

# International trade in the 21st century: the role of non-tariff measures and international certifications

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## Abstract

Non-tariff measures (NTM) leading to increased costs for accessing foreign markets currently represent the main obstacles to international trade. But it would be a mistake to consider all NTMs as barriers to trade introduced with purely protectionist purposes. Non-tariff measures often play a key role in international trade for consumers and for firms. The growing complexity of goods and services has led to an increase in demand for regulations regarding transparency and security on the markets. These regulations tend to increase production costs, and certification processes can be burdensome for companies, especially if duplicated, but this does not necessarily mean that trade is negatively affected by NTMs. In fact, given that standardization and improvement of information can expand markets and lead to an increase in demand for imports, certification and compliance with regulations can foster access to foreign markets.

Still, in order to improve firms' access to foreign markets, agreements, mutual recognition of standards and convergence or recognition in certifications appear fundamental. From this point of view, the European Union is a virtuous example of agreement among its members and in agreements with third countries. In this work we focus on the main NTMs introduced by the EU, to understand their possible effects on trade. After presenting the extent of European NTMs and the role they played in the recent preferential trade agreements, we assess whether they restrict or foster European trade

**Keywords:** trade agreements, mutual recognition, certification, quality.

**JEL codes:** F13, F14, F15.

In the 21st century, international trade is a fundamental driving force for the economy, growing on average at a faster rate than the global GDP. There has been considerable growth in the variety of the trade carried out among countries as well as the number of markets involved ([Amiti and Freund, 2010](#); [Broda and Weinstein, 2006](#)). The complexity of products has risen along with the number of countries playing major roles in global commerce (Piccardi and Tajoli, 2018; Spatafora et al., 2012).

This multiplicity of goods and countries increases the potential benefits deriving from international commerce but it also raises fear concerning the crucial problem of the safety of these goods, and consumers raise questions about their quality and the production methods used, such as GMOs, environmental impact and animal welfare (Beghin et al., 2012). The production processes based on new technologies – often poorly understood or perceived as unsafe – have contributed to the rise in consumer uncertainty, fueled by a growing distrust in science, with evident consequences in regulations (Lewandowsky and Oberauer, 2016; Gauchat, 2012). As a matter of fact, the ever-growing complexity of goods and services has led to more regulations regarding market transparency and safety.

Non-tariff measures (NTM) are of ever-increasing importance in international trade. Regulations and standards play an increasingly larger role in determining the cost of access for firms to foreign markets. The economic literature has shown how trade tariffs constitute the main international trade barrier (Carrer and De Melo, 2011). According to the UNCTAD (2013) non-tariff measures include all policies which are different from the customs duties which affect the costs of international trade. It's a relatively broad definition as it includes both traditional customs policies applicable to quantities rather than prices (for example, by means of quotas) and it also contains national policies which are not necessarily applied to exports which have an effect on commerce. In other terms, they include all economic policy measures which influence the possibility of substituting national or imported products irrespective of the customs requirements. It is a set of measures which, due to their technical characteristics, raise delicate problems of application because these procedures and the administrative activities involved could constitute a discriminatory element amongst producers of different nations.

This is particularly true within international chains of production involving companies located in different countries. Insofar as trust is a crucial factor in global exchanges, quality certification can be considered an important instrument for indicating credible quality level reliability to the market. One of the motives for a country – especially a less developed country – to take on the costs of certification, is the need to fulfill (and signal) reliability and quality requirements, so as to interact and collaborate with the multinationals in the more advanced countries.

Some recent research on the role of certification as a tool of participation of companies in the global value chains (GVC) highlighted a positive effect on productivity (Giovannetti et al., 2015; Del Prete et al., 2017). The data show that businesses involved in the GVC (import-export of intermediate products) in possession of international certification (e.g. certification to the ISO 9000 series) benefit from higher productivity.

Economic analysis enables the calculation of the tariff equivalents of general costs resulting from these measures but it would be wrong to consider all non-tariff measures as being barriers to trade, introduced with purely protectionist intentions (Grundke and Moser, 2019; Rodrik, 2018). As a matter of fact, the expanding literature on non-tariff measures (NTMs) highlights that regulations and standards might be beneficial for international trade as long as they make markets more transparent and address asymmetric information issues, but they may significantly increase the cost to reach a foreign markets especially for smaller firms and when regulations are different across countries (Cadot and Gourdon, 2016).

In order for regulation to be effective in increasing safety and transparency of International commerce without being an unjustified obstacle to it, the multilateral agreements in the WTO include rules on the non-tariff measures and their use, aiming to promote uniformity and simplification amongst countries. The WTO has dealt with potential barriers of a non-tariff nature, prevalently in the field of sanitation and pesticides (SPS), strengthening the existing agreement on technical barriers to trade (Bao and Qiu, 2012).

On a global level the process of harmonization seems to be an arduous one owing to the heterogeneity of preferences and needs among the various markets. This very complexity and the differences referred to above also mean that harmonization is not always possible and perhaps not even desirable. Taking technical barriers as an example: it is evident that the harmonization of standards implies a reduction in transaction costs, but it is also possible that different standards reflect legitimately differing social preferences and conditions of production. In this case the most efficient solution would be mutual recognition of the equivalence of national legislation and this is the approach envisaged by the recent regional agreements. For this reason, the recent trade agreements, the so called “new generation trade agreements” place much emphasis on harmonization of standards across member countries or mutual recognition of those standards. This involves higher production costs but not necessarily a slow-down in trade exchanges, given that standardization and/or improvement of information may lead to higher import demand. In many cases mutual recognition appears to be preferable or easier and quicker to accomplish compared with harmonization, which involves modifying the standards for at least one of the parties. Transparency is also fundamental to avoid disinformation and it therefore follows, for example, that labelling may contribute to correctly informing the consumers, affording them the possibility of making informed choices. It can be difficult for businesses to comply with all the rules. The procedures of evaluation for determining conformity and obtaining certification may involve differential costs owing to delays or the absence of structures and adequate information, as well as the certainty of higher costs required for the evaluation of conformity. Although the attention of the public and of commercial negotiators is attracted by harmonization or the mutual recognition of national regulations, as in the case of recent EU trade agreements (Disdier et al., 2014; Horn et al., 2010), export businesses are (rightly) worried by the necessary procedures and costs of demonstrating product conformity.

We address a specific point related to standards’ harmonization: talking about regulations and standards, barriers might be created by specific small details. A significant barrier might be in place even if standards are mutually recognized among countries but there is no agreement on who is responsible to certify the traded goods’ compliance with such standards. Even if there is an agreement on standards, if the importing country does not recognize the certifications issued by the exporting country’s authorities and agencies, and it requires its own certifications, barriers to trade have not been removed. For an exporting firm, for example the double certification process to enter in a foreign market might be too costly and cumbersome.

As far as the empirical analysis is concerned, the identification strategies relies on the fact that mutual recognition of conformity assessments agreements are introduced for different product-sectors in different years and for different trade partners. Recognition of conformity assessments is often related to mutual recognition or harmonization of the standards. However, it is worth emphasizing that the recognition of conformity assessment plays a role independently from the type of standard (i.e., domestic or foreign) that is certified: our final goal would be to provide a quantitative assessment of this specific impact.

From the political point of view, our results should help to highlight the importance that the process of harmonization in trade agreements covers also the problem of assessing compliance. The mutual recognition of certification bodies and agencies is a more technical problem than the mutual recognition of standards, and it might be less politically controversial than much of the current content of recent trade agreements. Still, it might significantly foster international trade and promote efficiency.

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