

# The Systems of Technical Barriers to Trade of China and Mexico under the Framework of WTO

## LOS SISTEMAS DE BARRERAS TÉCNICAS AL COMERCIO DE CHINA Y MÉXICO EN EL MARCO DE LA OMC

*Juan González García<sup>1</sup>*

*Zhang JuanJuan<sup>2</sup>*

*América Ivonne Zamora Torres<sup>3</sup>*

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### **Abstract**

In 2009, a financial crisis swept the globe and the world economy entered the “Severe Winter Period” causing a significant decline in spite of the international trade or the transitional capital flow. In order to deal with the crisis, all countries issued a series of policies in an attempt to stimulate the economy into its recovery while, at the same time, they implemented a variety of trade measures, among which, Technical Barriers to Trade (TBT) was one of the main ones since it was focused in the protection of domestic economy, one aspect that has become a major obstacle for the recovery of the global economy, and the proposition of submitting the international trade system, whose main

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1. Universidad de Colima, Economy Faculty and Center for Studies and Research on the Pacific Basin. Av. Universidad 333, Las Víboras, 28040, Colima, Colima, México. ORCID <http://orcid.org/0000-0003-1458-8047> Correo electrónico: [jgogar@uclm.mx](mailto:jgogar@uclm.mx) y [juanguan\\_70@hotmail.com](mailto:juanguan_70@hotmail.com)
2. Southwest University of Science and Technology of Sichuan, Lecture of Law School. 59 Qinglong Road, Mianyang, Sichuan, P.R.China 621010. Correo electrónico: [yb57214@connect.umac.mo](mailto:yb57214@connect.umac.mo)
3. Universidad Michoacana de San Nicolás de Hidalgo. Institute of Economic Research and Business Institute of Researchers. Avenida Francisco J. Múgica S/N Ciudad Universitaria, 58030, Morelia, Michoacán, México. ORCID <http://orcid.org/0000-0003-1811-4711> Correo electrónico: [americazt@hotmail.com](mailto:americazt@hotmail.com)

contents include a multilateral trading system and the rules of WTO, to a severe test. China and Mexico are both emerging economies affected by other countries' TBT measures, especially China, who became one of the main victims of the current round of trade protectionism. Taking base on the analysis of the current global TBT status and the regulations of the WTO, the research will compare similarities and differences of TBT systems between China and Mexico, making recommendations to both nations in order for them to cope with the trade protectionism impact currently prevailing in the world.

*Keywords:* TBT, Mexico, China, WTO, Trade, Economy.

## **Resumen**

En 2009, la crisis financiera azotó el mundo y la economía mundial entró en el “periodo de invierno severo” causando una caída significativa a pesar del comercio internacional o del flujo de capital transicional. Para hacer frente a la crisis, todos los países emitieron una serie de políticas para estimular la recuperación de la economía y, al mismo tiempo, implementaron una serie de medidas comerciales, entre las que se encuentran las barreras técnicas al comercio (BTC), siendo éstas de las principales, puesto que se centraron en la protección de la economía nacional, aspecto que se convirtió en un obstáculo importante para la recuperación de la economía global, y del envío de ésta al sistema del comercio internacional, cuyos principales contenidos incluyen al sistema de comercio multilateral y las reglas de la OMC, sometidos a una prueba severa. China y México son economías emergentes afectadas por las medidas BTC de otros países, especialmente China, que se convirtió en una de las principales víctimas de la actual ronda de proteccionismo comercial. Tomando como base el análisis de la actual situación mundial de BTC y las regulaciones de la OMC, en la investigación se comparan similitudes y diferencias de los sistemas de BTC entre China y México, haciendo recomendaciones a ambas naciones para que puedan hacer frente al impacto del proteccionismo comercial actualmente imperante en el mundo.

*Palabras clave:* BTC, México, China, OMC, comercio, economía.

## **Introduction**

With the emergence of the World Trade Organization (WTO) in 1995, international trade rules have become more complex. Although the WTO extended

issues to include trade in services and agricultural goods, intellectual property, industry, and financial services that the General Agreement on Tariffs and Trade (GATT) did not cover, it led to countries implementing non-tariff measures, some under the excuse of having green economy and low carbon deposits. In this context, the opening of markets to the globalization of the world economy also brought globalization of protectionist measures implemented during the 2008-2009 crises.

Mexico and China, both members of the WTO, have implemented both tariff and non-tariff measures in order to protect their economic systems even though, in relation to measures implemented by developed countries, these have been minor. This article discusses the causes and implications of non-tariff measures and other protectionist actions against Mexico and China in the last decade, emphasizing the damage that they cause to the economies of both countries as well as to their productive subsystems, fact that impedes the achievement of the objectives that gave rise to the WTO and incentives the facilitation of increased flows of goods and services in the world and the process, contributing to the reduction of instability and global uncertainty that the 2008-2009 crisis brought.

We conclude that, despite the complexity of the neo-protectionist measures present in the international trade, particularly the unilateral measures by developed countries, both Mexico's and China's state must continue to put interest in their economic systems in order to avoid becoming victims of unilateral decisions taken by developed countries and encourage themselves to exploit loopholes in the international trade of goods and services present in the WTO.

### **The condition of the Technical Barriers to Trade worldwide**

Technical Barriers to Trade (TBT) occurs when an importing country takes mandatory and non-mandatory, technical regulations, standards and quality assessment procedures, sanitary and phytosanitary measures (SPS), packaging labels and signs, environmental requirements, etc., to form a trade restriction to the agricultural products of other countries. In a broader sense, TBT includes TBT and SPS.

In 2009, the US's "Subprime Crisis" began with a round of global and financial turmoil causing the crisis to rapidly spread from the financial sector into the entire economy of the country and the world, leading to the

most severe economic crisis since the Great Depression (1929-1933). Both developed and developing countries have been affected by the crisis to some extent, without exception. And, in order to change the status quo, governments across the globe have issued a series of new policies in an attempt to stimulate their economies. In 2009, the world economy had already gained a certain degree of recovery and stepped in the post-crisis era. Furthermore, with the intention of protect the economy and prevent the subsequent risks from the economic crisis, as well as to avoid the negative impact of external factors on the domestic market; all countries have increased their intervention in foreign trade. On one hand, to take new trade protection measures such as the technical barriers, green trade barriers, intellectual property rights, social measures, etc. On the other, governments often use trade remedies such as anti-dumping, countervailing and safeguard measures to adapt the investigations against foreign products, resulting in an international trade friction and deterioration of the international trade environment which has led to a new round of trade protectionism.

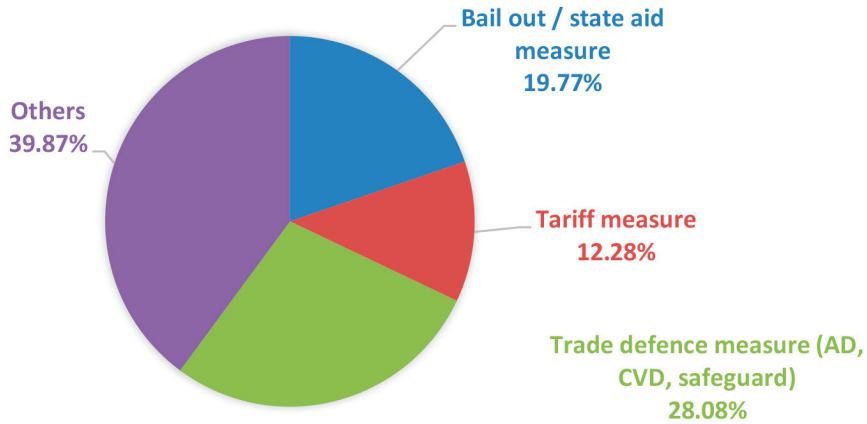
China and Mexico are both victims of this current round of trade protectionism. According to the survey of the World Trade Alert Organization (GTA), 2008-2014, China has been impacted by 1,441 of the implemented protective measures while Mexico only by 397 of them.<sup>4</sup> As exemplified by those numbers: how to face the trade protectionism in the post-crisis era, how to avoid becoming a major victim, how to give a positive response, and, how to reduce its impact on the national economy to have a better and faster development, are some of the most common problems faced by both countries.

The biggest characteristic of this new round of trade protectionism is variety. Many countries have used legislative and administrative means to intervene in their economies. The current trade of protectionism is being implemented under the cover of fair trade (see Figure 1). Furthermore, cover trade protective measures have appeared in an increasing rate under the cover of free trade and the trade policies of many countries that are walking at the edge of the WTO rules, in the name of different “reasonable” coats. This kind of condition has now become a common form of trade protectionism. For example, in 2012 the EU started imposing new carbon tariffs to a great variety of airlines that were meant to fly over its territory, covering the tariff’s implementation under the excuse of “environmental protection”.

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4. Info on <http://www.globaltradealert.org>

Figure 1  
Main Trade Measures implemented by Countries



Source: own elaboration based on data provided by Global Trade Alert (<http://www.globaltradealert.org>).

The various trade protectionist measures have gone beyond the scope of existing WTO agreements and protocols, fact that has been more difficult to deal with. However, the biggest challenge yet is that in many occasions it has not been easy to judge whether those measures are right or wrong since many of them are just trying to pass fisheyes for pearls, putting some countries, especially developing countries, in a rather passive and vulnerable position when facing the rise of protectionist trade, due to the relative backwardness of science and technology, besides the lack of funding and testing capabilities found in those countries. In the meantime, some developed countries, such as the US or the EU, usually exert effort in the concepts of low-carbon economy and green economy, using their environmental technology strength to promote the slogan of “energy saving and emission reduction”, resulting in the new “Three Issues of Carbon” (carbon tariffs, carbon labeling, carbon certified) coming into existence (Ni, 2013: 3). Once the carbon tariffs have been imposed, developed countries could make use of the existing national standard to calculate the carbon emissions of imported products, this will result in the products of developing countries facing the risk of being highly charged and the export competitiveness of the developing countries would be attacked. If the carbon labeling becomes the passport of the exporting

products, it will effectively prevent exports from developing countries. Furthermore, if the Carbon Certification becomes widely practiced in developed countries, the domestic consumers would prefer to buy national products, whose location is nearer, rather than exported ones. This will reduce the market share of imported products and create a good environment for the recovery of the manufacturing sector of the developed countries. Therefore, the “low carbon” measure is not only a new form of trade protectionism, but also a new form of economic hegemony from the developed countries.

The harm of trade protectionism is well known: since every country attempts to protect its own domestic market, the globalization of the economy would be reversed; also resulting in a serious impact on the global trade and creating a trade war, which would eventually lead to an increased friction between nations; in the same way, it would also affect the WTO’s multilateral framework system, making a victim out of every country, especially the developing ones, ultimately leading to social unrest and a political crisis.

Trade protectionism has caused widespread concerns on the international community. People fear the re-emergence of trade protectionism from the 1930s. As for the attitude taken towards trade protectionism, it seems that several countries have been involved in a sort of “prisoner’s dilemma”: on one side, every nation has recognized the dangers of protectionism and known that the trade protectionism is not on the road. While, on the other, in the present world (considering every nation as a subject), when in chaos, every country will firstly consider its own interests and social stability over the general panorama, making trade protectionism one often used way to be out of trouble.

### **Regulations of WTO on TBT**

In the past, every time an economic crisis occurred, a dispute between trade protectionism and trade liberalism appeared. In fact, it does not matter if pure trade protectionism or pure trade liberalism is non-existent, they are two endpoints and, in practice, the trade policies of each country are no more than a point between the two ends (Du, 2013).

Admittedly, trade liberalization remains a big trend in the development of the international trade. But with the acceleration of the global economic growth, regional differences have significantly expanded. In particular, the different manifestations in economic growth of the developed countries, and

some developing ones, make the environment, on which trade protectionism's existence depends on, unchanged. Therefore, trade protectionism will not disappear; on the contrary, it will grow in intensity.

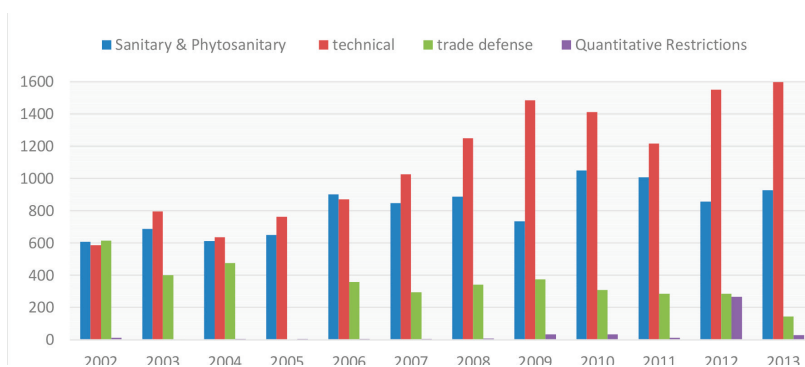
The aim of WTO is to make every member accomplish the basic principle of "taking the market economy, the basis and the free and fair competition as a core", while, at the same time, obtaining benefits from the international division of labor and the international market in order to protect the domestic market in accordance with the WTO provisions, as well as to maintain and expand the domestic market share. Thus, the goal of WTO is to achieve free trade, even though WTO rules have limited the intervention power of its member governments to some extent. In addition, WTO has supplied its members with some protective trade tools to develop the economy in promoting the trade liberalization process. However, since the principle of transparency requires that the trade policy must be shown in the law, the result is that while, on one side, the WTO encourages a freer trade through negotiations in order to reduce trade barriers on a condition of no-discrimination, transparency and the clear rules of the government on managing trade, on the other side, the member government still possesses the power to regulate trade, recognize the legitimacy of tariffs, permit the additional tariff to be imposed, under certain circumstances, and, particularly, to protect infant industries.

As for services sector, which has not yet made a promise of openness, national treatment would not be applicable since the government still has the power to restrict the exportation of certain goods if there is a domestic shortage and to set up some technologic, safety and quality standards to the imported and exported products, which means that if the products fail to meet the standards and specifications their importation and exportation will be prohibited. In the same sense, in the negotiation practices and rules of the WTO as well as in the trade practice of its members, two unities of opposites are shown, the first one between free trade and trade protection and the second one between the market economy and government intervention. Thus, trade protectionism and trade protection are two separated concepts (Du, 2013). Trade protection is a neutral concept that refers to the within of the WTO rules' scope and that stays in line with the corresponding prerequisite. WTO members could implement protection for their economic or industrial interests.

The trade protection measures allowed by WTO include: tariffs, technical barriers, green barriers, trade remedies, customs valuation, pre-shipment inspections, rules of origin, import licensing procedures, infant industry

protection measures, etc. Likewise, trade protection measures prohibited by WTO include: quantitative restrictions (that can only be used in particular circumstances), import bans, prohibited subsidies (including export subsidies and import substitution subsidies, but the field of primary products is an exception). Additionally, the local content requirement in the investment measures involving trade-related measures, the trade balance between imports and exports, and the import restrictions are also prohibited by WTO. Furthermore, the existence of a “grey area” in the WTO cannot be ignored, this being some areas counting with unclear regulations, regulations lacking effective constraint or even areas with no regulation at all, facts that provide a great opportunity for trade protectionism, whose main expressions are the voluntary export restrictions and government procurement. Moreover, protection measures relating technical standards, environmental standards, labor standards, competition policy, foreign exchange restrictions, remittance restrictions and local content requirements also contain a certain amount of “gray factor”. Figure 2 has shown that during the period between the years 2002 and 2013, the setting of non-tariff barriers, the technical barriers to trade and the green trade barriers have been the most frequently used, followed by the trade remedy measures and the prohibition trade barriers, such as quantitative restrictions, some of which still exist to this day. Besides, although the special safeguard measure has decreased year by year, it is still existent and China is the biggest victim.

Figure 2  
Measures initiated from 2002-2013



Source: own elaboration based on the data provided by World Trade Organization (<https://www.wto.org/>).



The related non-tariff measures of GATT/WTO of TBT, environmental protection, SPS measures are expressed mainly in articles (b) and (g) in the section 20 of GATT 1994, as well as the “TBT Agreement” and the “SPS Agreement” of Uruguay Round. In accordance with the relevant provisions of WTO, the national technical laws and the standards of the WTO members could not have been made with the intention of a trade restriction, while the basic principles as a most-favored-nation treatment (MFN) and those of a national treatment need to be applied.

Developed countries often use TBT to control the import from developing countries. On March 26, 2013, former President Obama of the United States signed a law, forcing the departments of Commerce and Justice, the National Aeronautics and Space Administration (NASA), and the National Science Foundation from procuring any information technology (IT) systems that are produced, manufactured, or assembled by any company owned, directed, or subsidized by China, unless the FBI completes an assessment of security risk from cyber-espionage or sabotage associated with the system of the United States. The reason United States gave to justify this technical barrier is “national security”, but the actual motive is no other than the implementation of trade protectionism, action that has already caused an impact on many Chinese enterprises such as Huawei, ZTE, Lenovo, etc.

Among the non-tariff barriers of the trade protectionism’s measures, some of which have already been implemented in various countries, TBT and SPS dominate in both number and variety. More specifically, according to the WTO statistics, only in 2013 and regarding the good’s trade, there were 1,337 SPS and 1,806 TBT<sup>5</sup> globally.

TBT and green barriers were firstly used by developed countries to harness their high level of environmental protection and technological development, with the intention of safeguarding their national security, protecting the human health, the environment, and to ensure product quality, along with the development and implementation of high technological and environmental standards, all this in order to weaken the competitive advantage of the low labor cost from developing countries, as well as to block other countries’ free access to the country’s commodity markets. Since the emerging economies are growing rapidly and few corporations count with a social responsibility certification, USA, Japan and the EU have all set up a variety of technical

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5. On <http://i-tip.wto.org/goods/Forms/MemberView.aspx?mode=modify&action=search>

With the implementation of WTO agreements, the protective function of tariffs and traditional non-tariff measures of the international trade are being gradually weakened and replaced.

barriers on the aspects of commodity standards, technical regulations and certification systems. In particular, we can remark the fact that there exists a big difference among the technical certification systems from different countries, and the certification's difficulty and its cost are high, matter that has become the main form of trade

protection in the EU and the USA, both of whom have set a great number of obstacles to prevent emerging economies from entering their markets. In 2013, the EU and USA proposed a total of 196 technical barriers, accounting an 11.25% of the global amount.<sup>6</sup>

With the development of the developing countries' economy, the overall increase of technological capability, the improvement of the society, and the innovations implemented in the markets the gap between the developing and developed countries is getting smaller and smaller, resulting in many developing countries also taking TBT or green barriers to protect their domestic markets, nowadays. For example, South Korea has begun to set up its own system of green trade barriers. Also, China, Brazil, Russia and Mexico, among other countries, have also shortened their distance from the international standards, while, at the same time, they have built their own TBT and green trade barriers. In 2013, the five countries which are part of the BRICS have all advocated 175 different TBT measures and 192 green trade barriers.<sup>7</sup>

By observing this developing trend, on the surface, technical and green barriers both coincide with the WTO rules, mixing with the other reasonable trade barriers, resulting in an increasing difficulty to distinguish the intention of each non-tariff measures. Therefore, it is safe to assure that the TBT measures have become the most frequent measures of trade protectionism.

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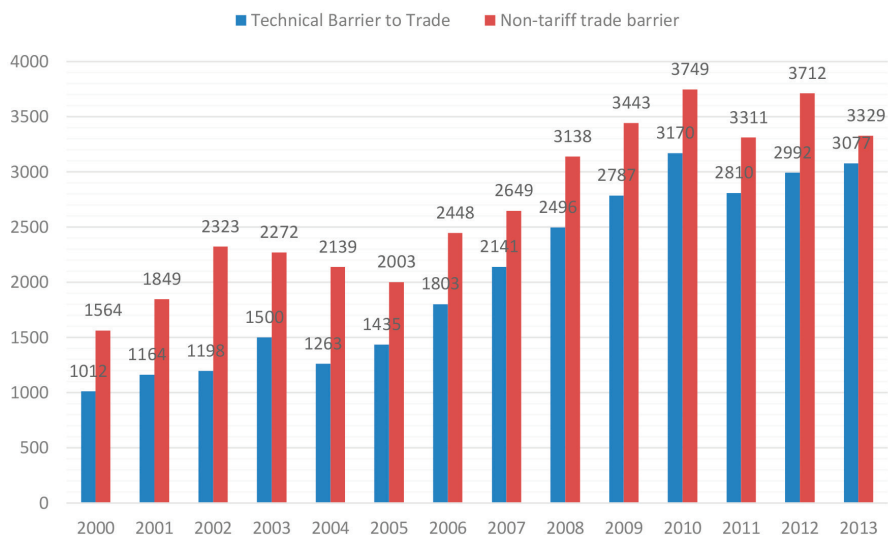
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7. On <http://i-tip.wto.org/goods/Forms/MemberView.aspx?mode=modify&action=search>

## The TBT systems of Mexico and China

With the implementation of WTO agreements, the protective function of tariffs and traditional non-tariff measures of the international trade are being gradually weakened and replaced. The non-tariff barriers have become the major obstacle for international trade liberalization. In all non-tariff barriers, due to the concealment of the means and the legality in the form, technical barriers have become the first major trade barriers. Figure 3 shows that since 2000, the proportion of the use of TBT among countries (including SPS measures) accounted 2/3 of the total non-tariff barriers, and it is increasing year by year, fact that has become the main expression of non-tariff barriers. Up until 2013, TBT has accounted for 92.43% of all non-tariff measures, which are the main obstacle to influence the international free trade.

Figure 3  
TBT and Non-TBT Measures (2000-2013)



Source : own elaboration based on the data provided by World Trade Organization (<https://www.wto.org/>).

## The application condition of TBT of two countries

After the financial crisis of 2009, when a new round of trade protectionism appeared, the economy of China had a great shock. Like other countries, China has taken some trade protection measures to safeguard local industries. One example is Beijing setting up a surgery-type of export management system which intends to support the export business in order to occupy the international market through the continuous adjustment of certain export rebates and a lower product value-added tax.

Table 1 shows that during the period of 2009-2013, China has initiated and implemented a total of 1334 passive protection measures, the main ones being the “sanitary and phytosanitary” (SPS), and the “technical barriers” (TBT), accounting 87% of the total measures taken. Judging from the numbers, it may seem as a large amount, while in fact the implemented measures are not so many: 117 SPS and 17 TBT. Comparing the numbers with those of Brazil, India, Argentina, USA and the EU, the trade protection measures implemented by China are small.

*Table 1*  
Trade Protection Measures taken by China, 2009-2013

<i>Trade protection measures</i>	<i>Numbers</i>
Tariff Measure	1
Sanitary and Phytosanitary	642
Technical Barriers to Trade	523
Anti dumping	91
Countervailing	10
Public Procurement	4
Bail out/state aid measure	5
Consumption subsidy	1
Export subsidy	7
Export taxes or restriction	7
Intellectual property protection	2
Import ban	1
Investment measure	8

<i>Trade protection measures</i>	<i>Numbers</i>
Local content requirement	6
Non tariff barrier (not otherwise specified)	3
Other service sector measure	2
Quota (including tariff rate quota)	6
Trade finance	1
Total	1,334

Source: own elaboration based on the data provided by Global Trade Alert (<http://www.globaltradealert.org>) and World Trade Organization (<https://www.wto.org/>).

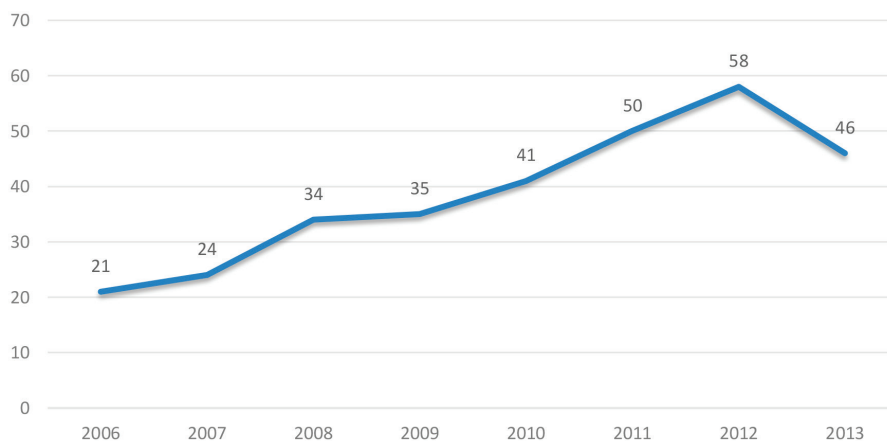
Furthermore, when China began to adjust its trade measures, other members of the WTO also adjusted theirs to China's export products, resulting in many countries reducing the tariffs of China's export commodities and increasing the quota. Nonetheless it has also been noticed that when the protection function of the traditional tariff and non-tariff measures weaken, other countries pay more attention to the use of new trade measures in order to safeguard their interests. After entering the WTO, the Chinese products meant to be exported to USA, Japan and the EU have been refused due to technical and green barriers of these countries, which resulted in serious return of the commodities.

In order to protect domestic industries, Mexico also has taken some trade protection measures, especially after the economic crisis. The number of trade protection measures implemented by Mexico increased from 24 in 2007 to 35 in 2009, and has annually increased until 2013. Figure 4 shows the trade safeguard actions taken by Mexico in this period. As it can be observed, there is a clear increasing trend for implementations present in 2009 and a smaller upsurge in later years. From this analysis, we can infer there was no protectionist tendency in Mexico prior to the crisis.

As seen from Table 2, from 2006 to 2013 Mexico has taken a total of 316 discriminatory measures, like China, most of these discriminatory measures adopted by Mexico are SPS, TBT and AD, which together accounted for the 95.8% of all measures taken by the country. Although the number of the discriminatory measures implemented by Mexico is not so big, it has become a trade barrier. The trade policy review of Mexico (2013) has reported that the unilateral tariff reduction made by Mexico from 2009 to 2013 is worth to praise, but as a supplement, it should also reduce non-tariff barriers, such

as SPS, and cancel the fixed prices of old cars, glass, iron, toys and textiles, as well as to abolish the import licensing provisions of petroleum products, old rubber products, cars, etc. (World Trade Organization, 2013).

*Figure 4*  
Trade safeguard measures taken by Mexico (2006-2013)



Source: own elaboration based on the data provided by World Trade Organization (<https://www.wto.org/>).

*Table 2*  
Trade Protection Measures taken by Mexico (2006-2013)

<i>Trade protection measures</i>	<i>Numbers</i>
Tariff Measure	4
Sanitary and Phytosanitary	46 (9 in force)
Technical Barriers to Trade	215 (62)
Anti-dumping	42 (15)
Countervailing	5
Safeguard	1
Export subsidy	1
Quota (including tariff rate quota)	2
Total	316

Source: own elaboration based on the data provided by Global Trade Alert (<http://www.globaltradealert.org>) and World Trade Organization (<https://www.wto.org/>).

As victims of the new trade protectionism, under the circumstances of a continuous expanding of the foreign trade and economy, the industries of domestic production from Mexico and China, which have a relatively weak competitiveness, will inevitably have to face strong competitive pressures. Especially with the decline of the import tariffs' level and the reduction of the non-tariff measures' use of the two countries, some increase in the number of imported products, which have a competitive advantage, is an unavoidable fact. With the reference of this condition, the relevant domestic industry should make timely adjustments to strengthen their competitiveness. Meanwhile, the two governments should also be in accordance with WTO rules to provide a reasonable and timely protection to the domestic industry in order to provide a domestic legal proof for trade protection measures which may be implemented in the future.

### **General introduction of the TBT regulations in Mexico and China**

Technical barriers mainly refer to a set obstacles applied to the imported products through the enactment legislation and the developing technical standards. Technical regulations refer to technical documents concerning relevant product characteristics, a related technique or the producing methods, which should be enforced compulsorily, including: laws and regulations; commands, decisions, ordinances issued by government departments; technical specification, guidelines, criteria indications, and instructions regulated by civil institutions such as industry association. Technical Standards refer to rules, guidelines or characteristics written down in documents about the products, which are generally approved by an acknowledged public institution, they are non-mandatory and can be reused. The current technical standards mainly include national, trade, and enterprise's standards. The implementation of the technical trade measures needs legal protection, which includes international treaties and domestic legislation.

The Mexican Constitution stipulates that all international treaties can be used directly, so the SPS Agreement and TBT Agreement of WTO can be applied directly. According to the articles 10.1 and 10.3 of the TBT and the regulation of the SPS, Mexico has established the Mexican Bureau of Standards (DGN - Dirección General de Normas) as the responsible organism for notifying and consulting the work concerning the SPS and the TBT. In the period lasting

from 2000 until the end of 2013, according to the Agreement, the Mexican institution has made 362 TBT notifications and 106 SPS notifications.<sup>8</sup>

In addition to the WTO rules, in 1992 Mexico enacted the *Federal Law of Standardization and Metrology* (LFMN - Ley Federal sobre Metrología y Normalización), which was amended twice. First in 1997 and then again in 1999, and the implementing regulations (Reglamento de la Ley Federal sobre Metrología y Normalización) that was published in Mexico's Official Gazette (DOF - *Diario Oficial de la Federación*) on January 14, 1999, which is the legal basis for the establishment of technical evaluation and standardization. These two laws have established the content of the classification of the technical standard and legal value of Mexico, defining the assessment procedure of the technical rules, clarifying the rules and procedures that different agencies should be subjected to when they are implemented in domestic and international levels, explaining in detail the development of the unified assessment process and the management of the quality identification as well as regulating the conditions and procedures of building a common identification protocol. In addition, the Mexican sanitary and phytosanitary legal framework also includes some of the following laws: *the Federal Animal Health Law* (2007);<sup>9</sup> *the Federal Plant Health Law* (1994);<sup>10</sup> *the Internal Regulations of the Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food* (Sagarpa) of 2001; *the General Law on Health*,<sup>11</sup> *the Regulations on Sanitary Control of Products and Services of 1999*,<sup>12</sup> *the Regulations of the Federal Commission for Protection against Sanitary Risks*,<sup>13</sup> and *the General Law on Sustainable Development* (2003). Resulting in the Mexican SPS measures being now in line with the relevant provisions of the WTO rules. The above laws and regulations have constituted the legal basis for the implementation of technical trade measures in Mexico (World Trade Organization, 2008).

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8. Sources from the website of World Trade Organization, <http://i-tip.wto.org/goods/Forms/MemberView.aspx?mode=modify&action=search>.

9. Published in the *Official Journal of the Federation* of 25 July 2007 (<http://dof.gob.mx/index.php?year=2007&month=07&day=25>).

10. Published in the *Official Journal of the Federation* of 5 January 1994 (<http://dof.gob.mx/index.php?year=1994&month=07&day=05>). Latest revision published on 26 July 2007 (<http://dof.gob.mx/index.php?year=2007&month=07&day=26>).

11. Published in the *Official Journal of the Federation* of 7 May 1997 (<http://dof.gob.mx/index.php?year=1997&month=05&day=07>). Latest amendment published on 6 June 2006 (<http://dof.gob.mx/index.php?year=2006&month=06&day=06>).

12. Published in the *Official Journal of the Federation* on August 9<sup>th</sup>, 1999 (not revised).

13. Published in the *Official Journal of the Federation* on April 13<sup>th</sup>, 2004 (not revised).



According to the LFMN, in an emergency situation of a possibly unlawful damage, the deputy agency of the technical rules may be authorized to issue emergency technical rules to prevent possible damages caused by the importation of some product. The applicable period of such emergency technique should last more than six months, and it should not be used more than twice in a continued manner. The statement of the applicable effect of this emergency technical rule must be submitted to the Ministry of Economy. Likewise, the LFMN also stipulates that from the moment the technical regulations, standards and reference standards enter into effect, they should be deliberated once every five years and the result must be informed to the Technical Secretary Department of National Standardization Commission (Comisión Nacional de Normalización), failing to follow the last point will result in the application of the rule being suspended, which should be published on official journals by the agencies. Mexico's standardization system comprises three categories of instrument: technical regulations (NOMs); Mexican standards (NMXs); and reference standards (NRs). From the year 1993 until March 26, 2014, the Mexican government published a total of 956 NOMs and 3444 NMXs.<sup>14</sup>

With the acceleration of economic globalization and the rapid development of science and technology, the quality and technical supervisions have played an important role in both the economic and social life. As the most basic and important law in the field of technical supervision, the *Standardization Law of the People's Republic of China* has experienced nearly 28 years, since December 29<sup>th</sup>, 1988, determining the basic law of the Chinese standard system, the standardization management mechanisms and the operational mechanisms. It contains 26 articles spread along five different chapters, which are: general principles, regulation of the standard, implementation of the standard, liabilities, and annexes. This law has greatly promoted the economic development and the technical progress. By the end of 2001, China obtained the WTO's membership and made the promise that its government and legislative bodies would introduce the rules of the TBT Agreement and make it compatible with the laws and regulations of Chinese standardization. However, with the exception of a certain gap within the TBT Agreement in the implementation process, the *Standardization Law* also reflects many problems

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14. Secretariat of Environment and Natural Resources: <http://www.economia-nmx.gob.mx/normasmx/pagingFechas.nmx?tiponmx=S&fecha=fecha&palabras=&d-49653-p=1&claveprod=0>.

yet to be solved, whose main performances are: the transition of the legislative principles and the scope, how to use the international standards, the problem of standard classification, whether the mandatory standards should be abolished, the abolition of enterprise's standard filling system, the unreasonable time of standard review, various standard certification issues, the supervision, deliberation and test problems of the standards, the cost of the standards regulation, the copyright of the standard, the intellectual property problem concerning the standards, and so on. The Chinese *Standardization Law* has been increasingly out of joint with its international counterpart, not to mention the existence of the big gap between the developing and developed countries, which only makes it more difficult to guide Chinese enterprises in an increasingly diverse international competition. Due to the influences created by the aspects of the economic globalization, China's accession to the WTO and its transformation from the planning economy to the market economy, many of the provisions of the law have lagged behind and are unable to adapt themselves into the rapid development of the economy and trade. Although the modification of *Standardization Law* has been included in the legislative project of the State Council and the National People's Congress, up until now, due to various problems, the law is still in a difficult modification process. In addition, Chinese SPS legislation mainly includes: *Law of the People's Republic of China on the Entry and Exit Animal and Plant Quarantine* (1991), *Regulations for the Implementation of the Law of the People's Republic of China on Import and Export Commodity Inspection* (2005), *Agricultural Product Quality Safety Law of the People's Republic of China* (2006), *Animal Husbandry Law of the People's Republic of China* (2005), *Regulation on Handling Major Animal Epidemic Emergencies and other technical regulations* (2005). In consideration of the length of the article, the paper will focus on the comparison of the Mexican LFMN and the *Standardization Law* of China.

### **The comparison between Mexico's LFMN and China's Standardization Law**

China has launched the modification of the *Standardization Law* and the reforms of the standardized management system, which requires full references and to learn from foreign advanced standardization laws and successful transition experience. We can say that the study of advanced foreign experience has an urgent practical significance on the modification of the *Standardization*

*Law.* The following is the comparison between the relative maturity of the Mexican legal system and the Chinese *Standardization Law*.

### *Standard system*

Mexico's standardization system comprises three categories of instrument: NOMs (Technical Regulation, mandatory); NMXs (Mexican Standard, voluntary); and NRS (reference standards). The NOMs are binding and intended to establish specifications for goods, services or production processes in order to guarantee the safety of the people, the protection of the humans, animals and plant's health, as well as the protection of natural resources and the environment. The NMXs are intended to promote quality and to guide both producers and consumers; they are voluntary, except when their application is required by a NOM if the producers, on their own initiative, declare that their products or services comply with a specific standard or when public bodies purchase goods or services. The NRS are drawn up by decentralized bodies of the Federal Public Administration in order to establish specifications for goods and services that are subject of government procurement when there is no NMX, international standards, or when these cannot be applied. The only bodies that issue NRS are Mexican Petroleums (Pemex) and the Federal Electricity Commission (CFE). Their classification is coordinated with those of developed countries, resulting in a well worked standard management and promoting competition (Molina, García, Sepúlveda, Ávila, Jiménez y Martínez, 2007).

Article 6 of China's *Standardization Law* divides Chinese standards into four categories: national standards, trade standards, local standards and enterprise's standards. When concerning the management of these four categories, the management of the trade standard can be accurately described as messy since it is duplicated with the scope and role of national standards, and even in current conflict with it. The confusions and contradictions found within the standard have influenced greatly on the standard enforcement agencies and the enterprises in practice. Furthermore, the excessive local standards lead to the formation of local market barriers, resulting in market segmentation (Yang, 2009).

### *Standardization management system*

The Mexican standard system consists of six national private units and nine government departments (Ministry of Economy, Agriculture, Communications and Transportation, Energy, Environmental Protection, Health, Labor, Tourism and the Social Development). All the industries that would see themselves influenced by the implementation of technical standards and regulations in both the domestic and international trade, should take part in the draft and revision process of technical regulations and standards. For this reason, the LFMN states that the standardization committees should be established to charge the formulation of the relevant policies, the coordination of the standards' implementation, and the making of the annual plan. The committee is also responsible for the regulation and implementation of the technical standards in Mexico, which represent the standardization's interest of Mexican consumers, scientific research, industry, and trade, consisting on manufacturers, service providers, wholesalers, traders, customers or uses, research institutions, Non-Governmental Organizations (NGO), social institutions (such as trade unions), and representatives of governmental agencies. Technical standards and regulations (or amendments) are not only discussed by all relevant sectors, but are also requiring the consent of these industries. In the case an agreement cannot be reached, the technical regulations could be approved by the absolute majority of the members of the Committee and voted by the authorities. This management system is the kind of "authorized by the government, managed by the civil institutions, and counting with the participation of the government departments", aspect that will ensure the representations' balance of the different parties' interests while making them participate equally on the management, decide on the national standardization, and being ensured with a full consistent consultation of the standards, in order for those same standards to adopt a wider range of market adaptability (Rodríguez, 2014).

Meanwhile, the management system of China's *Standardization Law* is the kind of "government-led standardization". Article 5 states:

The Department of Standardization Administration, under the State Council, shall be in charge of the unified administration of standardization throughout the country. Competent administrative authorities under the State Council shall, in line with their respective functions, be in charge of the standardization in

their respective departments and trades. The Departments of Standardization Administration of the provinces, autonomous regions and municipalities directly under the Central Government shall be in charge of the unified administration of standardization within their respective administrative areas. Competent administrative authorities under the governments of provinces, autonomous regions and municipalities directly under the Central Government shall, in line with their respective functions, be in charge of standardization in their respective departments and trades within their respective administrative areas.

Nowadays, the *Standardization Law* hardly reflects the inherent requirements of the market economy to those of standardized management. There are too many management model layers present in the laws, causing institutions to overlap, intersection of works, and leave responsibilities unclear, resulting in a lack of transparency on the standardization work, while the strict of the working procedures as well as the scientific rigor of the decision-making processes, have become legal obstacles for the standardization work adapting to the market economy (Li, 2005). The operational structure of China's market economy lacks the civility of the self-regulatory organizations to coordinate and regulate the operation of the market environment, besides the fact that the function of the industry association is limited. The government is in charge of the legislation power of the standards with the exception of the trade standard, which provides the government the power of promoting the national standard with the use of administrative methods and establishing the dominant position together with the absolute authority in the technical standard works, causing the enterprises not to play the role of mere objects. Hence, it will make the standards unable to adapt to the market and to not truly reflect the interests of all parties in a complete and effective way, especially the interests of the customers, the requirements of the enterprises and the changes of the market. Thereby, the national standards are unreasonable and cannot be applied by the enterprises (Ma & Ren, 2005).

### **Implementation mechanism of standardization**

Mexico's DGN is responsible for the conformity certification of the products, which is mainly formed up by its own laboratory as well as the laboratories of other government agencies together with a testing network formed by 110 laboratories approved by the DGN. However, in some exceptional cases, such as in Mexico, the test cannot be completed within a certain limited time.

The DGN can also approve the official report from the testing agency of the export country. Only certifications required by law are mandatory. Mexico recognizes the national certification protocol according to the mutual recognized agreement with the export country. As a result, the product certification for export may also be enforced. According to the NAFTA, Mexico has made a promise on two different aspects that do not form part of the TBT obligations. First, NAFTA has expanded its measure scope by taking into account the standards from trade goods to trade services; secondly, all the parties in the agreement accept the development of new technical standards by other parties. Although such standards should exceed the current internationally accepted standards (Dai, 1995: 34).

Moreover, the standards and the transparency of the standard regulations are also required: throughout the revision of technical standards and regulations, each interested party has the right to check the content of both the final and early files (drafts, etc.), for which, the LFMN has regulated the following obligations:

- In the beginning of each year, all matters of technical standards or regulations to be developed must be listed in the National Program of Standardization (Programa Nacional de Normalización, PNN). The program will be released on *DOF* and it will notify the specified agency (that is, WTO Notification & Registration centers);
- The draft of technical standards and regulations must be published on the *DOF* and it should solicit the comments of the public in 60 days while, at the same time, it should inform the specified agency;
- All interested parties can query the “Assessment Influenced by Regulation” and participate in the conference of the Drafting Committee of technical regulations or regulations;
- All comments submitted during the public comment period must be published on the *DOF*;
- The Final text of technical standards or regulations must be published on the *DOF*, and inform the specified agency, (such as the focal points of USA and Canada according to NAFTA) as appropriate;
- In general, there should be a comment period of no less than 60 days from the publication of the technical standards and regulations on the *DOF*.

As for this aspect, Article 6 of China’s *Standardization Law* regulated that: “National standards shall be formulated by the Department of Standardi-

zation Administration under the State Council; Trade standards shall be formulated by competent administrative authorities; Local standards shall be formulated by Departments of Standardization Administration of provinces, autonomous regions and municipalities.” The revision of national standards process generally is mastered by the drafting team of standards or the secretariat of the technical committee and it does not open to the public. WTO members are expected to have a certain transparency in the process of legislation, ratification and implementation of technical regulations. The legitimacy of the TBT Agreement requires that: the object of the regulating standard must have legal authority, the regulating procedures must be legitimate, the regulated standards must be open to the public, the draft of the standard must be announced, while at the same time the country must seek the views of other countries and advocate the draft of the standard after the negotiation. Because there is no an effective mechanism to safeguard the transparency of the regulation process of the standard, China usually violates the principle of “consensus” (Fan, 2005).

### **To conform with the international standards**

International standards include standards of the TBT Agreement and the standards issued by the International Organization for Standardization (ISO). Regulations of standardization of the WTO are mainly reflected in the TBT Agreement. The TBT Agreement has interpreted the general direction of the international standardization and international standards system with a new perspective and concept, which are a world standardization law and the most important form of the national standardization law. More so, the TBT Agreement has made a clear regulation to member governments for what kind of rules and obligations they should apply to the formulation, adoption and implementation of technical regulations, rules and conformity assessment procedures.

ISO is the world’s largest non-governmental specialized agency of standardization, and in recent year, its legal standardization work develops quickly. At present, China participates in the work of ISO on behalf of the Standardization Administration of China. According to the definition in Guide 2 of ISO, unlike the provisions of the TBT Agreement, in which, the standards are voluntary for its members, while the ISO standards could be either mandatory or voluntary, matter that is entirely decided in accordance to the country’s



laws or by the government of the country, independently. ISO does not make rules nor legislates them, it only creates international standards. In recent years, in ISO standards, the international standardization projects concerning electronics, information technology, and communications have significantly increased and the involved field of international standards has been increasingly widening. Among those international standards, the basic standards and methods are more than product standards, which are mainly developed in general standards by ISO. The regulation of the international standards is a revision activity of the standard on the basis of some standard draft or scientific research, which, on one hand, has effectively ensured the speed, quality and level of the regulation of the international standards, while on the other it avoids resource waste caused by duplication research.

In Mexico, in principle, all of the technical standards and regulations should be based on international standards or their relevant part. However, in compliance with the provisions of international agreements or treaties concluded by Mexico, it can publish technical standards or regulations without corresponding with the international standards or the basis for the reasons of the fundamental climate, geography, technology or infrastructure. In addition, in some cases, Mexico has shown that it considers that the protection level of the national standards exceeds that of the international ones, making Mexico unable to reference to such international standards.

After China's accession to the WTO, many domestic laws have generated a lot of conflicts with the international ones, characteristic that is likely to become an unnecessary technical barrier to trade in the future. Before its entrance to the WTO, China made correspondent promises. Nonetheless, presently, China's *Standardization Law* still keeps a certain distance with the TBT Agreement and the ISO standards, feature that is mainly reflected in the fact that: the legislative purpose is in the lag, the legislative principle is blank, the technical legal system is not established, and that the assessment procedure of the conformity is lacking. The convergence of the international law and the domestic law is necessary. In recent years, as the development of the standardization continues, other countries do have connected their domestic standards with the international ones. Therefore, strengthening the legal system of standardization and relating it with the international legal systems holds a more practical significance, which can better promote the launch of China's standardization work.



## **Enlightenments of systems of TBT barriers of Mexico on China**

*To establishing a legal framework identical with the international*

After China's entrance to the WTO, it required a strict abide by the TBT Agreement. Technical regulations, standards and conformity assessment procedures in the TBT have molded into an organic whole and now they complement each other. Mexico's LFMN covers various contents of technical regulations, standardization, conformity assessment, and the law together with its overall structure, that are corresponding with the three parts of the TBT, which fully reflect the development tendency of connection with the international standards, following the time trends.

Therefore, when China modifies the laws, it must take fully into account the further combination of all three, the establishment of a system of technical regulations on the basis of a smooth transition, the explicit regulation concerning the conformity assessment, the set of the conformity assessment mechanism, and the building of a qualified assessment procedures in order to ensure the viability and integrity of the law, as well as to make Chinese laws develop with the times.

*Development and measures of the legislative orientation*

The accuracy of the legislation orientation is essential for the extension and understanding of its legal content. With the development of times, the economic environment in which the standardization law exists has changed and the corresponding legislation orientation should have changed too. Standardization needs to gradually shift from the past in order to take the goal of regulating the production and management, improving the quality of industrial products, promoting international trade, enhancing the enterprises competitiveness, and developing itself towards the international market including the agricultural, information and service industries. Since the measures that correspond with the transition of the legislative orientation, the practices of Mexico could give China many references. As for the application of international standards, the LFMN has mentioned its importance and made some specific measures to adhere them in order to avoid blindly adopting international standards, causing damage to domestic enterprises and giving more protection to the national enterprises when participating

in the international competition in pursuance of providing them with more advantage; with respect of the standard system, we should gradually move closer to the international standard system and realize the transition from mandatory standards to the system that includes the combination of both mandatory and voluntary standards; respecting the classification of the system, it's better to implement the model of coexisting of the national standards and enterprise's standards and to fully stimulate enterprise enthusiasm when regulating standards; as for the standard management system, it is better to play the role of corporate and academic groups associations, supplemented by the guiding role of government and to transit from the "government-led" model to the "civilian agencies led" model; with respect for the specific operation of standardization, the national standards association should become a coordination and management mechanism authorized by the government in the true sense, as well as to have full autonomy on the aspects of the standards' regulation, approval, publishing, implementation and management, to transform into a more efficient working procedure and management Model (Ma & Ren, 2005). Meanwhile, during the process of the standards regulation, the informationization (computerization) management should be applied and it should fully reflect the principles of transparency and fairness. By changing the orientation of the law and driving the implementation of specific measures, the Chinese *Standardization Law* could be perfected.


In short, by comparing these two laws, we can find that due to being a precedent of a period of transitions and reforms, Mexico's law has provided a reference for the transitional road we are facing nowadays. In spite of the differences of the national conditions between China and Mexico, we hope that the successful strong points of the Mexican system can aid to provide China an orientation for the ongoing modifications of the standardization laws in order to make Chinese laws more responsible when regarding the development required for the time's trends.

## **Conclusion**

The target of the WTO is free trade and all its agreements and behaviors set to achieve that purpose. However, in the WTO era trade protection is not an unseen occurrence. Trade protectionism has not been converged for the strengthen of the multilateral trading system, the trade barriers being adopted by all countries are still increasing, especially in developed countries

since they have changed their tactics in order to seek new trade protection measures with globalist, hypocrite, diversified and complex characteristics to evade the constraints of WTO systems, which have caused the resurgence of trade protectionism. Evidently, under the WTO free trade mechanism, besides learning from each other, China and Mexico, should not blindly abandon the economy's intervention for the pursuit of trade liberalization, on the contrary, they should think for their own economic interests, and take appropriate trade protection measures according to them. As long as the antidumping policy is politically valuable it is not likely Mexico or any other country will stop applying it, regardless of it clearly having negative welfare effects for the country utilizing it and for the countries targeted by this policy (Linn, 2000: 41).

This paper highlights the ineffectiveness of the WTO to control protection spite of the tariffs barriers decrease non-tariff barriers (NTBs) have risen to take their place. Moreover, in recent years even the NTBs have become less transparent, in order to try to avoid international commitments, etc. Being one of the main reasons the poor perception of many countries behaving like mercantilists thinking that exports are good and imports are bad. Hence, countries try to achieve maximum market access abroad while giving up as little of their own market access. This trade negotiators mandate makes no sense as it is opening up your own markets to imports where the main economic gains come from, not from getting market access abroad. Thus, if governments do not sell liberal policies at home and/or do not believe in open trade and investment for their own economic progress, than governments are always going to find legal/grey ways to protect their industries.

The WTO requires the overall direction of developing countries' foreign trade policy being more liberal and open. China and Mexico, as WTO members, must reduce their tariff and non-tariff barriers in strict accordance with the principle of trade liberalization. According to the WTO system of "trade liberalization" and "general prohibition of quantitative restrictions in principle", this will cause the tariff level to be greatly reduced and the traditional protective tariff policy becoming unsustainable. Meanwhile, the same with the developed countries, the two countries must cancel their non-tariff barriers such as quota, import licenses, automatic export restrictions, in principle, and substitute them with new measures under the WTO system. 

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