the lack of data has limited our ability to understand and evaluate the importance of this issue for international trade.

Evidence based on actual trade flows, compared to our perception of banks/firms, is more informative to understand the use of financing terms in international

Figure 1



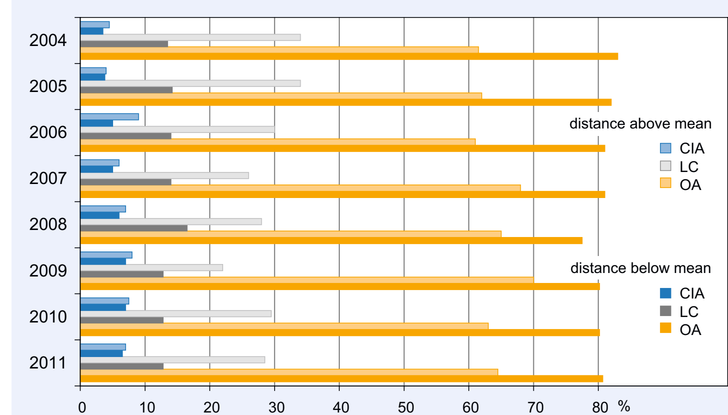
trade. For this purpose, information on the break-down of trade flows by financing terms is needed. Such detailed information, however, is seldom available to researchers. Antràs and Foley (2013) present some patterns of the use of financing terms for a single US-based exporter of frozen chicken products. In another study, Demir and Javorcik (2014) use a unique dataset that provides a break-down of the universe of Turkish manufacturing exports across financing terms during the period 2004–2011. The dataset also provides information on the destination and product composition of exports.[5]

Turkish data show that over 80 percent of Turkey's annual manufacturing exports are financed on OA terms, which are followed by LC and CIA terms (see Figure 1). Under LC terms the exporter receives the payment only after the documents are cleared by the importer's bank at the destination, requiring the exporter to pre-finance the transaction. This implies that over 90 percent of Turkey's exports require pre-financing on the exporter's side. In other words, Turkish exporters usually bear the financing burden of the international transactions they engage in.

In the data, we observe that trade partners are less willing to accept the financing burden of the transaction the further they are located away from each other. To the extent that distance increases the risks associated with an international trade transaction, this observation is not surprising. Working capital needs may also be expected to increase with time between production and delivery of goods – which increases with bilateral distance. Figure 2 shows that the share of Turkish exports on OA terms is consistently lower to countries located further away from Turkey over the sample period. This is mirrored by an increase in the share of exports on LC terms. The observation is consistent with the view that trade partners, when facing heightened risks, prefer to shift these risks to banks. In other words, they prefer to rely more on formal forms of financing.

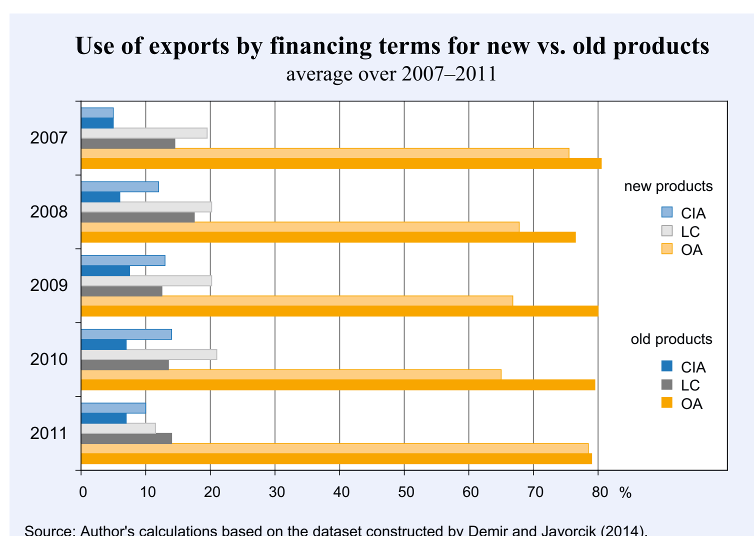
We might expect default risks to be higher for new trade relationships. Although the Turkish dataset does not allow us to track trade relationships, it allows us to identify new products. A new product is defined as an HS10 product that has been exported from Turkey to a particular destination for the first time in the last three years. Assuming that an established relationship between a Turkish seller and a foreign buyer is less likely to be observed in such cases, it would be reasonable to expect less OA/CIA financing and more LC financing when exporting new products. Figure 3 shows evidence that supports this view. The figure shows the breakdown of exports across financing terms for old

Figure 2



[5] The classification is 10-digit Harmonized System (HS).

Figure 3



and new products.[6] The share of exports on LC terms is higher for new products compared to old products. The interpretation is similar to that of distance: when they face heightened risks, trade partners prefer to shift the risks to banks.

Another pattern observed in the data is that Turkish exporters are more likely to finance an international trade transaction the more competitive the destination market is – measured in terms of a destination market's access to foreign suppliers.[7] Figure 4 shows that the share of exports on OA terms is higher to destinations that have better access to foreign suppliers. Assuming that buyers have greater bargaining power in such markets, they can more easily shift the financing burden and risks to sellers. This observation may suggest that exporters located in emerging markets might have additional trade financing requirements when exporting to more competitive developed markets.

OA appears to be the dominant financing term in all industries, but less so in metals and mineral products. Figure 5 presents the average share of each financing term in Turkey's exports in metals/minerals and in other industries over the period 2004–2011. The distribution of exports across financing terms within an industry is fairly stable over time. In almost all industries, OA terms account for the largest share of industry exports. In two industries, namely metals and mineral products, the share of LC-based exports is quite significant at around 30–40 percent. Two possible explanations for such a pattern are provided by Antràs and Foley (2013) and Demir *et al.* (2014). Firstly, given the fixed cost associated with obtaining an LC, it should be easier for importers to cover such costs for large transactions. Since transaction sizes are usually larger in metals/minerals, it is not surprising to observe a higher share of LC-based exports in these industries. Secondly, goods shipped in metals/minerals are easier to collateralise than those shipped in other industries. Thus banks might be more willing to issue/confirm LCs as potential losses, which, in the event of default, can be recovered more easily.

To sum up, detailed data on the use of financing terms in Turkey's exports transactions show that (i) over 90 percent of exports require pre-financing by the exporter; (ii) more risky transactions – those shipped to longer distances or involving new products – are more likely to occur on letter of credit terms; (iii) exports to more competitive markets are more

[6] New product is defined as an HS10 product, which is exported to a country in year t, and not between years t and t-3.
[7] Market competition is measured in terms of a destination market's access to foreign suppliers. Competitive markets are defined as those with a market competition measure above the sample mean, and less competitive markets are those with a measure below the average – see Demir and Javorcik (2004) for more detailed information on the construction of the market competition measure.

Figure 4

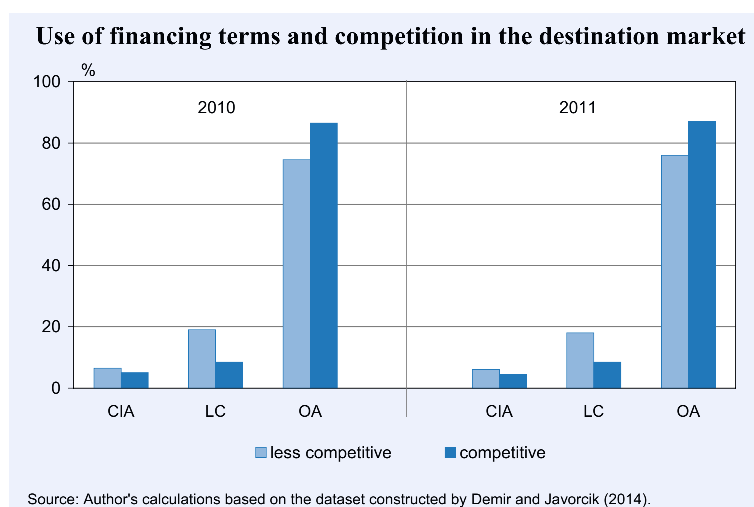
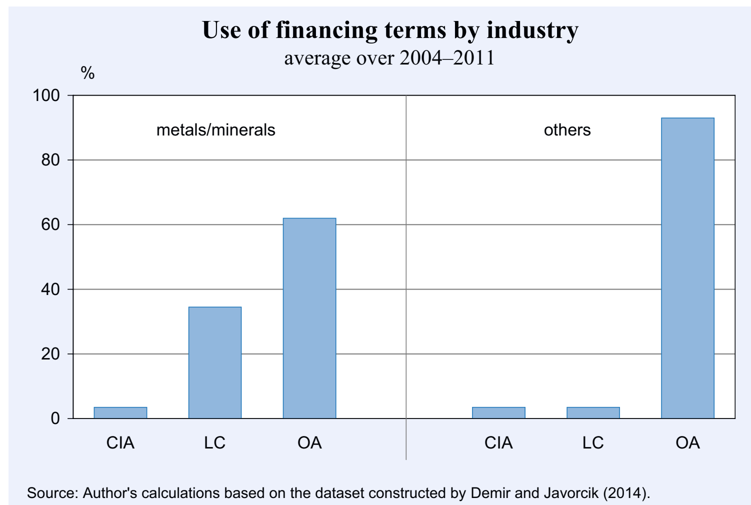


Figure 5



Source: Author's calculations based on the dataset constructed by Demir and Javorcik (2014).

likely to occur on open account terms; and (iv) there is considerable variation in the use of financing terms across industries; e.g. the share of LC-financed exports is ten-times larger in metals/minerals than in other industries.

The patterns presented in this article underscore the role of financial markets in facilitating international trade, especially in developing countries. In particular, the goal of these countries to diversify exports both in terms of products and destinations, i.e. towards developed country markets, calls for additional trade financing. Given their shallow financial markets, access to trade finance still remains a challenge for such countries. One possible remedy would be to extend short-term credit lines to exporters through Exim banks, with a view to meeting their working capital needs. Another remedy would be to create new instruments linked, for instance, to LCs, which can be used by beneficiary exporters to obtain short-term financing in their home countries. Bankers' acceptance is one such instrument. However, these instruments are seldom used because of their complexity and inconvenience.

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