

Box 2.2**“Spaghetti bowl effect” of free trade agreements**

In any World Trade Organization (WTO) agreement, one of the fundamental principles is that all members must trade among themselves without discrimination. For instance, all members have to offer each other the most-favoured-nation (MFN) treatment, meaning that a lower tariff rate offered by one member to another must be extended to all other members. Noting the increasing difficulty in negotiating trade agreements that are applicable to all WTO members in recent years, economies around the world have instead turned to forging webs of bilateral or regional free trade agreements (FTAs) as an alternative approach to pursue further trade liberalisation⁽¹⁾. While the rapid proliferation of FTAs (some 340 FTAs have notified the WTO since 2000, as compared to only 75 from 1958 to 1999) has understandably created trading opportunities across borders and thereby economic benefits, there have also been discussions among researchers on the consequence of the crisscrossing of multiple FTAs, which is also known as the “spaghetti bowl effect”⁽²⁾, that could undermine the potential gains of these FTAs.

Multiple and overlapping FTAs increase the transaction costs for international trade mainly because of their differentiated requirements that firms need to fulfill. On one hand, each and every FTA has its unique set of rules of origin (ROOs) to be complied with for the trade to enjoy preferential tariff rates⁽³⁾. However, the extensive global production chains nowadays mean that the manufacturing process of a merchandise could involve value-added activities in many economies along a trade route that is covered by several FTAs, and the differentiated ROOs of each FTA could render the production unable to take full advantage of all the preferential treatments along the production chains. For example, a study found that the ROOs of FTAs in the Americas alone consisted of a dense tangle of over 38 annexes of rules per product and 24 regulatory chapters operating simultaneously in 2007⁽⁴⁾. Such complicated or even restrictive ROOs and technical standards could pose obstacles to firms’ utilisation of these FTAs, as the adoption of intermediate inputs from a FTA signatory by a producer in another signatory might have affected the preferential status of the finished product. The possible hindrance could be showcased with three hypothetical bilateral FTAs between three economies (say, Economies A, B, and C). Assuming there is no provision for cumulation in any of these FTAs⁽⁵⁾, it is possible that even if Economy A merely assembles the intermediate inputs originating from the other two and exports the finished goods back to them, the final product from Economy A may still not be able to enjoy the preferential

-
- (1) The arrangement of FTAs, which allows signatories to grant more favourable treatments to each other than to the other WTO members, is permitted by the WTO as an exception to the MFN treatment principle, so long as such an arrangement observes the conditions stipulated in the relevant provisions of the WTO agreements.
 - (2) The term was first used in the paper by Bhagwati, J.N, (1995), “US Trade Policy: The Infatuation with FTAs”, Columbia University Discussion Paper Series 726, New York: Columbia University.
 - (3) As defined by the WTO, ROOs are the criteria needed to determine the national source of a product. However, there is wide variation in the practice of governments with regard to the ROOs and there is no single set of harmonised rules governing the determination of the country of origin of goods in international commerce.
 - (4) Cornejo, R. and Harris, J.T. (2007), “Convergence in the Rules of Origin Spaghetti Bowl: A Methodological Proposal”, Inter-American Development Bank Working Paper 34.
 - (5) The concept of “cumulation” (or “cumulative rules of origin”) allows the use of intermediate inputs that have obtained originating status in one signatory to be further processed or added to products originating in another signatory as if they had originated in that latter economy, without the finished product losing the benefit of preferential customs tariffs.

Box 2.2 (Cont'd)

treatments if the ROOs are too restrictive⁽⁶⁾.

On the other hand, the differentiated FTAs would also incur additional costs to firms. On top of the various administrative burden (such as certification costs and procedures), a large number of FTAs could also expose or exacerbate conflicting technical standards and requirements, thereby increasing the compliance costs and hindering market access that is in contrary to the original intention of the FTAs. Understandably, the more overlapping the FTAs are, the more complex are the rules, and the more likely the benefits of lower tariffs under the FTAs are offset by the higher compliance costs. In the worst case, firms may even choose not to take advantage of the FTA preferential tariffs when exporting their products to other signatories, leading to a decline in the utilisation of the FTAs.

Moreover, the situation is further complicated by the fact that international trade in modern days has gone beyond trade in goods. Very often, trade in goods is complemented by trade in services, and involves such other regulatory aspects as intellectual property rights, investment, competition, government procurement, and labour and environmental standards. While the FTA negotiations in recent years have increasingly addressed these important areas, they remain the areas that are likely to have larger discrepancies across economies because of the relatively short history of international cooperation. Without reconciliation on the terms and standards across FTAs, these would only add more dimensions of differentiated requirements on international trade, exacerbating the “spaghetti bowl effect”.

In 2011, the Asian Development Bank had conducted a survey study on evaluating the benefits and costs of a selected set of FTAs covering the East Asia⁽⁷⁾, sampling hundreds of firms in six Asian economies⁽⁸⁾. According to the study, while these firms typically reported more benefits than costs from those FTAs, there were 20% of respondents saying that multiple ROOs (i.e. a major aspect of the “spaghetti bowl effect”) did add significantly to their business costs. In particular, a further econometric investigation based the survey data suggested that the larger firms with longer operational history, i.e. those that tend to export to multiple markets and change their business plans in response to FTAs, are more likely to express concerns about business costs of multiple ROOs. Separately, 41% of respondents saw benefits from adopting some harmonised ROOs, particularly among those large firms with presumably more extensive upstream or downstream operations linked up in the region.

(6) For example, if the FTAs signed by Economy A with Economies B and C require a certain minimum ratio of value added taken place in economy A (say, 40%) to the total value of the final product in order to be eligible for the preferential tariff under those FTAs, the assembly process alone in Economy A might probably entail a ratio that is too low (say, 10%) to be eligible.

(7) Kawai, M. and Wignaraja, G. (2011), “Asia’s Free Trade Agreements: How is Business Responding?”, Asian Development Bank and Asian Development Bank Institute.

(8) The six economies refer to Japan, the Mainland China, Korea, Singapore, Thailand and the Philippines. There were 841 firms surveyed, yet the number of respondents to each aspect of the survey might vary somewhat.

Box 2.2 (Cont'd)

In a nutshell, the cost entailed in one single FTA encompassing a number of economies would be much smaller than that in numerous FTAs covering the same set of economies, and therefore more benefits will be generated. As such, the Government has long been a staunch supporter of multilateral trade agreements. To this end, the Government is actively participating in the development of the Free Trade Area of the Asia-Pacific, which if realised would cover most of the economies around the Pacific Rim. Promoting free trade on a multilateral basis and its continual enhancement are particularly important for Hong Kong, given our highly open economy with trade amounting to more than four times of GDP and our role as an important trading node with extensive trading networks covering a large number of economies. The Government will continue to work on these government-to-government platforms, with a view to enhancing Hong Kong's long-term economic growth and development.