Transaction Costs in Exporting: A Theoretical Study

Author's Details:
(1) Thi Ngoc Ha Tran-(2) Vu Anh Duong Pham-(1) (2) University of Economics – Technology for Industries -
Correspondence: Thi Ngoc Ha Tran, 456 Minh Khai, Hai Ba Trung, Ha Noi

Abstract:

The objective of this paper is to research and analyze the theory of transaction costs, types of transaction costs, transaction costs in exports. By qualitative research methods, synthesized on previous studies, we have codified the theoretical basis of transaction costs and transaction costs in export activities.

Keywords: *Transaction costs, Transaction cost classification, transaction costs in exports.*

1. Introduction

In trade, transaction costs are components directly into the price of goods and services and are increasingly focused and paid more attention. Today, the economy in general and businesses, in particular, want to compete in the world market, it is impossible to ignore the management and control of this type of cost so that they are as low as possible. For developing and underdeveloped countries, transaction costs are often high due to the underdevelopment of infrastructure, science, and technology. The international integration, trade barriers, qualifications also challenge them to minimize this type of cost, thereby increasing their commercial competitiveness.

In modern economies transaction costs have become equally (and perhaps more) important than production costs. This is quite a development considering that early economic theory (e.g., the perfect market economy model) focused entirely on production costs assuming that transaction costs did not exist. The implication for economic research: It has become relatively more sensible to do research in transaction cost dynamics rather than production cost dynamics. This is perhaps also contributing to the surge of interest for research in corporate governance that clearly has more to say about transaction cost dynamics rather than production cost dynamics. You can't manage costs effectively without taking into account the transaction costs. Many economists like to divide costs incurred by a business into two categories; transaction and production costs. Production costs include the costs of producing as well as distributing a good or service. Everything else is categorized into types of costs. The managers can't make the right choices without analyzing transaction costs.

In this paper, the author will review the theoretical basis related to transaction costs such as the concept and classification of transaction costs.

2. Literature review

2.1. Transaction cost

Ronald Coase (1937), the economist formulated the first ideas about transaction costs more than 70 years ago, mentioned "Without the concept of transaction costs, which is largely absent from current economic theory, it is my contention that it is imposible to understand the working of the economic systems, to analyze many of its problems in a useful way, or to have a basis for determining policy" [Coase 1988a, p.6].

In economics aspect, transaction costs are as the fees paid by buyers, but not received by sellers, or the fees paid by sellers, but not received by buyers. In finance aspect, transaction costs refer to the premium above the current market price required to attract additional sellers into the market.

According to econimists's studies, defination of transaction costs are described and developed through time. There are three economists have been rewarded the Nobel Prize for Economics for their contribution to the theory of transaction costs namely Ronald Coase, North, and Williamson.

Firstly, Ronald Coase described transaction costs as unavoidable costs of doing business, "the cost of using the price mechanism" in "The Nature of the Firm". Coase used the term "transaction costs" to refer to

costs of communicating, encompassing all of the impediments in bargaining. Given this definition, bargaining necessarily succeeds when transaction costs are zero.

Ronald Coase developed the notion of transaction costs as a way of explaining the emergence of the firm within an exchange economy and also as a way of understanding the particular structure and governance framework of firms in different sectors and under different circumstances. He asked: why does a firm emerge at all within an exchange economy, where the different factors of production (land, labour and capital) necessary to make goods or provide services can be freely exchanged? If the answer is to do with the nature of entrepreneurialism (specifically the ability of entrepreneurs to bring together factors of production which would not easily come together through the market mechanism alone), then why is this type of coordination achieved in some cases through entrepreneurialism and in other cases through the price mechanism? Why was it that, in some agricultural systems, bread would be made as a result of a series of exchanges between wheat farmers, millers and bakers, whereas, in other systems, all these functions would be vertically integrated within a single firm?

According to him, there are two main types of transaction costs, internal transaction costs and external transaction costs, and firm size depends directly on the nature of the transaction. External costs include the paid costs of getting the information, the opportunity cost of time taken up in searching…; whereas internal costs include the mental effort devoted to undertaking the search and sorting the incoming information… The firms must make a comparison between internal and external transaction costs and choose the lowest cost which enables it to increase profits.

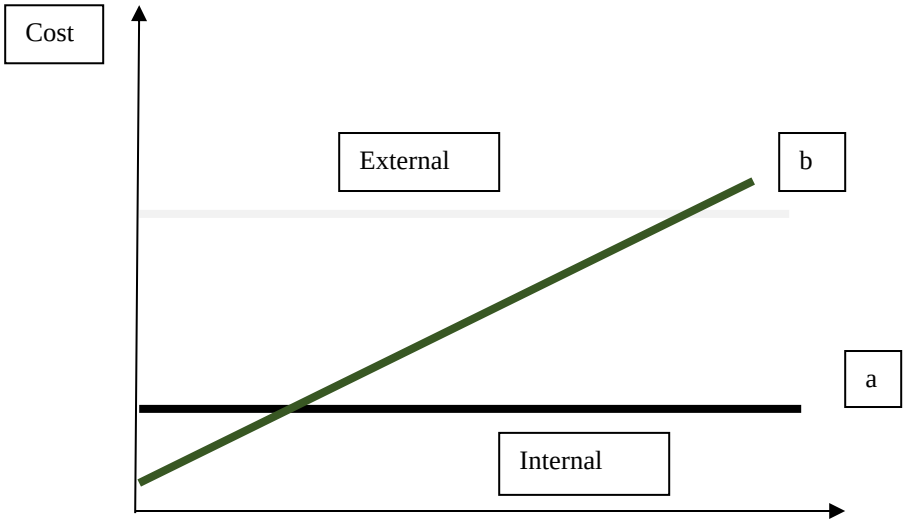


Figure 1: Internal and external transaction

Source: International Journal of Engineering and Management Sciences

The horizontal line (a) is the cost of doing any transaction within a firm and it is the fix cost, so any internal transaction costs are in effect the same. Coase argued that the firm will want to do all the work internally where line (a) is below line (b), or in other words, the transaction costs for exchange within the internal firm are lower than for exchange through the market, so that the firm size will grow. The opposite, transaction costs for exchange within internal system are higher than for exchange through the market, the firm will be downsized.

Douglass C. North, who are the most important and influential economist of the late 20th century, argues that institutions (include formal institutions such as legal rules and regulations… and informal institutions such as mutual trust, the commercial or mercantile skills of a nation) are key in the determination of transaction costs. Institutions that make low transaction costs, of course, promote economic growth.

Finally, Oliver Williamsion, he developed Coase's study defines transaction cost as the cost of running the economic system.

According to Alston and Gillespie's approach, transaction costs fall into two groups: firstly, production factors (physical and finance capital, human capital and work intensity); secondly, the production process (pre-production, production and post production). The following table illustrates the structure of transaction costs:

Table 1: Structure of transaction cost

Factors of production	Production Process		
	Pre-production	Production	Post- production
Physical and financial capital	Asset specialty	Abuse and agency costs	Measurement of output and contract enforcement
Human capital	Information constraints and asset specialty	Coordination costs	
Work intensity		Shirking and contract enforcement	

Source: International Journal of Engineering and Management Sciences

The table above shows that (pre-production and post – production) factors are those which encourage the firm to produce, and in their absence it is better to rely on market transaction. Production processes within the firm affect the transaction costs borne by the firm. Moreover, without production processes firms need to deal with other parties, which mean rising market transaction costs.

2.2. Transaction cost in export.

As in the domestic market, the price at which a product or service is sold directly determines your company's revenues. Your firm's market research should include an evaluation of all variables that may affect the price range for your product or service. If your company's price is too high, the product or service will not sell. If the price is too low, export activities may not be sufficiently profitable or may actually create a net loss.

A company that has decided to export its products to a new market or to buy from a new supplier in a different country cannot take for granted that the potential transaction will be viable, profitable or provide goods at a price and quality that are competitive. From a financial point of view, a transaction may prove unrealistic if the cost of entering a market is too high, the competition is grueling, or the price the company needs to charge in the new market is not competitive.

An importer needs to be sure that the product remains of interest to themselves or their potential customers after factoring in all the landing costs (all costs associated with the delivery of the goods to the country of destination), the packaging and the associated expenses.

An exporter must ensure acceptable and timely returns from international business activities in relationship to the associated costs and risks.

A transaction that cannot be completed at a profit, or one that is not compatible with the criteria and objectives of both the exporter and the importer, could harm domestic operations and may even threaten the long-term survival of the company. For an exporter, the decision to enter a new market may stem from a marketing plan based on solid market-research or may be the result of a reactive response to an unsolicited request. In some sectors, notably knowledge-based industries, exporting may be a competitive imperative undertaken on the first day of operations.

Once a company has decided to export, and before shipping any goods, it must do the following:

- ensure that the transaction is viable;
- determine the export costs;
- determine the optimum sales price.

Transaction costs in export, or in other words the export costs, are important aspect of your company's pricing analysis. There are different non-price factors that are not related with physical process of production of goods such as administrative processes, government rules and regulations, infrastructural bottlenecks etc... for which an exporter employs its own resources either in terms of time in terms of money before the actual

shipments of export items. The multiplicity of rules and regulations, rule-bound administrative procedures and practices, comprehensive infrastructural facilities and appropriate institutional support adversely affect the export promotion efforts. These non-price factors, often referred to as "transaction costs", slow down the motivation given to export growth even when other trade policy issues have been addressed by the Government. In the internationally competitive world, export promotion is highly price-sensitive and therefore any addition to it by way of transaction costs has to be addressed by the trade policy reforms.

These costs usually begin with an individual firm's imports of inputs required for exports and stretch till the export remittances are received through the banking channel. Comprehensive infrastructure is the one of principal sources of the transaction costs for most export industries in developing countries and underdeveloped countries. The basic problem with transaction costs is that some of the factors responsible for such costs are difficult to quantify and warrant more qualitative than quantitative treatment.

The principal objective of transaction costs analysis is to optimise all such costs, as beyond a critical level they tend to decrease the volume of transactions. Increasing costs of transaction costs tend to adversely affect the efficiency of transaction, partly in terms of resources and partly in terms of suppression of exchanges.

In the field of importation and exportation, transaction costs arise out of strict rules and regulations, complex administrative personel. Therefore, in a regime conducive to exports, efforts need to be taken to reduce the complexities involved in export transaction processes along with price-related measures, such efforts provide incentive to exporters to improve the export supply.

2.3. Transaction cost classification in export.

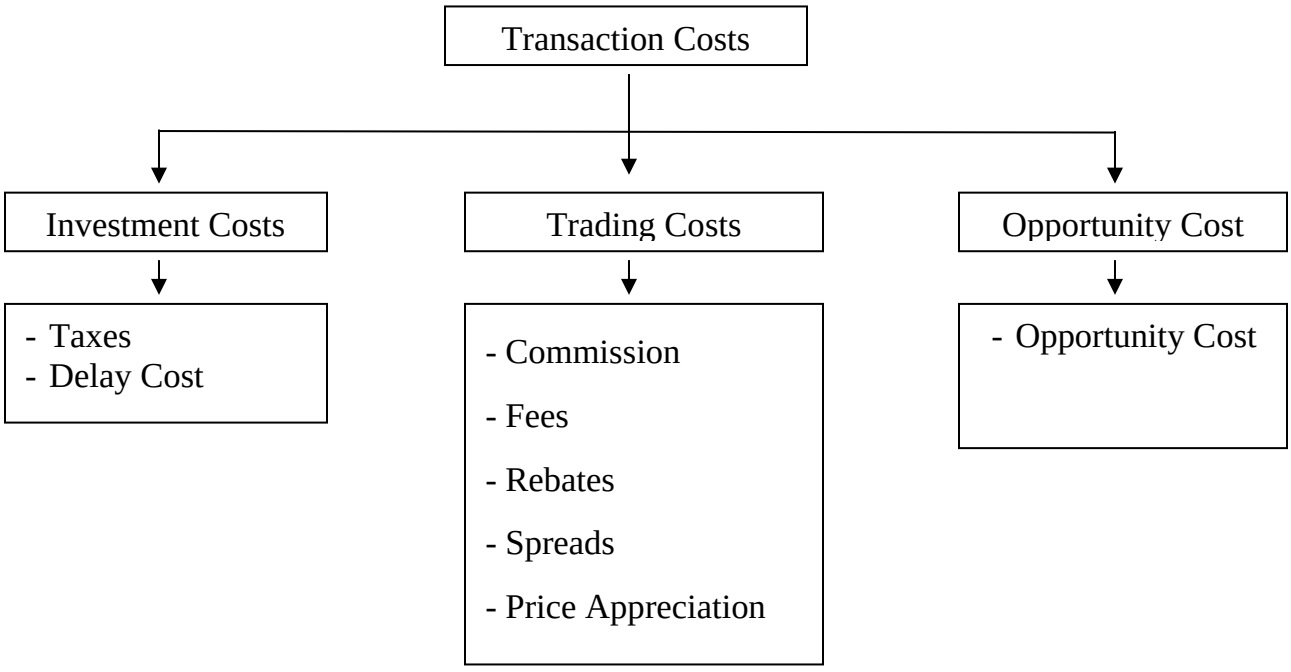
In import-export, several different types of transaction costs can be identified. First, there are the costs of obtaining information about market conditions in any given foreign market (quantities and qualities desired and the prices prevailing of each different quality), and of course reciprocal costs for agents in foreign countries. Second, there are the costs of information about government regulations and other policies in both the foreign market and the home market (including exchange rate policy, exchange restrictions, tariff and non-tariff barriers, and health and environmental regulations). Because implementation of these rules and actual practice can vary substantially from what the laws or rules say, knowledge of the official documents is far from sufficient. Third are the costs to each potential party of identifying appropriate trading partners in these markets. Fourth, there are the costs of negotiating, writing and enforcing contracts between the parties, includingthose associated with the resolution of disputes. Fifth, because of the generally long between the placement of an export order and its receipt and final payment, there are thecosts of financing the transaction and of bearing the risks of default at subsequent stages.

Among the factors tending to make these costs much higher than those with respect to domestic transactions are: language, cultural and taste differences, differences in laws and the way disputes are resolved, differences in income and information sources, differences in the way markets operate and in the extent and character of competition, and difficulties of enforcing contracts across countries, and hence higher risks of payment default. These transaction costs are not merely static; rather they change substantially overtime as circumstances change. For example, they may be expected to increase with changes in the identities of the trading agents, in the environmental conditions which surround them, and in the character of the respective markets. Even if an exporter has all the right information about all the relevant factors in a particular market at one point in time, the rapidity of change undermines the adequacy of his information about relevant future conditions in that market. Indeed, for any individual country, over time there are two important trends tending to raise transaction costs for developing country exporters: (1) the growing relative importance in developing country exports of quality-differentiated and increasingly specialized productsfor which it is difficult to distinguish between contract fulfillment and non-fulfillment (deliberate or otherwise), and (2) the growing use in developed countries (at both the national and subnational levels) of various non-tariff barriers to trade, including environmental regulations, which are subject to more sudden changes over time than tariff barriers. Another such factor is the asymmetry of information that characterizes many of the relationships, actual or potential, among the different agents. As is well-known, asymmetries of information give rise to problems of

adverse selection and moral hazard, and such asymmetries are likely to arise several different components of transaction costs at the same time.

For example, at the level of the rules and regulations, countries may want the conditions to look different than they really are, or be unwilling to enforce existing laws. Likewise, the agents charged with the responsibility of implementing the rules may have little incentive to do so, and indeed may have the incentive to leave the interpretation of these rules sufficiently ambiguous as to generate rents for themselves. Even more relevant and important, each potential trading partner has better information about his own characteristics and propensities (appropriate to defining the terms of the contract) than the other party, inducing adverse self-selection for any given terms. While in principle contracts could be written in sufficient detail so as to be complete and self-enforcing, in practice because the costs of doing so are excessive, actual contracts are necessarily incomplete and hence vulnerable to opportunistic behavior. Moreover, because of the lags between the time of writing the contract and that of delivering on it, and then again before payment is received, each party may have the incentive to default insome way on the terms of the contract (i.e., to practice moral hazard or opportunistic behavior relative to the other party). These problems are often further compounded by the fact that many of the information costs and enforcement costs are subject to economies of scale, economies of scope and externalities. The externalities imply that the incentives for investing in such information and in adequate enforcement mechanisms and insurance may well be insufficient (because their benefits leak out to others in the form of externalities). The economies of scale and of scope imply that, although there may well be a role forinter mediaries specializing in the production of these relevant services, competitive markets for such services may not exist. Instead, these services may be monopolistically supplied, but thereby creating the basis for government regulation and intervention.

Transaction costs can be classified into **investment related** (like taxes, delay cost), **trade costs**, and **opportunity cost**. Trade Cost is the largest subset of transaction costs, so this paper shall be focused on analysing trade cost in exporting firms. Table 2: Transaction cost classification



Trade costs are defined as: “all costs incurred in getting a good to a final user other than the cost of producing the good itself: transportation costs (both freight costs and time costs), policy barriers (tariffs and non-tariff barriers), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs and local distribution costs (wholesale and retail)” (Anderson and Van Wincoop, 2004). Trading costs interact with economic fundamentals like technology and factor endowments

(labour and capital) to produce the pattern of trade and production we observe around the world. As such, they have a great potential to influence the trajectory of a country's economic development.

The OECD-WTO survey provides some information on the types of trade costs that are most important in partner countries (Figure 2). The most commonly identified are trade facilitation (in the sense of customs and border procedures), transport infrastructure and non-tariff measures, including product standards. Each of these areas is one in which aid for trade can play an important role. In the case of trade facilitation, aid for trade is built into the architectureof the new WTO Agreement, so there is a strong chance that progress in this area will be possible with a combination of political will in partner countries and mobilisation of resources in donor countries. Transport infrastructure is a key component of traditional aid-for-trade spending. Finally, non-tariff measures like product standards are frequently the subject of technical assistance programmes run by donor agencies – either governmental or multilateral organisations – and have real potential to reduce the trade cost burden on partner country exporters.

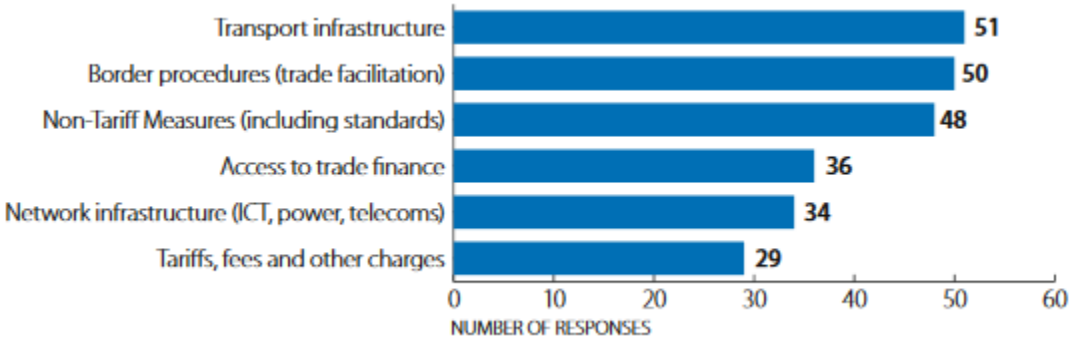


Figure 2: A particular source of trade costs is important (goods)

Source: OECD/WTOAid for Trade monitoring exercise (2015)

Tariffs are one well-known component, but they only account for a relatively small part of the total level of trade costs in most countries. Non-tariff measures are also important, including product standards, as well as other types of regulation that make it more costly to do business abroad than at home. The business environment and commercial and governance institutions also matter because they affect the cost of doing business for foreign firms. Over the last two decades, trade in services has expanded rapidly to reach more than a fifth of global trade flows. The participation of developing countries in this trade has increased dramatically, rising from 11% of world services exports in 1990 to 20% in 2011. As an input into other economic activities, services are a direct determinant of country's competitiveness. Services such as telecommunications, energy, transport and business services are critical inputs into the production of goods and other services and influence productivity and competitiveness. Opening up to services imports and Foreign Direct Investment (FDI) can be an effective mechanism to increase the availability, affordability and quality of these services, which are crucial for export diversification, economic growth and poverty reduction. In addition, services can offer dynamic new opportunities for exports (World Bank, 2015 monitoring exercise).

Services trade also involves transaction costs. Where pure cross-border trade is possible – for instance, via the internet – issues such as transport costs do not arise. Nonetheless, there may be issues of regulation or infrastructure investment that generate friction. Trade in services is governed entirely by domestic regulation. The regulatory framework governing services trade includes a vast range of domestic laws and regulations in areas that often include land ownership, establishment of foreign companies and migration policies. They exist in sectors as diverse as banking, professional services, transport, education and tourism.

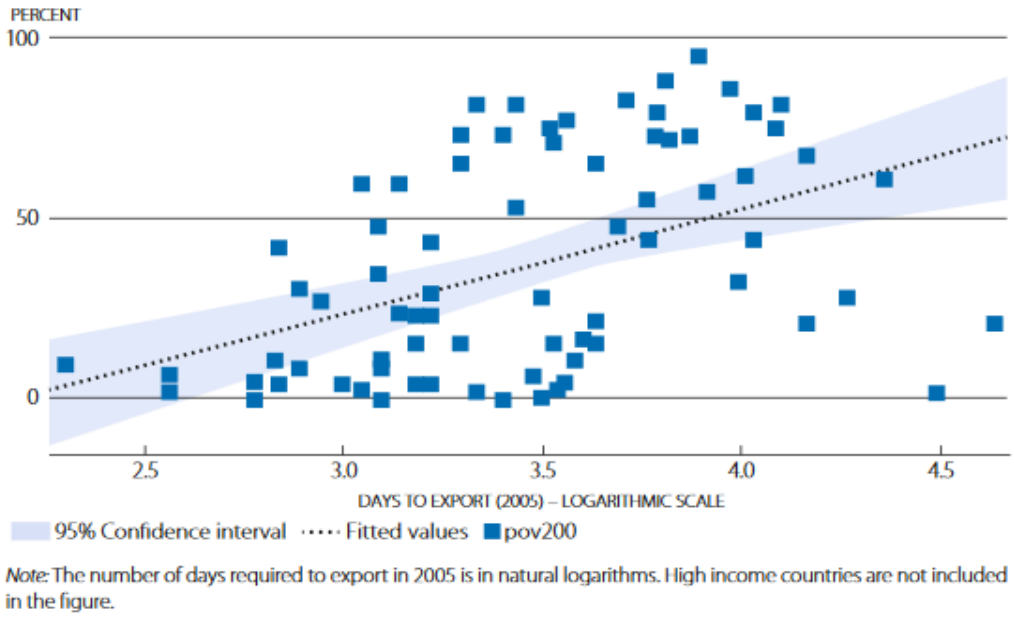


Figure 3: Population living on less than USD 2 per day (2008-12) and number of days needed to export

Source: World Bank World Development Indicator

High trade costs effectively isolate countries from world markets: consumers in these countries cannot take advantage of competitively priced goods from abroad, and their firms cannot access high quality foreign inputs or export to overseas markets. For those living at the base of the pyramid, often in extreme poverty, high prices disproportionately impacts on their consumer welfare. Not surprisingly, lower trade costs are typically associated with net poverty reductions even though the distributional impact of trade costs differs across countries. This positive relationship between trade costs and poverty is illustrated in Figure 3. Developing countries with higher trade costs – measured by the number of days required to export in 2005 – tend to have a higher share of the population living on less than USD 2 per day.

High trade costs price some country regions, countries and companies out of export markets, thereby limiting their economic development opportunities. Trade costs may not explain why some countries are low income or least developed, but, in combination with other factors, they do explain why some countries struggle to grow and exploit their comparative advantages (see figure 4). Keeping trade costs at reasonable levels and reducing them as far as possible in some key areas is essential to enjoying comparative advantage and the gains from trade.

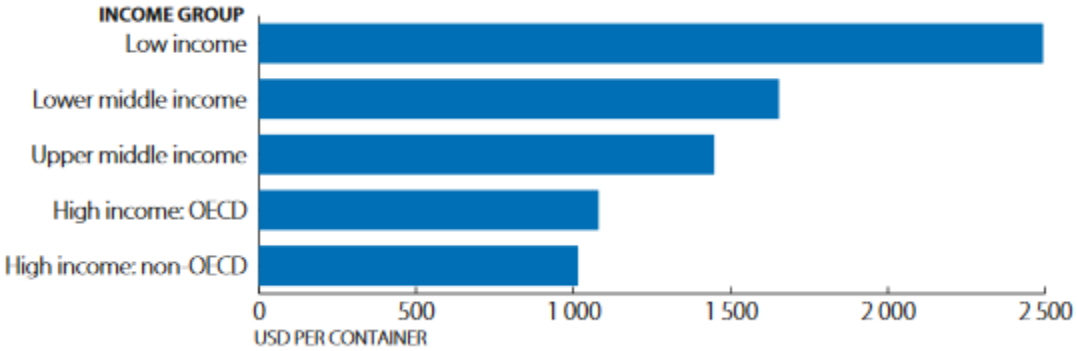


Figure 4: Doing Business costs to export, USD per container, 2014

Source: World Development Indicators

In a static sense, economic welfare can increase from lower trade costs – the real economic cost of doing business is reduced and GDP correspondingly increases as new transactions take place. Dynamic gains are also

possible. In particular, access to foreign inputs has been found to be associated with innovation activity: as firms gain access to new goods, they combine them in different ways to make new products. Indigenous technology development or adaptation is at the core of economic development over the medium to long term and harnessing the process is likely an important part of moving up global value chains.High trade costs are a considerable burden on the poor, undermining economic welfare by pushing up consumer prices and keeping poor producers out of global markets. Figure 5 below highlights the average number of days to import. Time is an important parameter for trade costs. Against this background, it is important to note what happens when trade costs for a particular country stay at an unnecessarily high level while those of its partners fall. The country will be less able to take advantage of specialisation by comparative advantage and thus will feel the gains from trade less fully than its partners. This point stands for countries that remain relatively marginalised from the global trading system as a result of high trade costs, for example, landlocked developing countries and small island developing states.

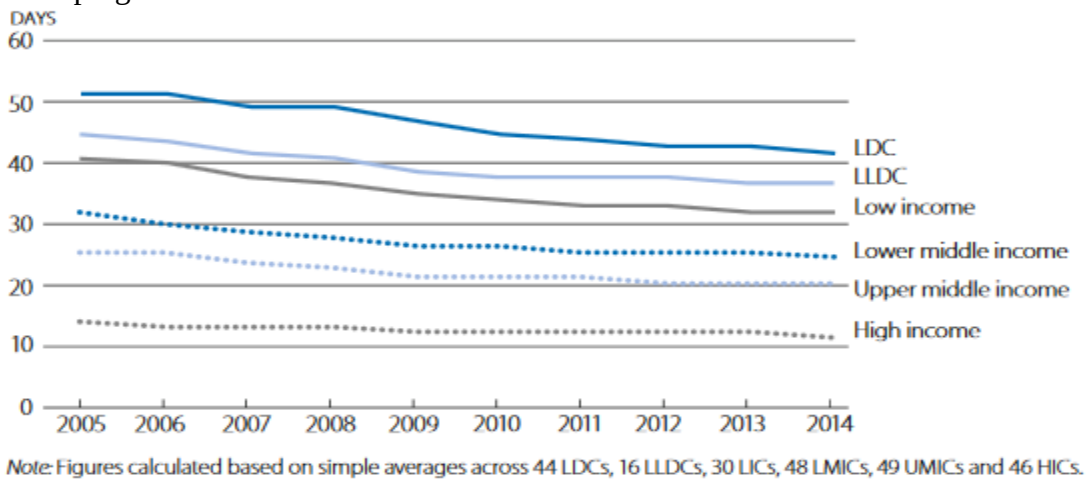


Figure 5: Average number of days required to export by income group

Source: World Development Indicator

Not only do trade costs matter between countries, they also matter within countries. Firms that face high costs of moving their goods from the factory gate to an international gateway, like a port or airport, effectively have an extra hurdle to clear when they try to enter international markets. Sometimes these barriers keep them out of business altogether, so Policy makers may not even realise the harm that is being done. Regions with high trade costs are often economically deprived and lie at the low end of income distribution (Inter-American Development Bank [IADB], 2013). Of course, many factors are at play in determining the ability of a country to grow and develop, and there are complex interactions among them. But trade costs stand out as one important source of disadvantage for countries.

3. Conclusion

The paper has built a theoretical basis related to transaction costs, transaction cost classification, as well as analysis of transaction costs in exports. This is an article in the form of a research overview.

The global pattern of trade and specialization in production is heavily influenced by transaction costs or trade costs. They limit the extent to which countries can profitably engage in specialization by comparative advantage. One more reason trade costs matter in terms of the post-2015 development agenda is that they affect national trade and income performance, including in poor countries. Net effects, as well as distributional issues, are both important from the perspective of sustainable and inclusive growth.

REFERENCES

i. *The Science of Algorithmic Trading and Portfolio Management. DOI: http://dx.doi.org/10.1016/B978-0-12-401689-7.00003-9 © 2014 Robert Kissell. Published by Elsevier Inc.*

ii. *David Bywaters, (2012), the role of transaction costs in economic growth, at: https://www.researchgate.net/publication/292975520.*

iii. *Frauke Eckermann, Alistair Hunt, Marcus Stronzik and Tim Taylor, (2003), the role of transaction costs and Risk Premia in the Determination of the Climate Change policy responses, at: https://www.researchgate.net/publication/45132067.*

iv. *Katarzyna MROCZEK (2014), Transaction cost theory – explaining entry mode choices, at: https://www.researchgate.net/publication/283641211.*

v. *Oliver E. Williamson (2004), The Economics of Organization: The transaction cost Approach, at: http://www.jstor.org/.*

vi. *A.Yousuf (2017), Transaction costs: A conceptual Framework, at: International Journal of Engineering and Management Sciences. DOI: 10.21791/IJEMS.2017.3.13.*

vii. *Anderson, J. and E. van Wincoop (2004), "Trade costs", Journal of Economic Literature, Vol. 42, No. 3, pp. 691-751.*

viii. *Balat, J., I. Brambilla and G. Porto (2009), "Realizing the gains from trade: export crops, marketing costs and poverty", Journal of International Economics, Vol. 78, No. 1, pp. 21-31.*

ix. *Decreux, Y. and L. Fontagne (2011), "Economic impact of potential outcome of the DDA II", Working Paper.*

x. *Diop, N., P. Brenton and Y. Asarkaya (2005), "Trade costs, export development and poverty in Rwanda", Policy Research Working Paper No. 3784, World Bank.*