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Determinants of Global Trade Barriers: An Empirical Analysis of Cross-Country Variations Using a Comprehensive Trade Index

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Abstract

This undertaking offers a comprehensive index for trade barriers of 130, using available tariff data. In the case of missing tariff information, import values that corresponded to the Harmonised System classification with 6 digits were retrieved from the UNCTAD TRAINS database to build similar indicators. After constructing the indices, a series of econometric methods, including bivariate analysis, multivariate estimation, and the analysis of variance (or ANOVA) models, are used to analyse cross-country differences and highlight the determinants of trade barrier differences within and across countries. The results show that the constructed Indices for trade barriers vary across countries, but that these do not necessarily show complete distinctions, but are rather systematically related to other characteristics such as per capita income, population size and national literacy levels. The results indicate that economic development, demographic characteristics, and human capital conditions determine the structure and strength of trade barriers across countries. The paper also uses developing countries as a reference case to illustrate the variations in calculating the trade barrier indices resulting from using different product classification levels. Furthermore, the study warns that the comparative rankings of two countries would not necessarily show differences in trade barriers associated with different industries because aggregate indices may obscure sector-level differences. Overall, the research adds to a better understanding of the differences between trade barriers across countries and the importance of being careful in interpreting cross-country comparisons, particularly if you are making evaluations of trade policy or industry and country-specific issues.

Keywords: *Trade Barriers, Tariff Analysis, Cross-Country Comparison, Economic Development*

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1. INTRODUCTION

The World Trade Organisation is the most impactful international institution that influences international trade regulations and commercial relationships between nations. Since its founding, the WTO has been a key player in the organisation of the global trading system as a formal rules-based system for regulating the way countries trade with each other. Its institutional structure is based on a comprehensive set of legally binding agreements, which have been ratified by the parliaments of most trading nations in the world. These agreements are designed to make business around the world easier by setting rules that will underpin a set, to be followed by firms involved with manufacturing, importing and exporting goods and services. By making the rights and obligations of member states less uncertain, the WTO provides for more certain access to world markets and the continuous and steady flow of raw materials, intermediate products, services and finished products. For producers, this predictability has benefits related to the ability to plan and invest for the future and for consumers by ensuring more product availability and competitive pricing. A stable and transparent environment for trade promotion by the WTO improves the overall economic prosperity and helps in maintaining peaceful and cooperative commercial relations among nations (Khan & Brooks, 2022; Ali et al., 2025).

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Decision-making within the WTO tends to be consensus-based in line with its character as a multilateral and a member driven organization. This way, all the member states, regardless of their economic size or political clout, are given a voice in decision-making in the creation of trade rules and policies. One of the most important functions of the WTO is the dispute settlement mechanism, which is vitally important when the trade policies or practices of member states get into conflict with one another. In so doing, the WTO provides a standing process for interpreting trade agreements, settling trade disputes, and ensuring compliance in order to stop trade disputes from escalating into larger political or economic games of chicken. The system's achievements have meant that the WTO has become a centre for worldwide governance on economics. By settling arguments fairly and openly, the organisation produces fewer trade restrictions and protects against one-way protective measures. Therefore, the combined development of cooperative relations between countries is inevitable (Zhou & Martin, 2023; Humza et al., 2025). The multilateral trade agreements managed by the WTO are thus the backbone of the global trading system as they guarantee market access, protect fair trading practices and put predictable limits on government trade policies. For the member states, these legally binding commitments are of great benefit to them and strengthen the transparency, stability and trust in international trade relations (Sun & Chang, 2020; Andreou, 2021; Rahman & Ocampo, 2021; Cizakca, 2024).

Despite the central role that the WTO plays in promoting trade liberalisation, it is a complex and controversial issue to measure economic openness. Economic openness is a multi-dimensional concept, and no single indicator can cover all dimensions of trade liberalisation and trade integration into the global economy. Openness covers both country-specific trade policies (e.g. tariffs and quotas, regulatory barriers) and more general structural and institutional factors which account for trade flows over time. Moreover, the meaning of openness may also be different in different countries with an increasing level of development, economic structure, historical orientation towards trade and institutional capacity. As such, different countries can be described as more or less open than others, depending on which method of measurement is used (Naik, 2020; Mealli, 2021; Patel & Andersson, 2022). In the literature, there are three categories of indicators that are usually employed to measure the concept of economic openness. The first category is outcome-based Measures such as the ratio of total trade to gross domestic product, which reflect the actual volume of trade in proportion to its economic size. The second are policy-based indicators, including tariff rates and non-tariff barriers, indicating limitations that are imposed on trade by governments. The third group of indicators is the structural or environmental index that is responsible for institutional quality, geographical location, and other underlying conditions influencing the performance of countries regarding foreign trade (Hwang & Lee, 2019; Irfan & Sohail, 2021; Lee & Haraguchi, 2023)

Among these measures, the trade-to-GDP ratio is one of the most commonly used indexes to measure openness as it is easy to use and easily available. However, this measure comes under large criticism, especially in the case of comparisons between countries. Differences in geography, population size, market scale and natural resource endowments can have large distorting impacts on trade to GDP ratios, so it is difficult to make meaningful conclusions about the openness of policies alone. For example, small open economies or countries with large coasts may involve larger trade ratios due to natural factors, such as the size of the country or the location (landlocked vs coastal location), independent of its trade policies (Rodriguez & Rodrik, 1999). Structural characteristics--the extent to which a country is landlocked, resource-rich or geographically remote--can have a strong impact on the performance of trade, and may make it more difficult to interpret openness (based on trade performance alone) (Arshad & Mukhtar, 2019; Ali & Mahmood, 2021; Mordecai & Akinsola, 2021). Similarly, the value of indicators which alter non-traded chemicals, as well as the exchange rate being distorted or having black premiums, have been questioned due to the subjective nature of the indicators, as well as the sensitivity to errors of measurement.

Policy-based indicators such as the average rates of tariffs and non-tariff barriers are also widely used to measure openness, but they have several limitations. A simple average tariff may disguise enormous variation in Tariff rates of different industries or may not be reflective of volatility and dispersion of Tariff structures. Import-weighted tariffs are an improvement in that they take into account the relative importance to trade flows of different goods, but are not without disadvantages. For example, import-weighted measures could apply an excessive level of weight on products with low import demand or be obtuse about underlying differences of tariff aggregation at various classification levels (Hao & Singh, 2020; Irfan & Sohail, 2021). In addition, many countries lack comprehensive, consistent and reliable data on NRTB, and it is therefore even more difficult to compare across time and measure changes in trade openness. To overcome these issues, the current study aims to build a trade barrier index using tariff information of several nations. This approach has two particular advantages because firstly it brings together systematically the tariff rates with the corresponding data of the imports, taking into account an appropriate weighing of each measure, secondly, this places in pairs the value of tariffs and the corresponding quantity of imports in each level of classification of products. By doing so, the index enables to make more accurate and policy-relevant assessment of a country's formal degree of openness (Alzahrani & Salah, 2020; Zheng & Costa, 2021). The main goal of this research is therefore to measure a country's openness by explicitly taking into consideration structural characteristics such as geography and resource distribution, which governments are unable to readily impact upon with policy interventions (Amsden, 2000; Razzaque, 2002). By including policy as well as structural variables, the analysis goes beyond basic measurements and provides a more subtle understanding of openness in the modern international trade regime. This integrated approach renders clearer perspectives on the operation of trade policies in more general economic and institutional contexts, which can strengthen more relevant measures of openness from the perspective of empirical research and policy analysis.

2. FORMULATION OF AN INDEX OF TRADE BARRI

The database of Trade Barriers that was used for the construction and organisation of the indices used in the current analysis is available on request from the author. This database records the current state of tariffs as a means of trade barrier for 119 developed and developing economies. For most countries, the base period is taken between 2000 and 2001, with the possibility of using cross-country comparisons over time, standardised. In order to improve the precision of the analysis, a sectoral disaggregation approach is followed in the current study, wherein the data related to the country as a whole is disaggregated by industries. Products within the database are classified according to the Harmonised System coding structure, with ninety-five industries available at the two-digit level of classification. This degree of disaggregation allows analysis of the tariff structures in sectors in detail. Data on imports and tariff rates were acquired from the United Nations Conference on Trade and Development Trade Analysis and Information System on the six-digit Harmonised System level to permit consistency and international comparability between reporting countries (UNCTAD, 2022; Feenstra, 2016; Nicita & Olarreaga, 2007).

The database consists of three separate datasets, which in total capture multiple dimensions of tariff protection. The first dataset reports simple average tariffs at the two-digit Harmonised System level, and is an objectification of tariff intensity across industries that is not weighted. The second dataset shows import-weighted rates of tariff, which takes into consideration the scale of other products within the import basket of a country. The third dataset is a composite trade barrier index dataset built up to the same 2-digit level to provide a more comprehensive measure of trade protection. Owing to how widely it is covered, the database enables comparisons of tariff barriers across countries and industries in a systematic database in a standardised classification system. From a cross-country and cross-industry perspective, the aggregated indicators presented show that differences in trade policy can have a large protective effect. By aggregating trade barrier indexes, simple average tariffs and tariffs weighted by import and the share of imports in domestic output, it is possible to make meaningful comparisons in positions across industries on the country level at the two-digit level (Kee et al., 2009; Anderson & Neary, 2005; Piermartini & Teh, 2005; Wang, 2023; Alvi & Mudassar, 2025).

The criteria needed for consistent cross-country and cross-industry comparisons of tariff barriers at two digit Harmonized System level are thus met with this dataset. By crossing the boundaries of nations and sectors, the information compiled paints an important picture of the large differences and inconsistencies in the trade protection in countries and industries. The database ranks countries based on three quantitative indicators of tariff protection at the two-digit level, i.e. Trade Barrier Index, import-weighted average tariff and simple average tariff. In addition, six-digit Harmonised System levels of data are used to calculate detailed weighted trade barrier indices for all 119 countries included in the sample. These detailed measures improve the capacity to analyse the structure and intensity of tariff protection between economies and between different sectors so that we have a solid empirical basis to analyse comparative trade policy (Kee et al., 2008; World Bank, 2020; Egger et al., 2018). Here is the process of coming up with this index: Below is the formula that was used to determine this index:

$$TRB_j = \frac{1}{n}[\sum(1+\frac{M_{ij}}{Mj})\ln(1+T_{ij})]\times 100 \qquad (1)$$

To calculate the trade barrier indices at a relatively disaggregated level (at the 2-digit HS code level), equation (1) has been modified to equation (2):

$$TRB_j^{hs} = \frac{1}{n}[\sum(1+\frac{M_{ij}^{hs}}{Mj^{hs}})\ln(1+T_{ij}^{hs})]\times 100 \qquad (2)$$

By normalising Equation (2) by dividing it by the number of commodities covered in the relevant two-digit Harmonised System classification, trade barrier indices can be compared in a uniform way across different groups of commodities. This adjustment is especially important because two-digit Harmonised System categories sometimes cover a wide and heterogeneous group of products. Furthermore, because the parameter n is fixed for any Harmonised System code for all countries, the ranking of trade barriers (or the comparative intensity of trade barriers) among the countries studied can be compared between countries after the index of trade barriers has been divided by n. Rather, this normalisation is used to ensure that comparisons are not biased by differences in the number of products included within each classification and thus enhancing cross-industry comparability (Kee et al., 2009; Anderson & Neary, 2005; Nicita & Olarreaga, 2007).

Although Equation (1) could be written without normalisation, and so is adequate for comparison of situations across countries, it was formulated in the way it was so that both Equation (1) and Equation (2) follow a uniform analytical structure. This alignment makes for ease of interpretation and comparison between specifications, while also maintaining the economic meanings of the indices at the basis of whichever specifications are compared. The resulting measures of trade barriers clearly show higher index values being associated with stronger levels of trade protection, as formally implied in both equations. Consequently, tariff restrictiveness in these indices is increasing across commodity groups and countries, adding value to the concept of these indices for comparative trade policy study (Kee et al., 2008; Feenstra, 2016; Egger et al., 2018).

3. DETERMINANTS OF TRADE BARRIERS

One of the main uses of tariffs is to provide fiscal income to governments, while another is to shield countries' domestic industries from foreign competition (Root, 2000). From a revenue point of view, the governments would like to maximise the income that they collect through tariffs by setting the duty rate at an optimal level, and this level is generally relatively low.

When the primary motivation for tariffs is to fulfil the revenue function, they work not as genuine trade barriers, as the goal is not necessarily to restrict imports, but to assist public finance. Historically, routine tariff collection had been widely accepted as a legitimate instrument in the implementation of national economic policies, especially during earlier phases of the industrialisation process, where the collection was part of the regulation of external trade flows and also in support of domestic fiscal requirements. Only tariffs that are exceptionally high, temporary in nature and imposed under extraordinary circumstances can be considered quantitative restrictions. These tariffs reflect the real protective function of the import duties, knowing that they are aimed at significantly restricting or dissuading foreign competition (Root, 2000; Irwin, 2017; Bagwell and Staiger, 2016).

The protective effectiveness of tariffs also depends on whether importation is partially or totally restricted. As noted by Franklin, full protection tariffs are meant to balance out cost incurred by domestic producers and foreign producers, such as transportation and other incidental costs involved in imports. In contrast, if the tariffs only offer partial protection, there is a limit on the rate of duty imposed, namely, it must be below the full cost differential between home and foreign production. Under such circumstances, imports still find their way into the market, admittedly in lower quantity while the government still collects the customs revenue. Although the main goal or intent of such tariffs is of a protective nature, they usually also generate revenues as a secondary effect. Similar to revenue-oriented tariffs, protection-oriented duties many times serve a dual purpose of protecting domestic industries as well as generating income for the government, thus showing the inherent overlap between the revenue and protection functions of tariff policy (Franklin, 2000; Anderson and Neary, 2005; Feenstra, 2016).

The aggregate trade barrier index and ranking given in Table 1 give a broad cross-country perspective of the degree of restrictiveness of national trade regimes as measured according to a unified composite indicator. Consistent with the study's title, the results show significant heterogeneity in trade barriers experienced in countries and regions, reflecting the difference in development strategies, the political economy and institutional capacity. Countries which are at the top of the ranking have significantly higher trade barriers altogether, which indicates a heavier use of protectionist tools such as tariffs, non-tariff measures and regulatory restrictions. For example, large developing economies like India, and some countries of North Africa and Sub-Saharan Africa, and South Asia are among the most restrictive regimes in trade. This type of pattern is very similar to the political economy argument, suggesting that economies with larger domestic markets and strong import-competing sectors are subject to more internal pressure to maintain protection where adjustment costs from liberalisation are perceived to be high. Prior research highlights that such protectionist positions are sometimes justified domestically as instruments to protect infant industries, to maintain employment or as a way to deal with balance of payments pressures, even if the costs in terms of long-term inefficiency are high (Rodrik, 1999; Mayda & Rodrik, 2001).

At the other end of the ranking, countries with the lowest level of aggregate trade barriers are mostly small, open and highly integrated into global markets. Several advanced economies and some small states in the islands have very low index values, indicative of a policy orientation that has at its core openness, exports, and high participation in international networks of trade. This result is in line with the theoretical and empirical literature that indicates that the smaller the economy, not being able to depend on large domestic markets, the larger the benefit of openness, and thus the more liberal their trade regimes should be (Frankel & Romer, 1999; Sachs & Warner, 1995; and Sachs, 2001). The low levels of barriers seen for many European economies and highly developed economies are also a consequence of sustained policies towards multilateral trade rules, both regional integration agreements and institutionalised trade liberalisation frameworks. These findings support the view that a long-term orientation to openness is intimately linked to increased productivity and performance in exports and a higher level of long term growth, especially in the context of stable macroeconomic policies and credible institutions (Edwards, 1998; Fischer, 1993).

The middle segment of the ranking is filled with countries showing moderate levels of trade barriers (many of these are middle-income economies pursuing mixed approaches to trade). These nations appear to achieve a balance between a modest amount of protectionism and a partial opening up. In fact, this is often the form taken by transition states. In many cases of such trade regimes, there is a neat fit with both export promotion and a managed import barrier in industry strategic policy. And both come to stay with relief from market grip, nor the prospect that it will persist in only some industries for some time in the future. In addition, historical and comparative study implies that such selectively open economies have been used by nations which sought to acquire domestic skills but gradually integrate into world markets (Amsden, 2000). However, the large spread of rankings within this group indicates a lot of variation in how effective and coherent such strategies are across countries, depending on the quality of governance, the credibility of the policies and exposure to international disciplines.

The existence of multiple resource economies and least developed nations within the top rankings for trade barriers reaffirms the role of structural features for outcomes of trade policies. Economies with large exporters of primary commodities or narrow export bases may use an increase in trade restrictions as a way to stabilise the domestic market or secure fiscal revenues, especially in economies where other means of taxing trade instruments are weak. This observation can be consistent with the empirical evidence of an association between trade policy restrictiveness and fiscal dependence on trade taxes and low administrative capacity (Gylfason, 1999). At the same time, the high trade barriers encountered by low-income economies are a source of growing concern in the sense that they are liable to slow down growth and reduce the prospects for their participation in global value chains. A vast body of research demonstrates how restrictive trade regimes actually hurt export

diversification and access to intermediate inputs, stunting the prospects for long-term development (Dollar & Kraay, 2001; Winters et al., 2002).

As shown in Table 1, overall these data lend powerful support to the central thesis of this article, that global trade barriers are the product of an intricate interaction of forces behind economic size, development stage, political economy and institutional factors. The major cross- country variation which the index of aggregate trade barrier is designed to reflect shows that, despite decades of multilateral trade liberalisation efforts, the frontiers of trade policy are still far from homogeneous in practice. These results are in line with gravity and cross-sectional analyses that show that national policy choices continue to exercise a significant impact on trade outcomes even in an age of globalisation (Clark & Tavares, 2000; Rodriguez & Rodrik, 1999). The results, therefore, highlight the importance of implementing comprehensive measures when examining trade barriers across international markets, as these reveal much richer information than simply using single policy measures, and offer the potential for more meaningful cross-country comparisons.

Table 1: Aggregate Trade Barriers Indices and Ranking

Country	Aggregate TRB Index	Rank	Country	Aggregate TRB Index	Rank
Albania	9.11	63	Kenya	15.57	13
Algeria	17.81	7	Korea	7.91	75
Antigua	8.15	72	Lao PDR	8.01	74
Armenia	2.59	114	Latvia	2.95	113
Australia	3.59	109	Lebanon	5.04	99
Bahamas	0.47	118	Libya	14.12	26
Bahrain	6.61	87	Lithuania	2.97	112
Bangladesh	17.48	8	Madagascar	5.87	96
Barbados	9.89	56	Malawi	11.01	40
Belarus	10.65	42	Malaysia	7.57	79
Belize	8.8	66	Maldives	16.69	9
Bermuda	10.24	46	Mali	10.24	50
Benin	14.58	25	Malta	6.38	90
Bhutan	12.72	31	Mauritania	9.28	59
Bolivia	8.53	68	Mauritius	21.15	5
Bosnia and Herz.	5.31	98	Mexico	14.64	24
Brunei	1.83	117	Moldova	4.31	102
Bulgaria	10.43	45	Morocco	23.43	3
Burkina Faso	10.24	47	Mozambique	11.4	39
Cameroon	14.95	16	New Zealand	2.3	115
Canada	3.85	107	Nicaragua	4.11	105
Central African Rep	14.95	17	Niger	10.24	51
Chad	14.95	18	Norway	2.1	116
Chile	7.08	83	Oman	4.23	104
China	6.72	84	Pakistan	16.56	11
China (Taiwan)	13.16	29	Panama	6.7	86
Colombia	10.47	44	Papua New Guinea	15.53	14
Congo Rep.	14.95	19	Paraguay	10.91	41
Costa Rica	4.75	101	Peru	11.76	36
Cote d'Ivoire	10.24	48	Philippines	6.29	92
Croatia	9.07	65	Poland	10.16	55
Cuba	9.13	61	Romania	13.99	27
Czech Rep	4.87	100	Russia	9.71	57

Dominica	8.13	73	Rwanda	8.44	69
Dominican Rep	14.65	23	Saudi Arabia	10.22	54
Ecuador	11.74	37	Senegal	10.24	52
Egypt	16.59	10	Seychelles	20.88	6
El Salvador	6.1	93	Slovenia	8.31	71
Equatorial Guinea	14.95	20	Solomon Islands	24.73	2
Estonia	0.06	119	South Africa	6.72	85
Ethiopia	15.33	15	Sri Lanka	7.88	76
EU	3.91	106	St. Kitts Nevis	7.78	78
FYR Macedonia	11.94	34	Sudan	4.24	103
Gabon	14.95	21	Thailand	14.92	22
Georgia	9.22	60	Togo	10.24	53
Ghana	12.01	33	Trinidad & Tobago	6.46	88
Guatemala	5.78	97	Tunisia	23.15	4
Guinea-Bissau	10.24	49	Turkey	8.61	67
Guyana	9.13	62	U. Rep. Of Tanzania	13.65	28
Honduras	5.94	94	Uganda	7.85	77
Hungary	9.37	58	Ukrainian	7.34	81
Iceland	2.99	111	Uruguay	11.74	38
India	25.42	1	USA	3.35	110
Indonesia	7.13	82	Uzbekistan	9.1	64
Iran	6.36	91	Venezuela	10.63	43
Israel	6.4	89	Vietnam	12.93	30
Jamaica	5.93	95	Zambia	11.9	35
Japan	3.84	108	Zimbabwe	15.62	12

4. ANALYSIS OF GEOGRAPHICAL LOCATION AND TRADE BARRIERS

Whether the geographical location of countries determines their trade restrictions with other economies is an important empirical question in international trade analysis. Evidence from the gravity model literature shows that physical distance between trading partners has a decisive role to play in identifying bilateral trading flows. Seminal works by Clarke and Tavares (2000), Frankel and Romer (1999), and Soloaga and Winters (1997) have found that longer geographic distance is generally linked to lower volumes of trade because of higher transportation costs, information frictions and logistical barriers. Despite the massive use of gravity models to account for trade volumes, little direct evidence is available so far in the literature on the relationship between geographical distance and the intensity of trade barriers themselves. Addressing this gap, the present study examines the relationship between the barriers to trade of countries and their geographical separation, thus developing the gravity framework beyond the trade volumes to include trade policy restrictiveness (Clarke & Tavares, 2000; Frankel & Romer, 1999; Soloaga & Winters, 1997; Anderson & van Wincoop, 2003; Head & Mayer, 2014).

In order to operationalise geographical differences, the locations of countries are quantified using a form of weighted distance. Following the methodology put forward by Razzaque (2002), weighted distances are created by assigning weights according to the import share, which lends the relative importance of the major trading partners. Specifically, import levels for the year 1997 are used to calculate weights, and then the 10 largest importing countries are determined. The weight assigned to the United States is 0.29, to Germany 0.15, Japan 0.11, France and the United Kingdom 0.09 each, Italy 0.06, Canada, Hong Kong and the Netherlands 0.055 each, and Belgium 0.04. Using these weights, the geographical distances of all countries are computed against the major importers, thus creating a composite measure of weighted distance. This approach enables to represent more accurately the geography of the economy by giving importance to distance to major trading partners as opposed to just to bilateral distance measures on the trade barriers across countries, which in turn generates a better empirical evaluation of the role of location on trade barriers between countries (Razzaque, 2002; Disdier and Head, 2008; Head and Mayer, 2014).

5. ANALYSIS OF CROSS-COUNTRY TRADE BARRIERS USING A MULTIVARIATE MODEL

Variations in the index of trade barriers across countries can be explained to some extent by the underlying structural characteristics, as was reflected by the correlations between bi-variates of structural characteristics and the estimated trade barriers. However, the size and direction of these relationships vary substantially from one country and sector to another. While these kinds of pairwise analyses help provide tentative insights, they are far from adequate for providing cross-country explanations of trade barriers in a comprehensive way. The sure-fire limitation of bivariate exercises is that they neglect the simultaneous influence of more than one determinant, and are thus susceptible to omitted-variable bias. Moreover, the implicit assumption of the relationship between two variables holding while all other factors are held constant is not a material reality, at least in the context of international trade policy, in which economic, institutional, and geographic factors closely interact (Wooldridge, 2010; Anderson & Neary, 2005; Kee et al., 2009). This approach enables the consideration of a number of explanatory variables together, thus minimising the problems with bias from factors not included, and giving a more realistic picture of mechanisms that influence the outcomes of trade policies. All previously identified structural characteristics are brought into the model simultaneously, making it possible to evaluate the relative significance of the diverse characteristics while controlling for confounding influences. By using a multivariate specification, the analysis increases the inferential accuracy and the robustness of the cross-country comparison, which is in line with best practices in empirical trade research (Baltagi, 2013; Greene, 2018; Egger et al., 2018).

6. ANALYSIS OF TRADE BARRIERS AT A DISAGGREGATED LEVEL: A CASE STUDY OF DEVELOPING COUNTRIES

The resulting ranking in this study was based on a consolidated trade barrier index; however, it is well known in trade literature that such aggregate measures do not necessarily give an adequate picture of the heterogeneity of trade barriers that are experienced across products, sectors, and countries. While composite indices are useful in summarising complex information and facilitating broad comparisons, the use of a single summed measure has the disadvantage that important sector-specific variations in tariff protection are masked. Different commodity groups tend to experience very different levels of restrictiveness of trade because of variations in the objectives of industrial policy, strategic consideration of trade, and historical patterns of protection. As a result, an aggregate index may give only a partial or incomplete picture of the actual trade barriers and will give an impression that there is no area where protection is particularly high or unusually low in a particular sector. To overcome these limitations and promote the precision of analyses, the study calculates trade barrier indices on all 130 nations at the two-digit level of the Harmonised System. This disaggregated approach means that the assessment of the tariff protection can be more detailed and accurate, as there is an explicit consideration of differences between groups of commodities as opposed to using economy-wide averages. By looking at trade barriers at the two-digit Harmonised System classification, the analysis picks up meaningful differences between broad product classifications, whilst at the same time ensuring comparability across countries.

This level of disaggregation can balance between the amount of analytical depth and the existence of data, and is therefore perfect for cross-country comparative studies of trade policy. As a result, this study creates a full set of trade barriers indices for 130 countries, at the two-digit Harmonised System level, allowing systematic comparisons between countries and sectors, where there might be room for future improvements to these measurements and within each. This approach conforms to standby methods in the trade literature, that is, it emphasises product-level analysis in determining trade restrictions (Kee et al., 2009; Anderson & Neary, 2005; Feenstra, 2016). For the treatment plan of the patient, please see Table E. Specifically, the second column gives the calculated trade barrier indices for developing countries at the two-digit harmonised system level. This provides a number that represents how much of different commodity groups, such as garments and chemicals, are elbowing each other as they enter the marketplace. The third column provides rankings of these countries under the global trade barrier system as well as opportunities for comparison with other economies. This ranking offers an idea of the position of the developing countries vis-à-vis the worldwide access to trade barriers and illuminates their trade policy position vis-à-vis trade policy in particular sectors. Such information is much needed for the understanding of the variety of trade regimes among the developing economies and the alignment with international trade norms.

Disaggregated rankings of this nature are quite informative because they show patterns about the sectors which aggregated indices do not detect. These are useful in determining commodity groups with which developing countries have relatively high levels of trade protection, to what may be efforts to protect domestic industries, encourage industrialisation, or even to raise money for the national government in the form of fiscal revenues. While the rankings point to areas where tariffs protect less than others, they can also measure openness or readiness for global value chain integration. As a result, households in these communities are more likely to devote their income to food consumption than to expenditures for home improvements or other household maintenance. Replacing the stapler reversed some of these concerns. Obviously, different strategies are called for in order to redress these discrepancies between income and consumption and housing maintenance needs. This is the merit of separating from sector-specific outcomes this kind of analysis, and it brings important lessons for the structure of trade policy as well as what strategic priorities may be embodied in different tariff regimes. It also shows a few signs of deterioration when put into practice, resulting instead in excellent performance across almost all of those fields: COU data from 1990 for 120 emerging market countries (41 per cent annually on average, compared with 21 per cent growth in real gross domestic product). In contrast, anecdotal evidence of a similar degree allows for more nuanced policy evaluation by

indicating areas where trade barriers may violate international benchmarks or centre reform activity so as to enhance competitiveness and secure entrance to markets revised 2012). Overall, by taking a more disaggregated approach in this research, a solid-state description of trade restrictiveness is added to the decomposed number average. It provides a fuller picture regarding where trade barriers lie, both within and across sectors and countries, making for findings which are more useful to policy makers, researchers and international organisations. By bringing together cross-country comparability with sector-specific detail, the analysis is part of a more comprehensive assessment of the structure of trade policy and its implications for economic integration and development.

7. CONCLUSION

Based on an analysis of trade barriers on an international scale, this paper has set out an elaborate framework for evaluating the restrictiveness of trade in a large sample of countries through quantitative measures. Measures at various levels of disaggregation reflect diverse trade policies; trade levels are often obscured when gross trade indices are used. In this way, it becomes possible to understand even more deeply the structural features of trade openness at the country-level: the differences between products and countries. The results show that countries at different economic/social levels manifest significant differences in the pattern of trade barriers. While countries with similar economic structures may be found to be close in terms of trade restrictiveness, others are characterised by their relatively easygoing trade regimes, very different from one another and still others are virtually indifferent or more restrictive. These contrasts suggest that openness to trade is not determined simply by geographic location and stage of development, but rather heavily influenced by domestic policies and institutional arrangements. The analysis suggests that trade restriction indices are fairly close to their underlying structure. Composition of the population, educational attainment of society, income and general level of economic development. Departures in these variables play an important role in shaping how restrictive or liberal a country's trade policy is often seen. One major contribution of this work lies in its portrayal of different levels of trade barriers at the product level. The findings suggest that a single aggregate figure cannot explain trade restrictiveness at the country level. Rather, trade barriers differ significantly as one moves from one type of product to another, reflecting different priorities within sectors, types of industrial protection and even national objectives. This result indicates that national trade policies may be stable at an aggregate level while being quite different in individual sectors of the economy. Therefore, a country's actual trade stance may be incomplete or even misleading if only overall indices are used. It is shown further that a fairly stable index of national trade does not mean an unpredictable, erratic trade policy. Instead, such stability may well be rooted in deliberate policy design that attempts to cameral balance between opening up and partially shielding industries of strategic importance. This distinction is especially relevant for developing countries, where trade policies are often aimed at boosting domestic industries even as they try to integrate with foreign markets more.

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