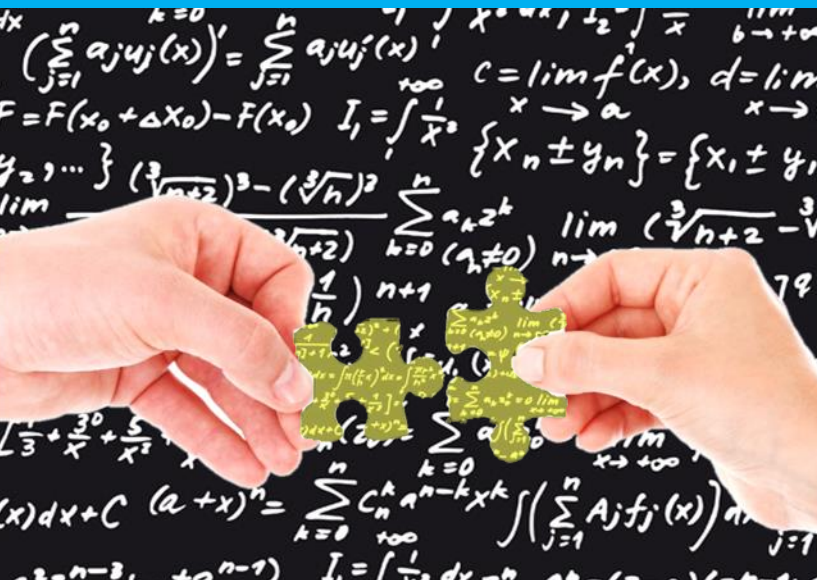




Regional trade agreements and
cross-border trade costs:

The case of Pacific Island
Countries



Jean Bertrand Azapmo

ASIA-PACIFIC RESEARCH AND TRAINING NETWORK ON TRADE

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WORKING PAPER

Regional trade agreements and cross-border trade costs:

The case of Pacific Island Countries

Jean Bertrand Azapmo*

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Abstract

Trade costs matter, in particular for small island developing countries, such as Pacific island Countries (PICs), given their economic size and remoteness from the world markets. This paper examines whether PICs' performance in cross-border trade costs is informed by the extent of their participation in regional trade agreements (RTAs). The paper begins by analyzing PICs' membership in five RTAs, focusing on trade facilitation-related provisions committed through those agreements, which have the potential to reduce cross-border trade costs. Applying a New Institutional Economics approach, we can categorize PICs in light of their membership in RTAs; with Tier 1 comprising PICs that are parties to all or four of the five RTAs examined in this paper, followed by Tier 2, and finally Tier 3 with PICs that are parties to less than three RTAs. Next, the paper assesses PICs' performance in cross-border trade costs using three main indicators (cost, time, and number of documents to export and to import) and data from World Bank Doing Business for 2013-2017. We find that, PICs that are in Tier 1 (except Fiji) do not systematically have lower cross-border trade costs than other PICs. We conclude that whilst RTAs provide a legal framework for improving cross-border trade costs, other factors, such as the nature and scope of trade facilitation-related commitments made by PICs through RTAs and their capacity to implement those commitments, are crucial. Based on these findings, we recommend to review and strengthen trade facilitation-related provisions in existing and future RTAs, to strengthen PICs' capacity to implement trade facilitation-related measures contained in RTAs, and finally, for PICs to make trade facilitation-related reforms a center element of their national trade policy as well as overall national economic development plan and strategy.

Key words: cross-border trade costs, Pacific island Countries, trade facilitation, regional trade agreements.

JEL codes: F13, F53, O10, O19, K33

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1. Introduction

Trade costs are among the main obstacles to international trade (cf. Arvis et al., 2012) and affect not only exports (Khan and Kalirajan, 2011; Hoekman and Nicita 2011), but also the flow of foreign direct investment (Mukherjee and Suetrong, 2008; Duval and Uthokam, 2014). In this regard, the conclusion of the World Trade Organization Trade Facilitation Agreement (WTO TFA) in 2013, which focuses mainly on expediting the movement, release and clearance of goods, including goods in transit through a number of trade facilitation measures, signals the resolve by the members of the multilateral trading system to tackle trade costs. More recently, Hoekman (2014, p.4) recommended “a global commitment to a specific, numerical trade cost reduction” to be part of the post 2015-Sustainable Development Goals.

Whilst there is a myriad of definitions of trade costs, Anderson and van Wincoop (2004, pp. 691-692) provide one of the most comprehensive and most cited. They refer to trade costs broadly as “costs incurred in getting a good to a final user other than the marginal cost of producing that good itself: transportation costs (freight cost and time cost), policy barriers (tariffs and non-tariffs measures), information costs, contract enforcement costs, costs associated with the use of different currencies, legal and regulatory costs, and local distribution costs.”

One of the main issues with trade costs is to determine their sources and magnitude. With respect to their sources it is admitted that bilateral trade costs result from exogenous and endogenous factors Arvis et al. (2012). Exogenous factors on one hand relate to factors of separation between the exporter and the importer: geographical distance, transportation costs or the lead time associated with transportation, common features between trading partners, such as language, common history, sharing a border, or participation in the same economic community. Endogenous factors on the other hand are specific to the origin or destination, and represent the “thickness” of their borders: logistics performance (cost, delay, and reliability) and trade facilitation

bottlenecks (such as border control and transit systems with third countries), international connectivity (such as the existence of regular maritime, air or terrestrial services), tariffs, and non-tariff measures.

The increased focus on trade facilitation worldwide has also coincided with the surge in the number of regional trade agreements (RTAs) concluded worldwide, with most of them including trade facilitation provisions which have become one of the common features of RTAs (WTO, 2015 and Neufeld, 2014). Neufeld (2014, 5) found that 95% of RTAs concluded after 2000 contain a trade facilitation component, which aims to promote trade and the removal of trade distortions. It is therefore expected that those RTAs will result in lowering trade costs not just between the Parties but also with all their trading partners given that trade facilitation are non-discriminatory in their design and implementation. Whilst several empirical studies tend to support this idea (cf. Chauffour and Maur, 2011; and Pomfret and Sourdin, 2009), recent studies in this area have shed new light on the relationship between trade agreements and trade costs (Mirodout and Shepherd, 2015; and Duval et al., 2016).

The purpose of this paper, which builds on previous studies, is to examine the extent to which PICs' performance in cross-border trade costs is informed by their participation in RTAs. The contribution of this research is twofold: firstly, it adds to the literature on the relationship between trade agreements and trade costs, by focusing exclusively on PICs. Unlike previous studies which are broad in scope and discussed PICs only incidentally, this paper aims to enhance understanding of PICs' performance in cross-border trade costs relative to their participation in RTAs. Secondly, we aim through this research to contribute toward enhancing RTAs' effectiveness to increase PICs regional trade, deepen their regional economic integration, and facilitate their participation in global trade. In this regard, we hope the findings and recommendations of this research will guide PICs' trade negotiators and policymakers involved in the review of existing RTAs or the design of future ones. RTAs covered in this paper are the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA), the

Pacific Agreement on Closer Economic Relationship (PACER), the Pacific Island Countries Trade Agreement (PICTA), the Melanesian Spearhead Group Trade Agreement (MSGTA), and the Economic Partnership Agreement (EPA). Cross-border trade costs referred to in this paper cover cost and time to comply with customs clearance and inspections as well as inspections by other agencies, port or border handling, obtaining, preparing and submitting documents during clearance, inspections and port or border handling, the number of document involved, and the costs of domestic transport.¹ The above cross-border trade costs, which fall under the category of endogenous trade costs, in particular the ones associated with logistic performance and trade facilitation bottlenecks, are adapted from indicators used by the World Bank Doing Business in assessing countries' performance in trading across border.

The data and trade statistics used for this paper are adaptation from Doing Business reports.² Although the methodology used by the World Bank has generated numerous criticisms (e.g. Berg and Cazes, 2007) acknowledged by the World Bank Independent Evaluation Group in its 2008 Report; it is also admitted that Doing Business reports provide a snapshot of countries' business climate and continue to inform and guide investors and policy makers in making strategic decisions. Due to data availability, we only cover ten of the fourteen PICs: Fiji, Kiribati, Republic of the Marshall Islands (Marshall Islands), Federated States of Micronesia (Micronesia), Republic of Palau (Palau), Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu.

The structure of this paper is as follow: after the review of literature (section 1), we examine of the main RTAs which PICs are party to, focusing on provisions that relate to reducing cross-border trade costs and thus facilitating trade (section 2). Section 3 analyses and compares PICs' performance in cross-border trade costs relatively to the extent of their participation in regional trade agreements using the NIE approach. We conclude with a discussion policy recommendations moving forward (section 4).

¹ This covers the cost of loading and unloading of shipment, transport between warehouse and terminal/port, transport between terminal/port and border, obtaining, preparing and submitting documents during domestic transport, traffic delays and road police checks while shipment is en route.

² World Bank Doing Business reports are available at <http://www.doingbusiness.org/>

2. Literature review

The first attempt to explain patterns of international trade by gravity models is commonly traced back to the influential work of Tinbergen (1962), who linked two countries' bilateral trade flows to their economic sizes and distance. Other well known models to explain international trade that existed at that time included the Ricardian model, which emphasized the difference in technology across countries to explain trade patterns, and the Heckscher-Ohlin model which relied on the differences in factor endowments among countries.

Anderson (1979) first attempted to develop a theoretical basis for gravity models in the context of the "iceberg" cost model formulated by Samuelson, where goods were differentiated by country of origin (Armington assumption) and where consumers have preferences defined over all the differentiated products. A well-specified gravity model was developed by Anderson and Wincoop (2003; 2004). In an influential paper they showed that trade flows between countries are determined not only by the conventional Newtonian factors of economic mass and distance, but also by the ratio of 'bilateral' to 'multilateral' trade resistance (MTR). MTR, which include price indexes, are average barriers that a country faces in its trade with all its trading partners, and are determined by how open to the rest of the world that country is.

Novy (2008) pointed out that one of the weaknesses of the theory-based gravity model was that it only considered cross-sectional data and assumed that trade costs were time invariant and that bilateral trade costs were symmetric, which was not also the case in practice. He derived an analytical solution for time-varying multilateral trade barriers or observable MTR variables that only depended on observable trade data and developed a theoretically consistent gravity equation that implied a micro-founded trade cost measures. Based on this approach, Novy found that between 1970 and 2000, the United States' trade costs with major trading partners (for example Mexico and Canada) decreased by 40%. He found this to be consistent with several important factors affecting trade costs, in particular the formation of RTAs, such as the North American

Free Trade Agreement (NAFTA), which contributed to lower their multilateral trade resistance.

With respect to trade costs in developing countries, an empirical study conducted by Arvis et al. (2012), using data collected on trade and production in 178 countries for the 1975-2010 period found, among other things, that trade costs were decreasing slower in developing than in developed countries and that trade costs were very high in low income countries. More recently, WTO (2015, p.75) reported that trade costs in developing countries in 2010 were equivalent to applying a 219% ad valorem tariff on their international trade.

Recent studies on trade costs are centered on the relationship between multilateral trade agreements, RTAs and trade costs. The idea here is that trade agreements with trade facilitation-related provisions would reduce trade costs between the parties as well as their overall multilateral trade resistance. Whilst several empirical studies tend to support this view (cf. Chauffour and Maur, 2011; Pomfret and Sourdin, 2009), others have shed new light on this topic. In a research on the relationship between RTAs and trade costs in services, Mirodout and Shepherd (2015), relying on a theory-consistent bilateral trade costs for 55 countries for 1999-2009 and following an analysis of services commitments in 66 RTAs to which these countries are parties, noted that despite the proliferation of services RTAs, trade costs were only slightly lower due to these agreements and that trade cost reductions that do take place tend to happen before the agreement is signed. More recently, Duval et al. (2016), using data from Neufeld (2016) on 234 RTAs, including RTAs involving PICs, measured the extent to which RTAs' provisions related to WTO TFA contribute to reducing trade costs. They found that while inclusion of such provisions in RTAs does not appear to systematically result in their implementation, they nonetheless have a statistically significant impact on bilateral trade costs among RTAs' members.

In highlighting the potential role of RTAs in reducing costs, the discussion on trade costs moves closer to the New Institutional Economics (NIE), which is an attempt to incorporate a theory of institutions into economics (Coase (1937), and most notably Williamson (1979; 1981; and 2009) and North (1990)). The NIE posits that institutions - informal constraints and formal rules, courts, and political institutions- play a key role in the performance of economies by creating an environment that helps address production and transaction costs.

Central to the NIE are three concepts: transaction costs, property rights, and contracts. Transactions costs arise from the fact that it takes something (costs) to produce, find someone with whom to trade, determine price and quality, reach an agreement between buyer and seller, and monitor and enforce that agreement (Coase, 1937). Using a historical approach, North (1991) argues that institutions reduce transaction and production costs per exchange so that the potential gains from trade are realizable. From this perspective, one should expect that RTAs, which are formal institutions of international trade, should contribute towards reducing the transaction and trade costs of participant parties.

One of the main criticisms waged at the NIE was that it took institutions as given (cf. Chang, 2006 and 2011; Ford, 2011). Chang (2006) argued that although bringing institutions to light was necessary, it was not a sufficient condition in understanding how countries perform economically. This particularly applies in the case of most developing countries where transaction costs were very high and economic performance weak, despite the fact that those countries have faithfully embraced numerous institutions, such as multilateral trade agreements and RTAs. He identified two key factors explaining such institutional lags: the first is the opportunity costs of institutional reforms, given that institutions are expensive to establish and run. The second is social inertia and institutional inheritance, which is justified by the fact that new institutions tend to be the adaptation of existing institutions (institutional path dependency).

3. PICs' membership in RTAs

In this section, we examine RTAs entered into by PICs, focusing on provisions that relate to reducing cross-border trade costs and thus facilitating trade. In analyzing those provisions, we rely the Regional Trade Facilitation Commitment (RTFC) Index developed by Duval et al. (2016, pp.7-8), which is “the number of the 28 TFA related provisions to which any country committed through any of its RTAs.” The RTFC index gives a measure of a country’s overall international trade facilitation commitments outside of the multilateral trading system and the WTO TFA. RTAs reviewed in this paper are: SPARTECA, PACER, PICTA, MSG, and iEPA.³

SPARTECA was concluded in 1980 between the Governments of Australia, the Cook Islands, Fiji, Kiribati, Nauru, New Zealand, Niue, Papua New Guinea, Solomon Islands, Tonga, Tuvalu and Western Samoa; and was later extended to other remaining PICs. SPARTECA⁴ aims to accelerate the development of PICs through the granting of duty free and unrestricted access to the markets of Australia and New Zealand over as wide a range of PICs’ products and the adoption of measures such as cooperation in the marketing and promotion of PIC’s goods with a view to expand and diversify PICs’ exports to Australia and New Zealand.

PACER was concluded in 2001 in Nauru between Australia and New Zealand and 14 PICs. The main objective of PACER is to provide a framework for cooperation including through the provision of technical assistance to PICs to undertake structural and economic adjustment, implement trade liberalization and economic integration (Article 2). Ultimately, this should lead over time to the development of a single market, Nevertheless, it is anticipated that SPARTECA and PACER will be replaced with

³ RTAs that are yet to enter into force are not covered. This is the case of the Treaty establishing the Micronesian Trade and Economic Community (MTEC) signed in 2014 between Marshall Islands, Micronesia, and Palau is not covered in this Paper. Although the MTEC Treaty was ratified by RMI in February 2015 and by the FSM in September 2016, it has not yet entered into force. Similarly, Agreements involving only one PICs, such as the FTA between Australia and Papua New Guinea signed back in 1976, and entering into force in 1977.

⁴ Despite the fact that SPARTECA was notified to the GATT as a trade agreement under GATT Art. XXIV, Article 2 (a) suggest that it is a non-reciprocal trade agreement.

PACER Plus. PACER Plus negotiations were launched in 2009 between Australia and New Zealand and the 14 PICs and are still ongoing.

PICTA, it was signed in 2001 and came into effect in 2007. Article 2 on the objectives of the Agreement provides that PICTA is designed to lead to a single regional market among PICs by strengthening, expanding, and diversifying trade between the Parties through the gradual and progressive removal of tariff and non-tariff barriers, taking into consideration the difficulties faced by some smaller island countries. PICTA is opened for accession to other Pacific territories or self-governing entities (Article 27), which include notably French, United States, and New Zealand Pacific Territories, such as New Caledonia, Guam and Commonwealth of Northern Mariana Islands, Tokelau, and Wallis and Futuna. As of 2016, 11 of the 14 PICs had ratified PICTA and seven had undertaken the necessary national legislative and administrative reforms necessary to trade under PICTA. The seven countries are: Cook Islands, Fiji, Niue, Samoa, Solomon Islands, Tuvalu, and Vanuatu. Kiribati, Nauru, PNG, and Tonga are in the process of making the necessary legislative changes to give effect to the provisions of PICTA. Micronesia signed the Agreement in 2006, but hasn't yet ratified it. Marshall Islands and Palau are yet to sign PICTA.⁵

In addition to the first three RTAs, which involved all PICs, there is presently one sub-regional trade agreement in force in the Pacific region: the MSGTA, which was concluded in 1993 between PNG, Solomon Islands, and Vanuatu. Fiji acceded to the Agreement in 1998. The main objective of the MSGTA as stipulated in Article 3 is to promote and facilitate the flow of identified goods and services and to ensure fair competition between the Parties. This should contribute to the development and expansion of world trade. The initial coverage was trade in goods. In 2016, the MSGTA was further revised to include trade in services, labour mobility and cross-border investments, as well as a private sector development strategy.

⁵ In 2012, PICTA was expanded to include trade in services following conclusion of negotiations for the Trade in Services Protocol. The Protocol is currently undergoing ratification by the signatory countries.

The other trade agreement involving at least two PICs is the interim Economic Partnership Agreement (iEPA) between the European Union (EU) and the Pacific States concluded in 2007, which aims to promote the gradual integration of Pacific States into the world economy, in conformity with their political choices and development priorities through the establishment of a free trade area between the Parties, based on their common interest (Article 1). To date, only PNG and Fiji have signed and ratified the iEPA. Negotiations for a comprehensive EPA have continued since 2008, before being suspended in 2015.

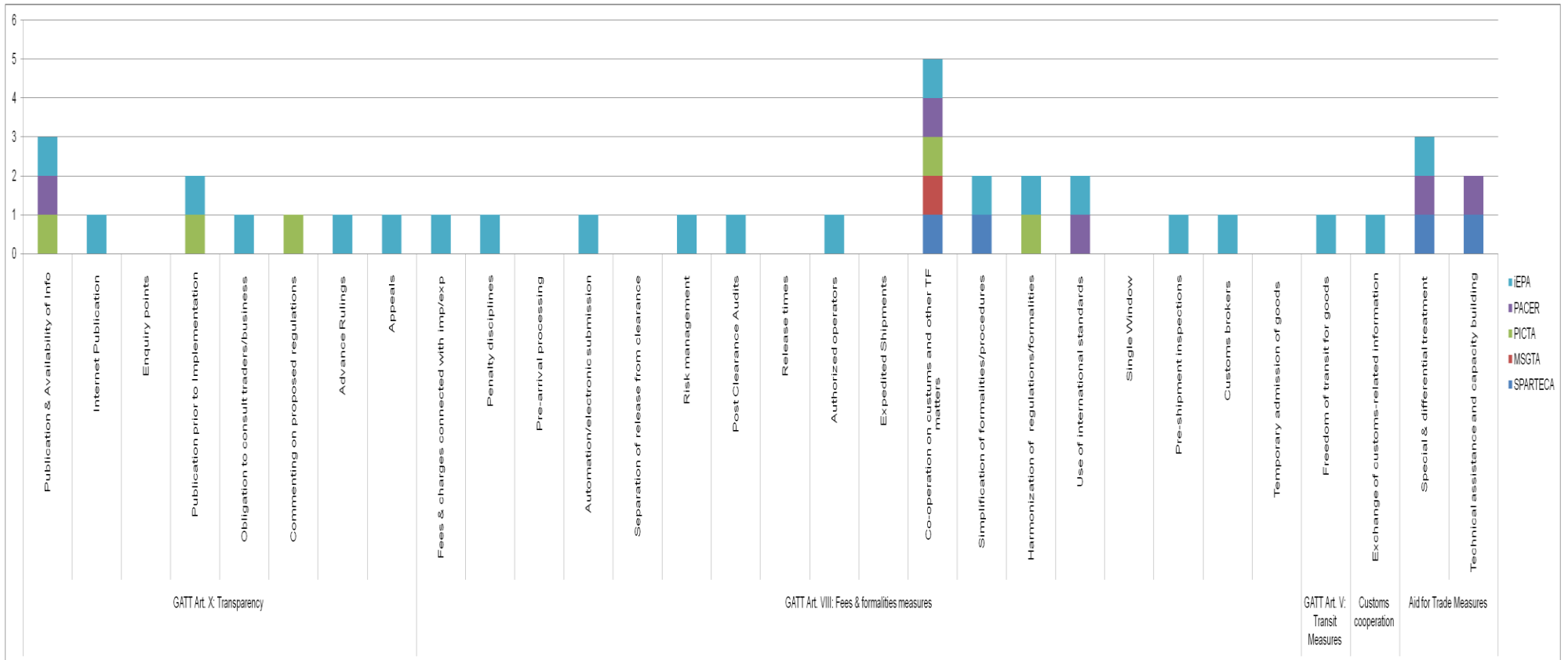
A review of trade facilitation-related provisions in the above RTAs using an adaptation of the RTFC index developed by Duval et al. (2016) is summarized in the table below:

Table 1 - Trade facilitation-related provisions in the PICs' RTAs

GATT	WTO TFA Measures	SPARTECA	MSGTA	PICTA	PACER	iEPA
GATT Art. X: Transparency	Publication and Availability of Info	0	0	Art.17 (1); Art. 20	Art.14 (2)	Art. 29 (b) and (c)
	Internet publication	0	0	0	0	Art. 29 (b)
	Enquiry points	0	0	0	0	0
	Publication prior to implementation	0	0	Art.17 (1)	0	Art. 29 (e)
	Obligation to consult traders/business	0	0	0	0	Art. 29 (d)
	Commenting on proposed regulations	0	0	Art.17 (2)	0	0
	Advance rulings	0	0	0	0	Art. 28 (4) (b)
	Appeals	0	0	0	0	Art. 28 (5) (a)
GATT Art. VIII: Fees & formalities measures	Fees & charges connected with imp/exp	0	0	0	0	Art.7
	Penalty disciplines	0	0	0	0	Art. 28 (2) (b)
	Pre-arrival processing	0	0	0	0	0
	Automation/electronic submission	0	0	0	0	Art.28 (4) (a)
	Separation of release from clearance	0	0	0	0	0
	Risk management	0	0	0	0	Art.28 (2) (c)
	Post Clearance Audits	0	0	0	0	Art. 28 (2) (c)

	Release times	0	0	0	0	0
	Authorized operators	0	0	0	0	Art. 28 (2) (b)
	Expedited shipments	0	0	0	0	0
	Co-operation on custom & other TF matters	Art. 8 (1)	Art. 17	Art. 18 (1) and (3)	Art. 9 (2) Annex I, Art. 2 (5)	Art.17; Art. 27; Protocol I
	Simplification of formalities/procedures	Art. 8 (1)	0	0	0	Art. 28 (2) (c)
	Harmonization of regulations/formalities	0	0	Art. 18 (2)	0	Art. 31
	Use of international standards	0	0		Art. 9 (3)	Art. 28 (1)
	Single window	0	0	0	0	0
	Pre-shipment inspections	0	0	0	0	Art. 28 (2) (g)
	Customs brokers	0	0	0	0	Art. 28 (2) (f)
	Temporary admission of goods	0	0	0	0	0
GATT Art. V: Transit Measures	Freedom of transit for goods	0	0	0	0	Art. 28 (2) (e)
Customs cooperation	Exchange of customs-related information	0	0	0	0	Art. 27 (1) (a) and Protocol I
Aid for Trade Measures	Special and differential treatment	Art. 9	0	0	Art.9 (4)	Art. 28 (3)
	Technical assistance and capacity building	Art. 8 (3)	0	0	Art.11	0

Figure 1. Trade facilitation-related provisions in the PICs' RTAs



Source: Author, adapted from Duval, Neufeld, and Utoktham (2016) and Neufeld (2014).

Table 1 and figure 1 suggest three things: firstly even though SPARTECA, PICTA, PACER, and the MSGTA were concluded before the launching of multilateral trade facilitation negotiations at the WTO in 2004, they nevertheless include trade facilitation-related provisions, which have the potential to reduce cross-border trade costs among participating countries. However, those provisions are limited: with the exception of commitments made in the iEPA which cover 19 of the 28 TFA related provisions, PICs in general have made few trade facilitation-related commitments in their RTAs: five in PICTA, four in SPARTECA and PACER, and one in the MSGTA. This is in line with Duval et al. (2016, p.8) who found that on average, “North and Central Asian and Pacific Islands’ subregional average commitments are lowest at only 6 (of 28).”

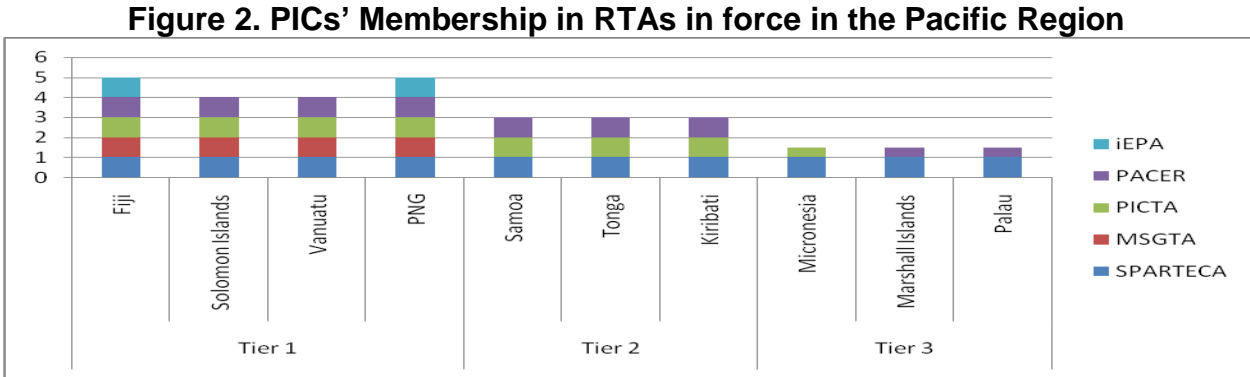
Secondly, the most frequent trade facilitation-related provisions found in the five PICs’ RTAs covered in this paper are: publication and availability of information, co-operation in customs and other trade facilitation matters, harmonization of regulations/formalities, use of international standards, and special and differential treatment. The relative limited number of trade facilitation-related provisions in RTAs entered into by PICs can be explained by the fact those agreements were concluded prior to the launching of the WTO TFA negotiations, when trade facilitation was still at an infant stage. This is consistent with Neufeld (2014, p.4) who found that trade facilitation provisions were almost inexistent in early RTAs which took predominantly the form of “subject specific co-operation arrangements.”

Thirdly, trade facilitation-related provisions pertaining to Aid for Trade measures are rare in RTAs entered into by PICs. Hence, SPARTECA and PACER are the only two RTAs covered in this paper that have trade facilitation-related provisions pertaining to aid for trade measures; PICTA, MSGTA, and the iEPA do not have. Even in the case of SPARTECA and PACER, it is worth noting that these RTAs are non-reciprocal trade agreements and do not have any enforcement mechanism envisaged under the Agreement, other than consultations on matters related to the implementation of the Agreement.

In light of the above, and following the NIE approach, which posits that institutions (informal constraints and formal rules, courts, and political institutions) play a key role in the performance of economies by creating an environment that helps address production and transaction costs, one can anticipate that PICs that are parties to several of the above RTAs and made trade facilitation-related commitments would have a better performance in trading across borders and lower cross-border trade costs than the ones that are not.

4. PICs’ performance in cross-border trade costs relatively to their membership in RTAs

Taking into consideration their membership in RTAs and their trade facilitation-related commitments, we are able to group PICs into three categories summarized in the figure 2 below: Tier 1 comprises of PICs that are parties to all or four of the five RTAs examined in this paper. Those countries are Fiji, Solomon Islands, Vanuatu, and PNG. Tier 2 includes PICs that are parties to two to three of the five RTAs: Kiribati, Samoa, and Tonga. Finally, Tier 3 is made up of other PICs, which are parties to less than two of the five RTAs examined in this research.



Source: Author.

The above categories will be used to review PICs' overall performance in cross-border trade costs against their participation in RTAs. We use three main indicators adapted from indicators developed by the World Bank to assess countries' performance in trading across border with their natural trading partner: cost, time, and number of documents required to export and import.⁶

4.1. PICs' performance in relation to cost to export and import

The cost to export is the average amount of money spent by businesses in one country in connection to border compliance,⁷ documentary compliance,⁸ and domestic transport,⁹ in exporting the product of its comparative advantage to its natural trading partner. The cost of import on the other hand, is the average cost spent to import a standardized shipment of 15 metric tons of containerized auto parts from its natural import partner. Based on the NIE's view that institutions reduce transaction and production costs per exchange, one expects that PICs in Tier 1 would have lower cost to export and import than other PICs given their commitments to undertake trade facilitation-related measures through RTAs.

The reality is different, as shown in figure 1. Overall, it appears that PICs categorized under Tier 2 and Tier 3, which are parties to fewer RTAs than PICs in Tier1 and have

⁶ The World Bank Doing Business study assumes that each country exports the product of its comparative advantage (defined by the largest export value) to its natural export partner (the largest purchaser of this product). It also assumes that each country imports a standardized shipment of 15 metric tons of containerized auto parts from its natural import partner defined as the economy from which a country imports the largest value of auto parts.

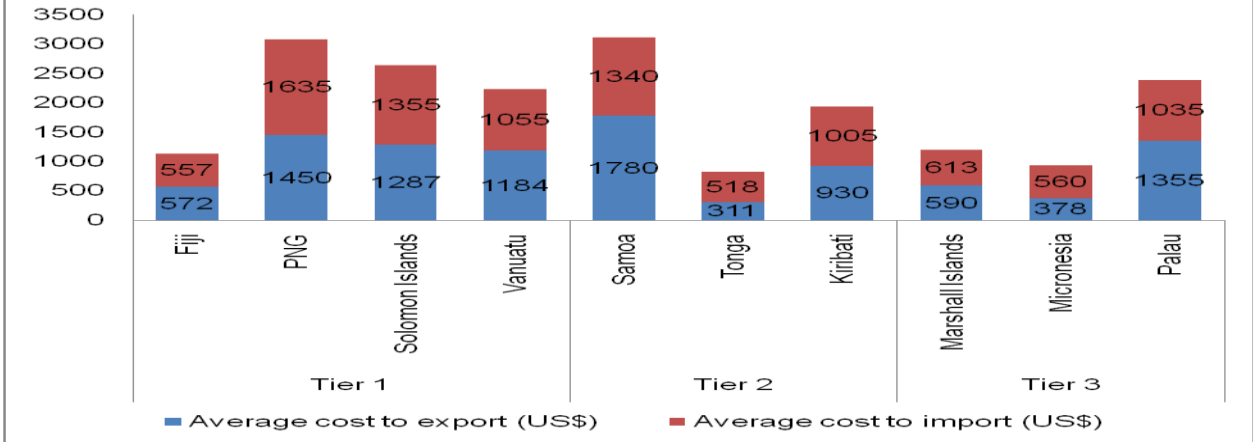
⁷ Border compliance covers customs clearance and inspections as well as inspections by other agencies, port or border handling, obtaining, preparing and submitting documents during clearance, inspections and port or border handling.

⁸ Documentary compliance, it relates to obtaining, preparing and submit all documents required by law and in practice during transport, clearance, inspections and port or border handling in origin economy, or documents required by origin, transit and destination economies.

⁹ Domestic transport includes the following: loading and unloading of shipment, transport between warehouse and terminal/port, transport between terminal/port and border, obtaining, preparing and submitting documents during domestic transport, traffic delays and road police checks while shipment is en route.

made few trade facilitation-related commitments through RTAs, perform better than those in Tier 1. With respect to export, Tonga has the lowest cost to export \$311; followed by Micronesia (\$378). Of PICs in Tier 1 category, Fiji has the lowest cost to export (\$572). Of the 10 PICs examined, Samoa has the highest cost to export (\$1,780), followed by PNG (\$1,450).

Figure 3. Cost to export and import from selected PICs



Source: Author, based on World Bank Doing Business 2017.

With respect to the cost to import, it is Tonga which also has the lowest cost of the ten PICs covered in this paper. Businesses in Tonga reported spending \$518 to import a standardized shipment of 15 metric tons of containerized auto parts from its natural import partner of this product). Tonga is followed by Fiji and Micronesia where importers spent on average \$557 and \$560 respectively to import. The country with the highest cost to import is PNG. Here businesses spend on average \$1,635 to import. PNG is followed by Solomon Island and Palau (\$1,355 each).

A decomposition of export/import costs shown in figure 4 a and b below shows that the cost of border compliance represents the highest share of the overall cost to export for nine of the ten PICs covered here and the highest share of the overall cost to import for eight PICs. For example, in Samoa the cost associated with border compliance in relation to export was estimated at \$1,400 representing approximately 79% of total cost

to export. Even in the case of Tonga, which reported the lowest export/import cost among PICs, the cost of border compliance to export was still very high. Businesses in Tonga that of \$311 spent to export from Tonga, \$201 was spent on border compliance alone representing about 65% of total cost to export. This suggests that businesses spend significant amount of money on dealing with customs clearance and inspections as well as inspections by other agencies, port or border handling, obtaining, preparing and submitting documents during these processes.

Figure 4. Decomposition of cost to export for selected PICs

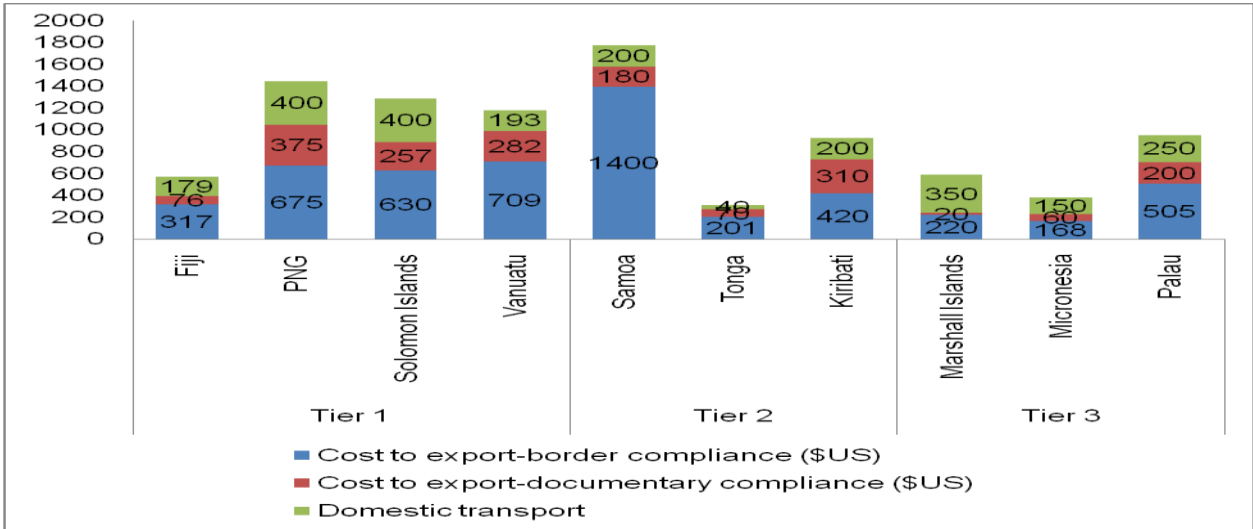
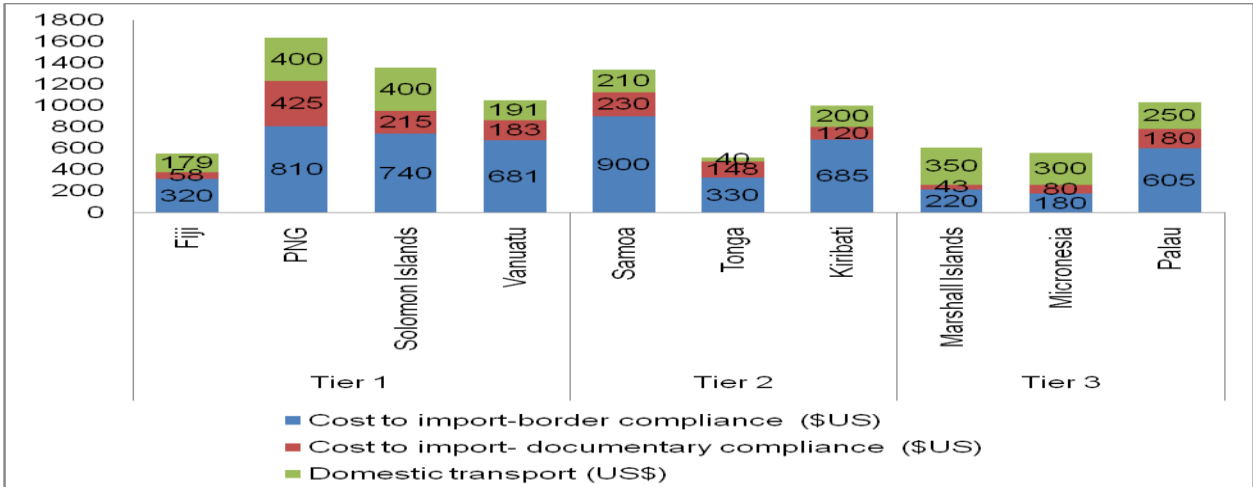


Figure 5. Decomposition of cost to import for selected PICs



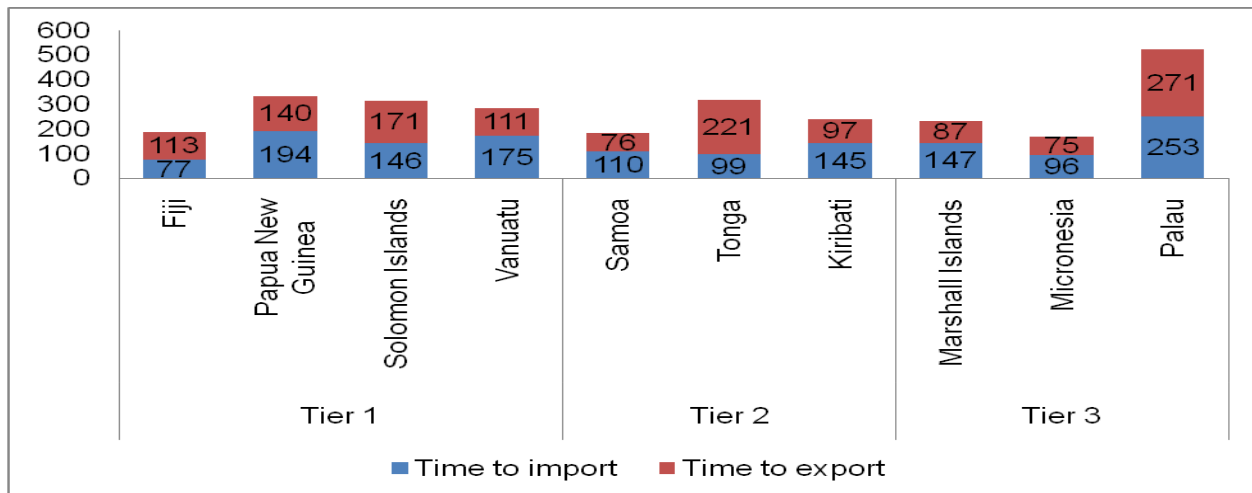
Source: Author, based on data from Doing Business 2017.

The cost of border compliance is followed by cost of domestic transport. In the case of Marshall Islands, the cost to domestic transport is even the main contributor to the overall cost of export and import. Businesses in Marshall Islands reported spending approximately \$350 on domestic transport for export and import, which represents 59% of total cost to export and 57% of total cost to import. The country with the lowest domestic transport cost is Tonga which is member to fewer RTAs and has thus made few trade facilitation-related commitments than countries in Tier 1. In effect, figures 2 a and b shows that businesses in Tonga spend on average \$40 on domestic transport for export and import, which represents 13% of the total cost of export and 8% of the total cost of import.

4.2. PICs' performance with respect to the time to export and import

The average time to export and import covers the number of hours to comply with the required documents (documentary compliance), the number of hours do comply with borders requirements (border compliance), and the number of hours to transport goods from the factory to the port (domestic compliance). Based on the NIE's view that institutions reduce transaction and production costs per exchange, one expect that PICs in Tier 1 would perform better than other PICs given their commitments through RTAs to streamline processes to export and import. We dit not observe any major difference among PICs. Figure 5 shows that whilst Micronesia is the most expeditious of the PICs surveyed with respect to export (75 hours), followed by Samoa and Marshall Islands (76 and 87 hours respectively), the situation is different with respect to the time to import. Here, Fiji has the shortest time to import (businesses reporting spending 77 hours to import), followed by Micronesia and Tonga (96 and 99 hours respectively). Of the PICs surveyed, Palau has the highest time to export and import (271 and 253 hours respectively).

Figure 6. Average time to export and import for selected PICs



Source: Author, based on data from Doing Business 2017.

The three other PICs in Tier 1 (PNG, Solomon Islands, and Vanuatu) perform poorly in this area. Businesses in PNG reported an average time of 194 hours to import and 140 hours to export. This situation raises concerns, given that the country has a great export potential. As rightly pointed out by Hummels and Schaur (2012), time is a trade barrier and undue delays are likely to further affect countries' participation in international trade and their overall economic development.

Figures 6.a and 6.b provide a breakdown of time to import and export. It appears that businesses spent most of their time on border compliance, which represents the highest percentage in the overall time to export for five PICs and the highest percentage in the overall time of import for seven PICs. In some instances the time spent on border compliance represents more than 2/3 of the overall time to export (case of the Marshall Islands) and more than 2/3 of the overall time to import (case of Samoa).

Figure 7. Decomposition of time to export for selected PICs

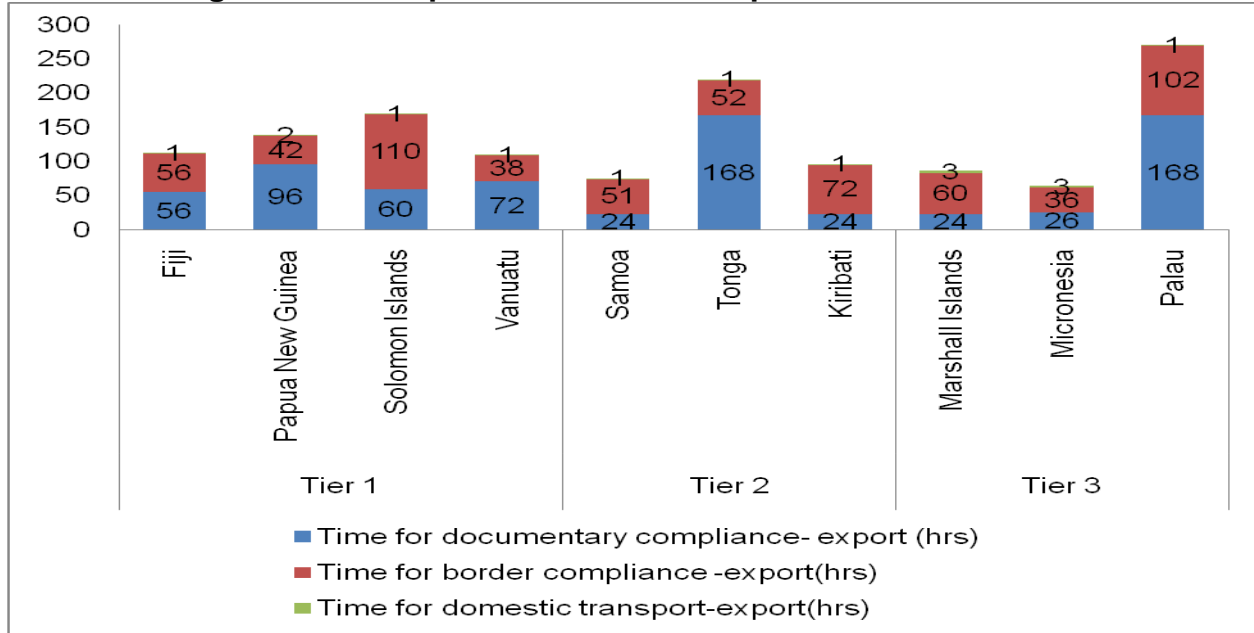
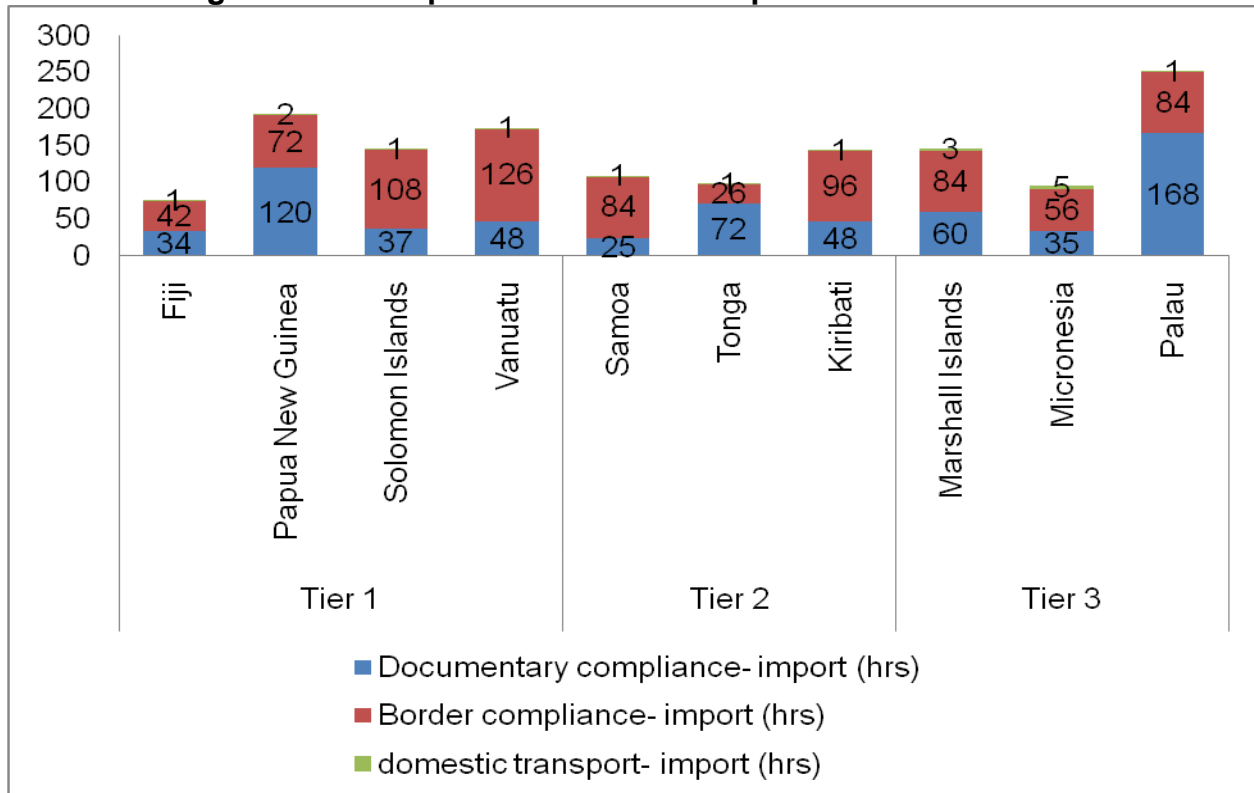


Figure 8. Decomposition of time to import for selected PICs

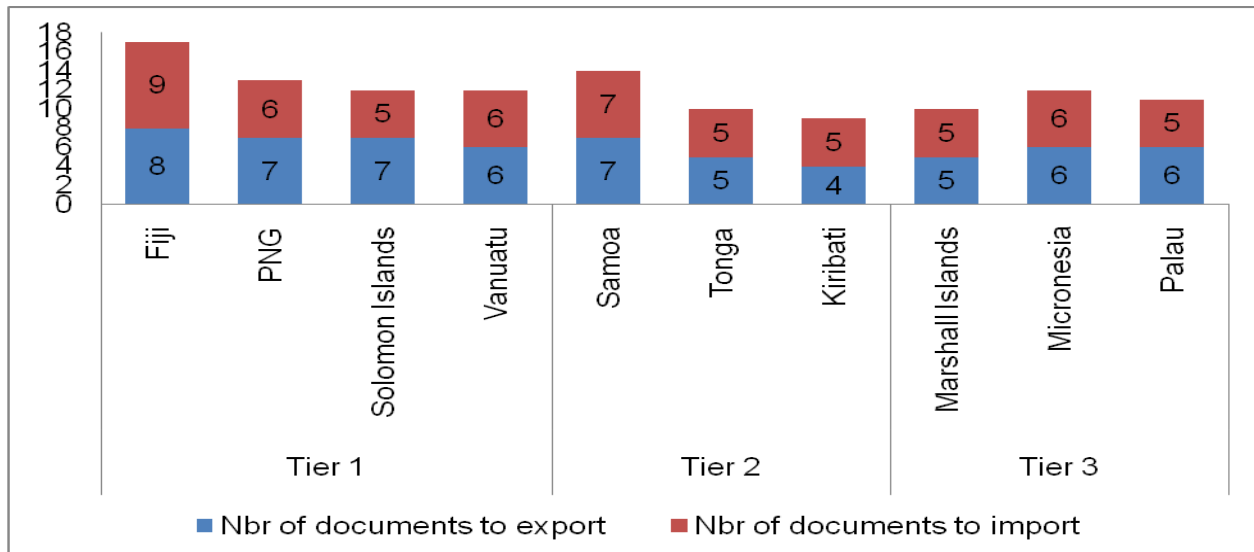


Source: Author, based on data from Doing Business 2017.

4.3. Number of documents to export and import

Documents to export include bill of lading, cargo release order, commercial invoice, export declaration, foreign exchange declaration, inspection report, phytosanitary certificate, packing list, and terminal handling receipt. With respect to documents to import, they include bill of lading, cargo release order, commercial invoice, customs import declaration, foreign exchange declaration, customs release note/order, technical standard/health certificate, packing list, and terminal handling receipt. Given their commitments through RTAs to simplify their formalities and processes to export and import, we expect that PICs in Tier 1 would require few documents than PICs in Tier 2 and Tier 3. On the contrary, figure 7 below shows that PICs in Tier 3 and Tier 2 require fewer documents than PICs in Tier 1 countries. Hence, of the 10 PICs examined here, Kiribati requires the fewest number of documents to export (four) and to import (five) in contrast with Fiji, which requires the highest number of documents for export (nine) and for import (nine).

Figure 9. Number of documents to export and import



Source: Author, based on data from Doing Business 2017.

It is worth noting that even though the number of documents varies from one country to another, some are common to all PICs. These are: bill of lading, commercial invoice,

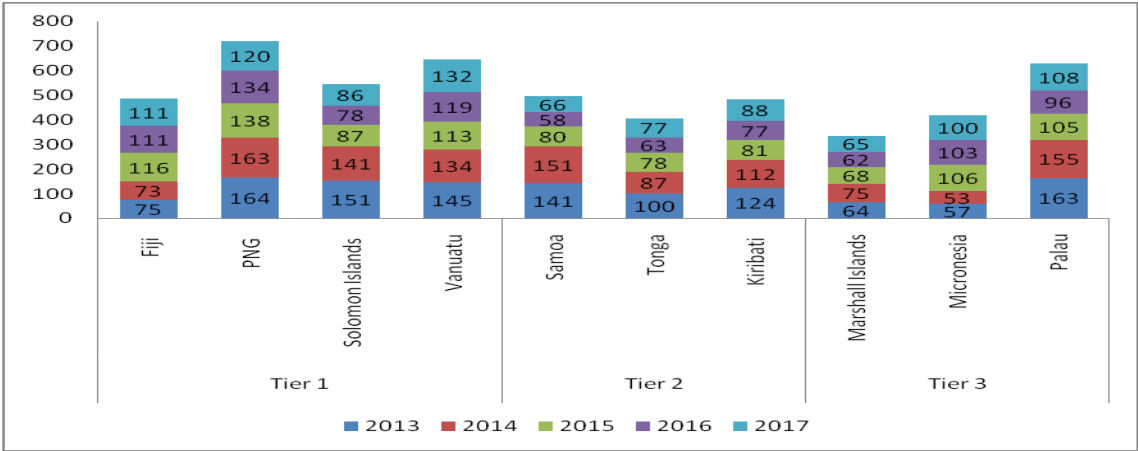
customs/import declaration or export declaration, and packing list countries; suggesting the existence of a basis upon which a regional initiative to harmonize import or export documents could be built.

5. Discussion and policy recommendations

5.1. Discussion

Overall, it appears from the above analysis that PICs’ performance in cross-border trade costs is not informed by their membership in RTAs and thus the level of trade facilitation-related commitments made through those RTAs. In effect, with the exception of Fiji, the performance of other PICs in Tier 1, which are members to four or five of the five RTAs examined in this paper with respect to cross-border trade costs was below that of the majority of PICs in Tier 2 and Tier 3. Surprisingly, countries like Tonga, Micronesia, and Samoa appear to be the best performers based on the indicators used in this paper. This is also evidenced by their overall performance in trading across border between 2013 and 2017 as shown in the figure 8 below.

Figure 10. PICs’ overall performance in trading across border, 2013-2017



Source: Author, based on data from Doing Business 2013-2017.

What are some of possible explanations of the gap between PICs' Membership in RTAs and their performance in cross-border trade costs? The first main explanation is the nature and substance of trade facilitation-related provisions in the PICs' RTAs. As discussed in the previous section, even though the five RTAs examined in this paper contain trade facilitation-related provisions, they are limited in terms of scope and only cover a few of the 28 TFA related provisions. As discussed in the previous section, with the exception of commitments made in the iEPA which cover 19 of the 28 TFA related provisions, PICs in general have made few trade facilitation-related commitments in their RTAs: five in PICTA, four in SPARTECA and PACER, and one in the MSGTA.

The second main explanation relates to the implementation of trade facilitation-related commitments in RTAs concluded by PICs. Although Tier 1 countries are parties to four or five of the RTAs examined here, some still have not yet fully implemented their obligations under those agreements. For example, PNG signed and ratified PICTA; but has not yet undertaken the necessary national legislative and administrative reforms necessary to trade under PICTA. This could be due to the lack of adequate resources provided under the RTAs to support parties in implementing their commitments. As discussed in the previous section, only two of the five RTAs examined in this paper have trade facilitation-related provisions pertaining to aid for trade measures: SPARTECA and PACER. The three other, including the iEPA which contains 19 trade facilitation-related commitments, do not have; which is likely to impact the implementation of commitments made by the Parties, especially in the case of RTAs that involved developed countries, given the already existing institutional, infrastructural, and financial gap between the parties. Even in the case of SPARTECA and PACER, it is worth noting that these RTAs are non-reciprocal trade agreements and do not have any enforcement mechanism envisaged under the Agreement, other than consultations on matters related to the implementation of the Agreement.

Another explanation for the gap between PICs in Tier 1 and PICs in Tier 3 and Tier 2 could be the volume of trade and the size of agencies involved. In effect, given the small

amount of trade flows that customs officials of PICs in Tier 3 and 2 have to handle and considering the small size of their administration, their processes and procedures would be more simple and streamlined. For example, all PICs in Tier 1 have relatively higher trade volume than the remaining PICs: PNG exports for 2014 were estimated at \$14 billion while imports amounted to approximately \$6 billion compare \$452 million of import and \$140.2 million of export for Samoa during that same year (ADB).

Overall, it appears from the above that the mere existence of such provisions in RTAs is not sufficient to determine how countries ultimately perform in cross-border trade costs; other factors are also critical and are worth considering moving forward.

5.2. Policy options moving forward

5.2.1. Review and strengthen trade facilitation-related provisions in the PICs' RTA entered into by PIC

One of the findings of this paper is that trade facilitation-related provisions in RTAs examined in paper, remain sketchy and are limited to a few areas of the trade facilitation spectrum. The MSGTA for example has only one provision on trade facilitation-related commitments, which deals merely with customs cooperation. In this regard, it would be necessary to review those provisions and identify those needed strengthening. For example, PICs should consider prioritizing in their RTAs commitments to improve their processes associated with border compliance, which covers customs clearance and inspections as well as inspections by other agencies, port or border handling, obtaining, preparing and submitting documents during clearance, inspections and port or border handling.

5.2.2. Strengthen PICs' capacity to implement trade facilitation-related obligations enshrined in RTAs

Moving forward, there would be a need to strengthen PICs' capacity to implement trade facilitation-related provisions in RTAs covered in this paper, in particular PICTA, MSGTA, and the iEPA, by including clear provisions on Aid for Trade measures to

support them in implementing their trade facilitation-related obligations. In the case of SPARTECA and PACER, a successor agreement (PACER Plus) should go beyond what is presently in those agreements. Provisions on aid for trade measures to support the implementation of trade facilitation-related obligations should include trade cost reductions goals and target to be achieved within an agreed timeframe, in particular in the case of RTAs between PICs and developed countries like the iEPA. This will ensure that developed countries deliver on their promises and that developing countries meet the reduction target agreed upon by the parties.

Strengthening PICs' capacity to implement trade facilitation reforms should also be considered outside RTAs, given that trade has the potential to contribute to economic growth through export expansion, which will generate income and government revenue necessary to achieve the SDGs adopted in September 2015. In this regard, a combination of global and regional partnership would be essential. At the global level, in addition to the traditional Aid for Trade programme under the WTO, the support of other regional and global institutions and organizations working in the area of trade facilitation in the Pacific region such as ADB, ESCAP, ITC/UNCTAD, and World Bank would be very important. At the regional level, PICs should consider joint initiatives, which will enable them to jointly mobilize adequate resources, which otherwise might prove difficult to achieve by individual PICs.

5.2.3. Make trade facilitation reforms a central element of PICs' economic development strategies

Given that trade facilitation reforms would ultimately benefit all segments of the society (cf. Shoji, 2014); it appears that it would be in the self interest of PICs to commit domestic resources to implement sound trade facilitation reforms regardless of their membership in RTAs. In this regard, trade facilitation reform initiatives should become a central element of PICs' economic development strategies, bearing in mind the acknowledgement by the international community through the UN General Assembly Resolution on SDGs that "... each country has primary responsibility for its own

economic and social development and that the role of national policies and development strategies cannot be overemphasized.”

6. Conclusion

The central question of this paper was whether PICs’ performance in cross-border trade was informed by the extent of their membership in RTAs. Using three main indicators - cost to export and to import, time to export and import, and number of documents - and data from Doing Business reports 2013-2017, we found that with the exception of Fiji, membership in RTAs did not necessarily have lower cross-border trade costs than other PICs. This suggests that though RTAs matters as they create the legal framework through which PICs’ can reduce their cross-border trade costs and improve their performance in this area, their mere existence is not sufficient. Other factors are essential, including the nature and scope of trade facilitation-related provisions in RTAs and PICs’ capacity to implement their commitments. Moving forward, it is important to review and strengthen trade facilitation-related provisions in RTAs, strengthen PICs’ capacity to implement trade facilitation-related obligations, and make trade facilitation reforms a central piece of national trade policy as well as development plan and strategies. This raises the question of alignment between trade policy and other national development policies, in particular in the context of the SDGs, which warrants further investigation.

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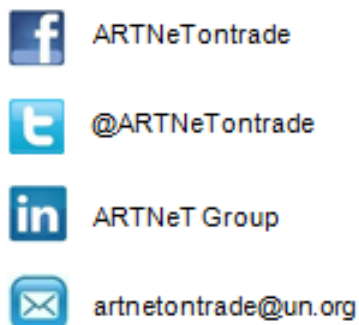
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