This section reviews the literature on the theoretical and empirical effects of PTAs on exports and situates the analysis in the relevant field of research.

**Theoretical Framework**

**Comparative advantage and trade creation and diversion**

Traditional trade theory emphasizes trade creation (allowing cheaper products from PTA members to substitute for more expensive domestic products) and trade diversion (substituting products from non-PTA members that were cheaper before the PTA with products from PTA members that are cheaper now due to the PTA reducing tariffs) (Schiff, Winters and Schiff, 2003) and argues that the impact of PTAs depends on the comparative advantage of member countries. In particular, it argues that PTAs magnify the impacts of a country’s comparative advantage, relative to the world and to other member countries signatories of a common PTA. If member countries of a PTA have a comparative advantage on a factor endowment relative to the world, but one country also has a comparative advantage on the same factor endowment relative to the other member countries, the country with the “extreme” advantage will be more vulnerable to trade diversion effects, while countries with “intermediate” advantages will gain from trade creation effects, predicting divergence of trade outcomes, and winners and losers among member countries. (Venables, 2003). This emphasis on the trade creation and trade diversion effects among member countries with significant differences in the comparative advantage of their factor endowments relative to the world and to each other, suggests that, when the country with the “extreme” comparative advantage is a high-income country, relative to a lower-income country with an “intermediate” comparative advantage, the lower-income country should seek a PTA with the other country as it will gain more. On the contrary, if both members are lower-income countries, the country with the “extreme” comparative advantage, should not seek a PTA with the other low-income member country as it will be vulnerable. (Sanguinetti, Siedschlag and Martincus, 2010). This logic can be easily extended to the North-South and South-South types of PTAs, as North countries will reasonably have an “extreme” comparative advantage in skill-intensive goods relative to South countries, while South countries will reasonably have an “extreme” comparative advantage in labour-intensive goods relative to North countries. Furthermore, it is also argued that benefiting from economies of scale through South-South economic integration is more difficult because member countries do not have complementary production and trade structures nor high interpenetration of each other’s markets on intra-industry trade. (Schiff, Winters and Schiff, 2003). Also, South countries can benefit from greater technological diffusion from North-South PTAs as the North countries have higher industrial development as well as investment in research (Schiff and Wang, 2008). Finally, as the trend in manufacturing has been in favour of vertical specialization or value chain fragmentation (Krugman, 1995), North-South PTAs are preferable as developing countries strive to capture a greater portion of the value added. For these arguments, developing countries should therefore be better off entering into North-South rather than South-South agreements.

**Economies of Scale and Input-Output linkages**

In contrast, classical development theory and new trade literature go beyond the static welfare gains from trade creation and diversion effects when analysing the effect of PTAs.

“Preferential trade arrangements between developing countries can lead to industrialization of the region as a whole as a consequence of the effective market enlargement induced by reducing intra-South barriers.” (Puga and Venables, 1998)

Other arguments

* Infant industry development
* Economies of scale
* Decoupling

“Trade can also arise from product differentiation and from economies of scale that reduce costs as production grows. In these circumstances competition between firms is weakened, and consumers lose. International trade then offers an important means of increasing competition by allowing new suppliers to enter markets.” (Schiff, Winters and Schiff, 2003)

Stumbling block vs building block dichotomy

**Discussions on SS PTAs**

“*The trade literature long argued that PTAs can benefit member states through economies of scale and comparative advantage and higher competition (Schiff, 2003). However, these arguments are generally reserved for North–North and South–North but not South–South PTAs. First, it is argued that similar production and trade structures in the South make it more difficult to benefit from economies of scale. Second, given the lower industrial development and research and development activities in the South, greater technology diffusion for the Southern country can be reaped from South–North integration (Schiff and Wang, 2008).3 Third, the more advanced members are argued to be the likely winners in South–South integration, thanks to their higher industrial and institutional development. As a result, lower income Southern countries might be better off entering South– North PTAs. It is also claimed that industries with long term development potential are more likely to move to the bigger and richer members, leading to divergence once the barriers are lowered under South–South PTAs (Puga and Venables, 1997; Schiff, 2003; Venables, 2003). Last but not the least, North–South PTAs are argued to facilitate increasing vertical specialization or value chain fragmentation, what Krugman (1995) referred to as the slicing up of the value added.4*

*In contrast, the classical development theory and new trade literature has a more positive view of South–South PTAs, focusing on their developmental benefits through infant industry development, economies of scale and decoupling rather than on the static welfare gains (from trade creation and diversion) or the ‘stumbling block/ building block’ dichotomy. Myrdal (1956), for example, suggested that regional integration in the South can help developing countries overcome local market size limita- tions during industrialization. Accordingly, given the strongly skill biased structure of output expansion in inter- national trade (Antweiler and Trefler, 2002), increasing market size can help developing countries enjoy scale effects and increase the skill content of their exports while reducing the cost of intermediaries, which in return may help stimulate export penetration into Northern mar- kets in industrial goods (Fugazza and Robert-Nicoud, 2006). Likewise, Lewis (1980), and more recently UNCTAD (2005) and World Bank (2008), also pointed out that South–South trade can reduce the growth depen- dence of the South on Northern growth, leading perhaps to decoupling from Northern business cycles (thus helping the recovery from current global downturn (ESCAP, 2009)). Furthermore, the structure of South–South trade is argued to have dynamic and long term benefits for developing countries because of its comparatively higher technology and human capital intensive factor content (Amsden, 1987; Lall et al., 1989; Demir and Dahi, 2011). Besides, similarity in production pattern and resource base may facilitate appropriate technology trans- fer (Amsden, 1980, 1987; UNIDO, 2005; World Bank, 2006).*

*It is also possible that South–North PTAs can yield more benefits to Northern countries than the Southern ones because of asymmetries in bargaining power, nego- tiating capacity and retaliatory capability. Even though these asymmetries are also present between Southern countries, the gap is likely to be smaller.*

*Thrasher and Gallagher (2008), for example, show that South–South PTAs leave the greatest policy space available to ‘deploy effective policy for long-run diversification and develop- ment’ than South–North PTAs. We should also note that structuralist North–South models have long discussed how interactions between countries with asymmetrical economic structures, patterns of specialization, and devel- opment can lead to uneven development (Findlay, 1980; Darity, 1990; Dutt, 1992; and also see the survey articles Findlay, 1984; Dutt, 1989; Darity and Davis, 2005).*

*In addition to the debate above, the effects of PTAs on the structure of trade are of particular importance for long term development and growth. Development economics and the new trade theory provide strong evidence that not all trade is equal and what you export might matter for long term economic performance (Kaldor, 1967; An and Iyigun, 2004; Hausmann et al., 2007). Exports in more technology intensive industries are likely to generate lar- ger spillovers (such as innovation and physical and human capital accumulation) and linkages for development than lower technology and labour intensive ones (Hausman et al., 2007). Earlier on, this point was also raised by Kaldor (1967) in his three growth laws; which stated that there is a strong positive relationship between the growth of manufacturing output and (i) the growth of GDP, (ii) the growth of labour productivity in manufacturing (i.e. the Verdoorn’s law) and (iii) the growth of productivity in nonmanufacturing sectors.*

*Note that the question we raise here is different than the one usually discussed in the literature, which is whether PTAs are trade creating or diverting.5 To the extent that PTAs enhance manufactures exports, we can then start evaluating the success or failure of PTAs according to their potential long term developmental impact. Much of the traditional PTA literature, both theoretical and empiri- cal, is taken up by trade creation versus trade diversion debate. These questions are not unimportant; however, there is reason to question the disproportionate attention still given to the classic Vinerian dichotomy.*

*(...)*

*Second, since North–North, South–North and North–South trade barriers appear to be significantly lower than the ones present in South–South trade (Kowalski and Shepherd, 2006, also see Kee et al., 2009; Medvedev, 2010), it is unlikely that South–South PTAs are trade diverting from the North, which has retrospectively been the main point of contention among trade theorists on the relative costs and benefits of South–South PTAs. In fact, consistent with Mundell (1968)’s assertion that ‘a member’s gain from a free-trade area will be larger, the higher are the initial tariffs of partner countries’, South–South trade barrier reduction is found to generate a significant increase in South–South exports, while no such effect is reported in the case of North–South, South–North or North–North trade (Kowalski and Shepherd, 2006). Besides, there is also some empirical evidence showing that South–South PTAs are no more trade diverting than other PTAs (Cernat, 2001). Third, since higher transportation costs and former colonial linkages with Northern countries (which always appear to be significant in gravity models of trade), in addition to higher trade barriers (Kee et al., 2009), con- tinue to limit South–South trade expansion, PTAs might be seen as a way of compensating for such trade barriers that are lower in South–North, North–South or North– North trade.6 Last but not least, in the case of industrial development, what matters are dynamic not static gains. That is to say, if South–South PTAs are found to enhance industrial development, the long term gains may very well outweigh the static short term losses.*” (Dahi and Demir, 2013)

**Significance of Exports**

**Defining South and North**

**Empirical literature**

“Turning to the empirical work on PTAs, the majority of research reports a significantly positive effect of PTAs on member trade. Cipollina and Salvatici (2010) review 85 papers on the effects of PTAs and find that the mean effect is 0.59 (or an 80% increase in trade), while the median is 0.38 (or a 46% increase in trade). Although the range of coefficient estimates is quite large (–9.01 to 15.41), only 312 out of 1827 coefficient estimates are reported as negative. Nevertheless, despite the diversity of research, there are only few studies that compare heterogeneous effects of PTAs within and between developing and developed countries. Among the few, Medvedev (2010), using a cross sectional analysis, reports that while North–North PTAs are insignificant in stimulating preferential trade, North–South PTAs increase trade by 40% and South– South PTAs increase them by 163%.

Cipollina, M. and Salvatici, L. (2010) Reciprocal trade agreements in gravity models: a meta analysis, Review of International Economics, 18, 63-80.

Medvedev, Denis, Preferential Trade Agreements and Their Role in World Trade (October 1, 2006). World Bank Policy Research Working Paper No. 4038, Available at SSRN: <https://ssrn.com/abstract=938031>”

The empirical work on the structure of trade under PTAs has also been scarce. Sanguinetti et al. (2010) examine the impact of PTAs on South–South manufacturing production patterns in the case of MERCOSUR for the period of 1985–1998 and find that South–South PTAs cause a spatial regional reorganization of production along the lines of internal comparative advantage.

Sanguinetti, P., Siedschlag, I., & Martincus, C. V. (2010). The Impact of South-South Preferential Trade Agreements on Industrial Development: An Empirical Test. Journal of Economic Integration, 25(1), 69–103. <http://www.jstor.org/stable/23000966>

**Stylised facts**

**Ideas:**

Total number of SS, NS and NN PTAs

Share of SS, NS and NN PTAs

Total exports by S and N countries

Share of total exports by S and N countries

Total exports of manufactured by S and N countries

Share of total exports of manufactured by S and N countries

Number of products exported by S and N countries

**References**

Dahi, O.S. and Demir, F. (2013) ‘Preferential trade agreements and manufactured goods exports: does it matter whom you PTA with?’, *Applied Economics*, 45(34), pp. 4754–4772. Available at: https://doi.org/10.1080/00036846.2013.804169.

Krugman, P. (1995) ‘Growing World Trade: Causes and Consequences’, *Brookings Papers on Economic Activity* [Preprint].

Puga, D. and Venables, A.J. (1998) ‘Trading Arrangements and Industrial Development’.

Sanguinetti, P., Siedschlag, I. and Martincus, C.V. (2010) ‘The Impact of South-South Preferential Trade Agreements on Industrial Development: An Empirical Test’, *Journal of Economic Integration*, 25(1), pp. 69–103.

Schiff, M. and Wang, Y. (2008) ‘North-South and South-South Trade-Related Technology Diffusion: How Important Are They in Improving TFP Growth?’, *The Journal of Development Studies*, 44(1), pp. 49–59. Available at: https://doi.org/10.1080/00220380701722282.

Schiff, M.W., Winters, L.A. and Schiff, M. (2003) *Regional Integration And Development*. Washington, UNITED STATES: World Bank Publications. Available at: http://ebookcentral.proquest.com/lib/londonschoolecons/detail.action?docID=3050563 (Accessed: 12 August 2024).

Venables, A.J. (2003) ‘Winners and Losers from Regional Integration Agreements’, *The Economic Journal*, 113(490), pp. 747–761. Available at: https://doi.org/10.1111/1468-0297.t01-1-00155.