7: On the Economics of Trade Agreements: Who Gains and Who Loses?

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Bilateral and regional free trade agreements have proliferated around the world in recent decades, with New Zealand jumping onto the FTA bandwagon as early as 1983 with the establishment of the Closer Economic Relations (CER) agreement with Australia. According to the Ministry of Foreign Affairs and Trade, New Zealand has successfully enforced nine trade agreements with sixteen WTO members, with more under negotiations.[62]

It is a well-known fact from the economics literature that trade liberalisation generates efficiency and higher overall welfare for any country, big or small, developed or developing.[63] Some of the most common arguments in favour of trade liberalisation is that it creates opportunities for specialisation in production of an entire good or service or a part of it, thereby improving economic efficiency, and creates opportunities for competition, product diversification and innovation. However, it is also a fact that such agreements, whether negotiated on a bilateral or regional basis does not benefit every individual in the society, especially those in their capacity as import-competing producers.[64]

Traditional classical and neoclassical country-based trade theories have produced important findings for adverse impacts of trade liberalisation on income distribution. However, recent firm-based trade theories incorporating intra-industry trade and firm heterogeneity also confirm that trade results in adjustments within sectors so that only large and more productive firms within a sector become successful in exporting at the expense of smaller, less productive firms.[65] This reallocation of economic activity across firms within industries raises aggregate productivity and total exports, and has a positive impact on increasing real wages for exporting and more productive firms, with increased labour demand in that sector. However, post-trade liberalisation, intra-industry resource re-allocation can lead to exit of those firms whose productivity is lower than the others.

[62] See Ministry of Foreign Affairs and Trade. (n.d.). *Free trade agreements in force.* Retrieved from https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force/

[63] See Krugman, P. R., Obstfeld, M., & Melitz, M. J. (2015). *International economics: Theory & policy* (10th ed.). Essex, England: Pearson.

[64] From the New Zealand perspective, import competing producers would be a group of producers in the country that are producing goods or services in the domestic market, that compete directly with imports from Australia, China or other trading partners of New Zealand.

[65] Krugman, P. R. (1979). Increasing returns, monopolistic competition, and international trade. *Journal of International Economics*, *9*(4), 469-479. Melitz, M. J. (2003). The impact of trade on intra-industry reallocations and aggregate industry productivity. *Econometrica*, *71*(6), 1695-1725.

According to firm-based trade theories, three groups of firms are likely to exist post the trade liberalisation process through free trade agreements. The first group would consist of low productivity import-competing firms, some of whom would exit the industry due to increased competition as a result of free trade agreements, and thereby cease to operate. The second set of firms with intermediate level of productivity serves both domestic and export markets, and are more likely to generate favourable labour market outcomes in terms of increased real wages and employment. The third group of most productive firms, in addition to exporting and serving domestic market through local sales, would access foreign markets through foreign direct investment (FDI), and are more likely to be larger relative to domestic, non-exporting firms.[66]

Theoretical evidence broadly suggests gains for the exporting industry due to greater international market access, although possible adverse impacts are observed on wages and employment in the import competing industry due to increased competition. However, empirical findings are often based on micro-level evidence of firm data. There is an interplay of factors that defines the complex relationship between trade liberalisation and labour market impacts, which includes the depth and scope of trade agreements negotiated, relative price effects, market structure, efficiency of capital markets, global engagement in the value chain at a firm-level, informality in the labour force, and the quality of laws and regulations governing them.

A straightforward answer to who gains and who loses from trade liberalisation through trade agreements in a country therefore remains elusive. The picture is made more complex with countries entering into multiple trade agreements, often at times with the same nations, that are dissimilar in terms of membership, coverage, rules and commitments.

This article therefore revisits the important question of who gains and who loses in trade liberalisation through trade agreements - from a New Zealand perspective. The rest of the article is organised as follows. I first analyse the welfare effects of trade agreements, and attempt to revisit the vital yet controversial question of who gains and who loses in their presence. I then analyse the policy implications and offers some concluding remarks.

[66] See Helpman, E., Melitz, M. J., & Yeaple, S. R. (2004). Export versus FDI with heterogeneous firms. *The American Economic Review, 94*(1), 300-316. Retrieved from http://www.jstor.org/stable/3592780

Who gains and who loses from trade agreements?

The need to balance the globalisation challenges and the domestic interests in the post-cold war era fostered a trend for greater economic cooperation through free trade agreements, also known as Regional Trading Agreements (RTA). This resonated as a wave of 'new regionalism' among the Asia-Pacific economies over the last two decades.[67] With the breakdown of multilateral trade talks through the World Trade Organisation, all of its 151 member countries are now members to at least one such FTA/RTA.

Free trade agreements are legal agreements wherein members agree to promote and facilitate trade and economic cooperation among themselves. There is no legal requirement to cover all goods traded between the member countries in a free trade agreement to begin with, and member countries are free to discriminate against non-members with respect to trade policy. This would imply that since New Zealand and China have a working bilateral free trade agreement, both countries are free to implement separate trade policies for non-members which do not have an FTA with either of them, such as India.

In New Zealand, MFAT defines trade agreements as a 'set of rules for how countries treat each other when it comes to doing business together—importing and exporting goods or services and investing.'[68]

The primary aim of free trade agreements was once to eliminate or reduce tariff barriers on goods imported and exported, but recent FTAs address a range of issues on other aspects of international trade restrictions that go beyond trade barriers at the border. These include simplification of customs procedures, removal or reduction of restrictions related on trade in commercial services and investment, as well as regulatory measures pertaining to changes in labour laws, environmental regulations, intellectual property, competition policy and government procurement. As these so-called comprehensive economic partnership agreements (CEPs) are not negotiated under a common framework, they vary from each other in terms of their issues covered, depth of the agreements, implementation deadlines and forms of negotiation. Differences in levels of development dictate trade policy priorities for members.

[67] As of 31 January 2014, 377 of some 583 notified RTAs received by the GATT/WTO (counting goods, services and accessions separately) were in force. 315 RTAs were in force till date, with 144 of these proliferating just over the past decade of 2007-2017.

[68] New Zealand's oldest free trade agreement has been the Australia-New Zealand Closer Economic Relations (ANZCERTA), effective since 1983. However, post-2001, with the failure of the multilateral trade talks at the WTO, New Zealand has enforced nine trade agreements, seven of which have been bilateral in nature involving Singapore, Thailand, China, Malaysia, Hong Kong, Chinese Taipei and Korea respectively. The two regional agreements involving multiple membership are the ASEAN-Australia-NZ FTA (AANZFTA) comprising of 12 members and the P-4 agreement. New Zealand's most recently signed regional trade agreement is the PACER Plus agreement which was signed in Nuku'alofa in Tonga on 14 June 2017 by Australia, New Zealand and eight Pacific island countries – Cook Islands, Kiribati, Nauru, Niue, Samoa, Solomon Islands, Tonga and Tuvalu. See Ministry of Foreign Affairs and Trade. (n.d.). *PACER plus full text.* Retrieved from https://www.mfat.govt.nz/en/trade/free-trade-agreements/agreements-under-negotiation/pacer/pacer-plus-full-text/

The implications of trade policy interventions in a country differ on whether the country is 'small' or 'large' in the international market.

A 'small' country, by definition is the one where changes in its domestic market do not alter the international price of the commodity. This implies that the country acts as a 'price-taker' in the international market. In the free trade agreement context, if there is an existing tariff, then the small country bears the entire incidence of the tariff, with net welfare losses that equal the inefficiencies from overproduction and under-consumption caused by the price distortions resulting from the tariff.

In contrast, if the country is large in the world market – for example, the United States – then it is able to generate a terms of trade gain through protectionist tariffs by changing prices for goods in the world market that override these efficiency losses. This implies that, theoretically, there is an optimum tariff for a large country that justifies protectionism and the continuation of beggar-thy-neighbour policies, as long as it does not invite retaliation.

Since New Zealand is a small open economy that cannot influence its terms of trade, and that acts as a price-taker in the international market, the cost of protectionism is high for New Zealand. Theoretically, its optimum tariff is zero.

When New Zealand enters into a free trade agreement, reduction of tariffs and non-tariff barriers among member countries are likely to have price effects in its goods market, which in turn have an impact on output, employment and wages in the affected industries. From the exporters' perspective, as market access improves, output and employment in exporting industries should expand due to free trade agreements, thereby increasing wages. However, from the perspective of domestic producers in New Zealand who face cheaper import competition, lower tariffs or non-tariff barriers increase the prospect of downsizing, restructuring or exit, which leads to unemployment and/or reductions in wages, especially if these companies are not involved in exporting or importing intermediate inputs. It is therefore clear that trade agreements will generate winners and losers. What might then be the overall welfare effect of these trade agreements for New Zealand?

The notion of *trade creation* and *trade diversion*, terms coined by Viner, summarise these effects.[69] Trade creation through an FTA occurs when consumption shifts from a high-cost producer to a low-cost producer because of the agreement. As an example, if we assume that China is the most efficient producer of garments, then, after arranging a free trade agreement, is possible to import garments from China into New Zealand without paying the tariff. This will lead to an efficiency gain for New Zealand consumers, and translate into positive welfare gains.

[69] Viner J. (1950). *The customs union issue.* New York, NY: Carnegie Endowment for International Peace.

On the contrary, trade diversion is more likely to occur when a hitherto efficient non-member producer of goods or services loses out to inefficient member producers due to creation of a free trade agreement. As an example, let's assume that China is the most efficient producer of garments, but there is no FTA between New Zealand and China. Instead, a new free trade agreement comes into force between New Zealand and Vietnam, a more high cost garment producer compared to China. In this situation, some garment imports into New Zealand could be diverted toward Vietnam from China as a result of tariff elimination in this free trade agreement. In that sense, it could be a potential net welfare loss for New Zealand, especially if the revenue loss from eliminating tariffs with Vietnam for garments is greater than the efficiency gains from the now diverted cheaper imports that were coming in from China.

Given that New Zealand now has nine working free trade agreements, it is evident that these FTAs may have some import markets in which trade creation would occur and other markets in which trade diversion would occur. An economist would say that the net effects of all New Zealand's free trade agreements would be welfare improving if, summing up the effects across markets and across countries, they were to lead to more trade creation than trade diversion. There is however, no recent research to confirm that all of these free trade agreements have been net trade creating.

Even if there is a net trade creation, it is important to emphasise here that all market access under FTAs are subject to compliance of the rules of origin (ROOs).[70] These determine which goods will enjoy preferential tariffs among free trade agreement members. Indeed, restrictive and multiple ROOs across different trade agreements can have the equivalent effect of a tariff on imported intermediate inputs and potentially adverse effects on trade flows. The result is a disguised protectionism tool (Krishna, 2005, Auger et.al, 2005), particularly in the manufacturing sector which involves global value chains. Further, multiple and restrictive ROOs increase transactions costs of trade by imposing additional administrative costs on exporters that offset the bilateral trade creation, and also increase trade diversion with non-members by inducing firms to switch suppliers in order to meet the rules of origin. Free trade agreements change the relative price of imports from member countries vis-a-vis non-members due to preferential tariff reductions or eliminations. This provides incentives for firms to reduce their purchases of inputs from non-FTA member countries and switch their imported input suppliers in favour of member nation firms. They are also therefore more likely to affect small countries such as New Zealand since they are more dependent on imported intermediate goods. Estevadeordal and Suominen argue that restrictive and selective ROOs in final goods increase trade among intermediates in the short-run.[71] Over the long-term, although

[70] For manufactured goods, ROOs comprise three types: (i) a change in tariff classification rule defined at a detailed harmonised system level; (ii) a local (or regional) value content rule, which requires a product to satisfy a minimum local (or regional) value in the country (or region) of a free trade agreement; and (iii) a specific process rule, which requires a specific production process for an item (See Estevadeordal and Suominen, 2006).

[71] Estevadeordal, A., & K. Suominen. (2006). Mapping and measuring rules of origin around the world. In O. Cadot, A. Estevadeordal, A. Suwa-Eisenmann, & T. Verdier (Eds.), *The origin of goods: Rules of origin in regional trade agreements* (pp. 69-113). Oxford, England: Oxford University Press.

exporters may learn to apply ROOs over time, these regimes can also incentivise firms to circumvent the ROOs and go for foreign investment in the partner country without utilising free trade agreement provisions at all. Kawai and Wiganaraja, drawing from a survey of ROO perceptions among firms across Asia, argue that larger firms tend to have more negative perceptions of multiple ROOs than small and medium enterprises (SMEs).[72]

Nevertheless, as trade agreements reduce bilateral import tariffs or taxes, and reduce both cross-border and behind-the border price distortions caused by interventions, consumers, would be able to buy a greater variety of cheaper imported goods and services. Further, if trade agreements guarantee improved health and safety standards by requiring its importing country free trade agreement partners to adhere to a common regulatory framework for trade of goods and services, it would also indirectly benefit New Zealand consumers, as long as they do not substantially increase transaction costs of trade in the specific industries.

The effects of trade agreements on the labour market, and on producers, is however, more complex and existing research is yet inconclusive, as argued earlier. From the exporters' perspectives, free trade agreements certainly generate gains in terms of opportunities to expand output, increase employment and wages, and become more productive and efficient. However, the picture is clearly gloomy for low productivity firms, especially if they are import competing and not involved in exporting products and/or using imported intermediate inputs in production. As an example, Amiti and Davis's firm-level study on Indonesia estimates that a 10 per cent decline in output tariffs decreases wages by 3 per cent in firms oriented exclusively toward the domestic economy, but increases wages by up to 3 per cent in exporting firms.[73]

Empirical evidence also points to increases in the skill premium on wage inequality with increasing trade liberalisation, owing more to skill-biased technical change (SBTC) due to rapid globalisation.[74] Indeed, there is a valid argument that rapid technological changes in the labour market due to globalisation has a stronger adverse impact on the labour market than trade if skill formation does not catch up with the pace of new technology.[75] This implies that while trade may be one of the causal factors that creates job losses and income inequality in the short-run, SBTC and labour market rigidities play an important role in worsening it over the long-run.

[72] Kawai, M., & Wignaraja, G. (Eds.). (2011). *Asia's free trade agreements: How is business responding?* Edward Elgar Publishing. doi: http://dx.doi.org/10.4337/9780857930415
[73] Amiti, M., & Davis, D. R. (2012). Trade, firms, and wages: Theory and evidence. *The Review of economic studies*, 79(1), 1-36.
[74] See Goldberg, P. K., & Pavcnik, N. (2007). *Distributional effects of globalization in developing countries.* NBER Working paper 12885. Cambridge, MA: National Bureau of Economic Research. doi: 10.3386/w12885
[75] For the United States context, see Garrett, G. (2017, February 1). Do trade agreements lead to income inequality? *Wharton - University of Pennsylvania*. Retrieved from http://knowledge.wharton.upenn.edu/article/do-trade-agreements-lead-to-income-inequality/

Policy implications and concluding remarks

As New Zealand is a small open economy, with more than half of its national income generated from international trade, it is inevitable that bilateral and regional trade agreements will continue to form an integral part of New Zealand's trade policy in the near future. Not surprisingly, the recently released Trade Agenda 2030 has set a target of 90 per cent of New Zealand's goods exports to be covered by free trade agreements by 2030.[76]

This has two implications. First, everyone in New Zealand in their capacity as consumers, as well as producers in the export market, stand to benefit from the market access offered to them in these trade deals. However, this would require that New Zealand's trading partners implement these agreements in their entirety and that businesses utilise them for exports of goods and services and investments abroad. Second, these trade agreements will also require New Zealand to likewise provide preferential market access to its partners, which will put pressure on import-competing producers of goods and services, as well as domestic investors in the country to be more competitive, potentially resulting in job losses.[77] To summarise, New Zealand's trade agreements are more likely to generate winners who will be dispersed (consumers), while the losses are more likely to be concentrated (employers who lose jobs due to import competition). Therefore, political pressure for protection is inevitable with more and more FTAs coming on board.

As economists would argue, since New Zealand stands to gain overall from trade liberalisation, a policy tool that enables the government to redistribute the gains from trade more evenly across society would be essential to ensure that trade policy works for the benefit of everyone, and mitigates any adverse effects on income inequality.

What would such a policy tool comprise of? Urata and Narjoko offer some interesting insights, confirming that firm-level and country-specific evidence of the impacts of trade liberalisation on income inequality is mixed.[78] Their studies consider two policy tools. First, providing social safety nets for workers adversely affected by trade liberalisation through Free trade agreements could be a short-term option.[79] Second, labour market regulations that limit the mobility of labour increases income inequality with trade liberalisation. It is important to ensure that displaced workers with improved skills can find appropriate jobs in a post-FTA scenario.

[76] For details on the future direction of New Zealand's trade policy see Ministry of Foreign Affairs and Trade. (n.d.). *Trade agenda 2030*. Retrieved from https://www.mfat.govt.nz/en/trade/nz-trade-policy/trade-agenda-2030.

[77] Recent free trade agreements that include beyond-the-border barriers and regulatory measures related to intellectual property, competition policy, dispute settlement etc. aim to create a level playing field for both New Zealand businesses that venture overseas as well as for overseas businesses who sell their goods, services, or invest in New Zealand.

[78] Urata, S., & Narjoko, D. A. (2017). *International trade and inequality.* ADBI working paper no. 675. Tokyo: Asian Development Bank Institute. Retrieved June 12, 2017, from https://www.adb.org/sites/default/files/publication/230591/adbi-wp675.pdf

[79] A good example would be that of the Trade Adjustment Assistance (TAA) program in the United States. See United States Department of Labor. (2012). *What is trade adjustment assistance?* Retrieved from https://www.doleta.gov/tradeact/factsheet.cfm

In the New Zealand context, these policy tools could include provision of education and training for workers displaced by import-competing imports. This makes sense because there is evidence that trade agreements allow technology transfer and increase the demand for skilled workers, due to the SBTC effect. The OECD's Economic Survey of New Zealand 2017 has noted with concern that while the economy has high levels of skills in literacy and information technology, there exists high levels of mismatch between qualifications, skills and jobs.[80] This has the potential to exacerbate income inequality, amid increasing demand for high skilled workers and concomitant trade liberalisation through free trade agreements. A notable point of significance in this OECD report is the need to enhance educational advancement in mathematics for new entrants to the future labour force in New Zealand, as increasing automation and high skilled jobs in engineering and computing make these skills essential for improving labour productivity, with a direct bearing on growth.

Clearly, improving the quality of education and upgrading skills in the labour force through human resource development, in a more flexible labour market is a key to reducing income inequality, whether associated directly or indirectly with trade liberalisation, and to provide a net positive welfare impact. The role of the government to ensure that trade agreements benefit the entire economy, working for everyone who contributes to its growth, is crucial. This suggests that an improvement on the status quo concerning trade and labour market policies are required. While the Trade Agenda 2030 is a step in that direction, appropriate labour market policies will have to devised to ensure the two are in tandem.

[80] See Organisation for Economic Co-operation and Development. (2017). *Economic survey of New Zealand 2017*. Retrieved from http://www.oecd.org/newzealand/economic-survey-new-zealand.htm

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