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국제학석사학위논문

**Liberalization of Technical Regulations:
Focusing on the Korea's FTA TBT Commitments**

대한민국의 기술표준자유화에 대한 평가 및 시사점:
대한민국 FTA TBT 협정문을 중심으로

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**Liberalization of Technical Regulations:
Focusing on the Korea's FTA TBT
Commitments**

A thesis Presented

By

Ji Eun Kim

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Seoul National University
Seoul, Republic of Korea**

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Focusing on the Korea's FTA TBT Commitments**

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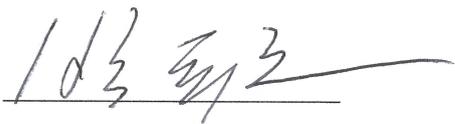
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Abstract

Liberalization of Technical Regulations: Focusing on the Korea's FTA TBT Agreements

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As more and more countries are recognizing the significant effects of TBT measures, corresponding policy considerations are becoming more active. Technical regulations and standards themselves work as a barrier to trade as it may limit imports that fail to satisfy the requirements of the importing countries. On the other hand, the introduction of harmonization or mutual recognition of standards, technical regulations and conformity assessment procedures through the conclusion of Free Trade Agreement (FTAs) facilitate trade by realizing cost reduction. At the same time it enables checks for standard protectionism among trading partners. Thus, high level of achievement in harmonization or mutual recognition of technical regulations and standards may lead to liberalization of trade. This research paper analyzes twelve FTAs that Korea has signed and looks through every TBT Agreements. Each TBT provision in FTAs will be analyzed through categories of 'reference to the WTO TBT Agreement', 'harmonization of technical regulations, standards, and conformity assessment procedures', 'acceptance of technical regulations as equivalent', 'mutual recognition of conformity assessments', 'transparency', and 'enforcement and dispute settlement.' It evaluates the level of liberalization in terms of TBT measures.

Keywords: WTO, TBT Agreements, FTA, Liberalization

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LIST OF ABBREVIATIONS

| | |
|-------------|------------------------------------------------|
| CEPA | Comprehensive Economic Partnership Agreement |
| CJK | China-Japan-Kora |
| EU | European Union |
| FTA | Free Trade Agreement |
| GATT | General Agreement on Tariffs and Trade |
| ISO | International Organization for Standardization |
| MFN | Most Favored Nations |
| NAMA | Non-Agricultural Market Access |
| SDoC | Supplier`s Declaration of Conformity |
| TBT | Technical Barriers to Trade |
| TPP | Trans-Pacific Partnership |
| US | United States |
| WTO | World Trade Organization |

I . INTRODUCTION

Since the establishment of WTO (World Trade Organization), international trade environment has experienced dynamic changes. It has increased in its size and became more complicated with various systems and rules. The effort of WTO Members has accomplished tariff reduction through multiple channels. Many of the developing countries newly joined WTO promising that they would also ultimately remove trade barriers and accept the multilateral trading systems. Regional based as well as bilateral free trade agreements are being negotiated and signed across continents.

On the other hand, the issues on elimination of trade barriers, the primary goal of WTO, seem to be shifting its focus from tariff barriers to non-tariff barriers. According to the WTO statistics, WTO Members' simple average applied MFN tariff of all products decreased dramatically after the development of WTO system. Looking into the major trading countries in the year 2014, China's simple average applied MFN tariff rate was 9.55%. That of EU was 5.31%, Korea recorded 13.32%, and US lowered its tariff down to 3.51%. These numbers decrease further when excluding agricultural goods. Simple average applied MFN tariff for NAMA (Non-Agricultural Market Access) is 8.61% in China, 4.19% in EU, 6.78% in Korea, and 3.24% for US based on

2014 data. ¹Imports of toys made in China was banned to enter US (United States) market for the safety reasons² and suppliers had to change its method of catching tuna in a dolphin friendly ways in order to meet the processing requirement and gain the qualification to have the dolphin friendly labeling³. These dispute cases represent the possibility of using TBT (Technical Barriers to Trade) measures in order to protect domestic industry from import-competition. Justifiable and necessary technical regulations and standards may enforce safety and build trust between the producers and consumers. However, misuse of TBT measures without notification or consultation processes to WTO Members may cause serious trade disputes among trading partners. Not only technologically advanced countries but developing countries are tightening up its technical regulations and standard barriers for protecting domestic suppliers from fierce competition. Imposition of technical regulations is expanding its categories from goods to even service sectors that are being traded among countries. ⁴

¹ Documents, Data and Resources, WTO Official Website. Retrieved November, 19, 2015. https://www.wto.org/english/tratop_e/tariffs_e/tariff_data_e.htm

² Elvira, C. (2007). Total Recall on Chinese Imports: Pursuing an End to Unsafe Health and Safety Standards through Article XX of GATT. *American University International Law Review*, 23, 915

³ WTO. DS381.

⁴ Seo & Kim (2012)

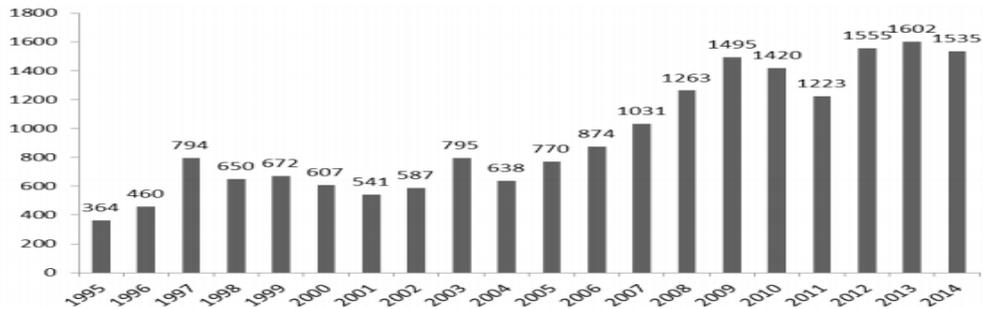
Technical regulations can be effective means to hinder the number of imports in the domestic market whereas standards and standardization policies can even allow countries to reach economic growth. Technologically advanced countries are putting more effort in their standardization policy since standardization creates economies of scales through technology diffusion and decreases diversity. The study reports that introduction of harmonization or mutual recognition of standards and conformity assessment procedures is positively affecting the trade expansion through cost and time reduction. Thus, these policies are actively discussed through WTO as well as Free Trade Agreements (FTAs) as means to ensure safety and to promote economic growth.⁵

Under the WTO TBT Article 15.3, the WTO Committee on TBT conducts Annual Review of the Implementation and Operation of the WTO Agreement on TBT. According the Review, the number of new notifications regarding TBT from the Member-states has shown increasing trend. In the year 2012, 2013, and 2014 the number of new notifications reached over 15,000. ⁶

⁵ Choi & Goh (2010)

⁶ WTO/TBT/36, Twentieth Annual Review of the Implementation and Operation of the WTO TBT Agreement. https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm

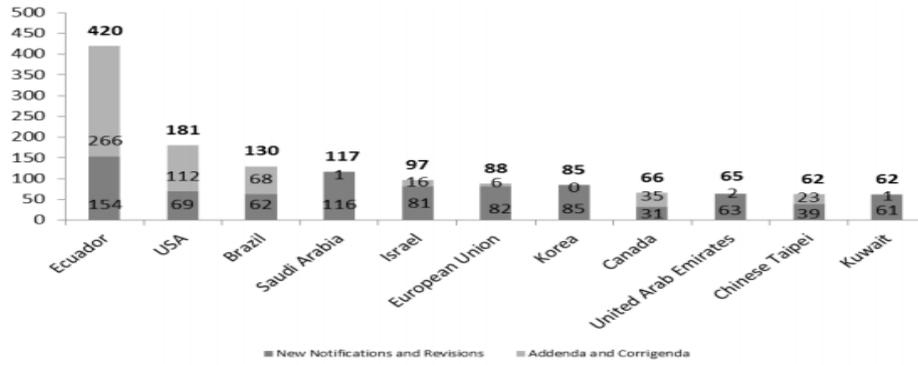
< Chart 1. New Notifications, 1995-2014 ⁷>



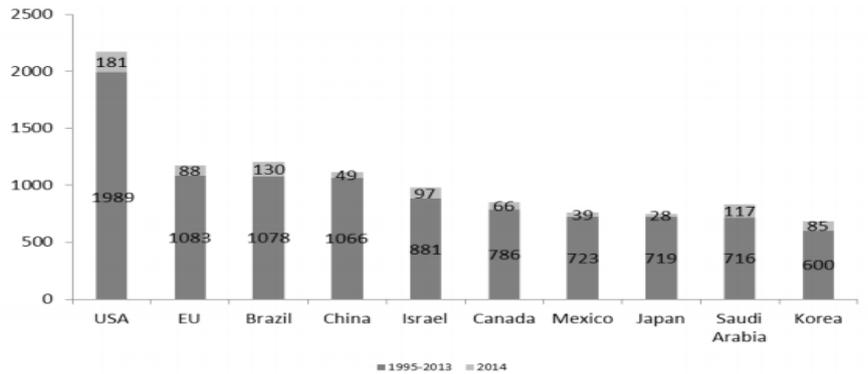
Korea is one of the most active notifying Members in the WTO in terms of TBT matter. According to the Chart 2 below, Ecuador (420 notifications in 2014), US (181 in 2014), and Brazil (130 in 2014) are the top three countries that notified new TBT related measures. US and Brazil have been the leading countries in notifying the TBT related measures since 1995 as shown in the Chart 3, however Ecuador has raised its number of notification significantly in the year 2014. In terms of accumulated numbers of notification from 1995 to 2014, Korea recorded tenth place among WTO Members.

⁷ Ibid.

< Chart2. Most active notifying Members, 2014 ⁸>



< Chart3. Most active notifying Members 1995-2014 >



‘Protection of human health or safety’ has been the most frequently notified objective of implementing TBT measures followed by ‘Prevention of deceptive practices,’ ‘protection of the environment,’ and ‘quality requirement’ objectives

⁸ Ibid.

as described in Chart 4. This implies that Member-states' interest regarding protection of human health, safety issues, and protection of environment is significantly high.

< Chart 4. Notifications by objectives, 1995-2014 ⁹>



Korea is the Member of WTO and twelve FTAs have been entered into force. Additionally, Korea-Colombia FTA, Korea-New Zealand FTA, and Korea-Vietnam FTA are in its last stages to go into effect. TBT provisions in these twelve FTAs are diverse depending on the counter Parties. Preliminary researches on Korea's FTA regarding TBT Agreements mostly focus on specific industry within TBT issue. Jang and Seo (2014) found out that through years 1995 to 2013, increase in the notification of TBT related measures had negative

⁹ Ibid.

effect especially on the export of Korea's electrical machinery and machinery appliance products to the US market. ¹⁰ Another paper by Choi and Goh (2010) focused on the EU's international standardization policy and its implication through Korea- EU FTA negotiations. EU's effort to implement Supplier's Declaration of Conformity (SDoC) is an example of internationalizing its technical standards to maximize benefits. As Korea is a technologically advanced country, when SDoC is accepted in electronic industry, EU can enjoy comparative advantage against other standards that competitors might use. Thus, it implies that Korea also needs strategy and policy for international standardization of its own technical standards related to TBT Agreements. ¹¹

Despite reduction of tariff rates worldwide, there are increasing concerns on the usage of NTBs among trading members. FTA allows signed Parties to enjoy preferential trading conditions which also include provisions related to TBT. Standards, technical regulations, conformity assessment procedures may be encouraged or required to be harmonized or mutually recognized by trading partners in order to pursue trade liberalization. The purpose of the research is to analyze the framework for TBT liberalization and find out how much Korea has

¹⁰ Jang & Seo (2014)

¹¹ Choi & Goh (2010)

liberalized its technical barriers to trade through its FTAs. Fifteen FTAs are analyzed using the frameworks to find patterns and strategies in TBT commitments.

II. INTERNATIONAL RULE FOR TBT AGREEMENTS

1. GATT Article I and III

1.1 History of GATT

Specific rules for technical regulations do not exist in the GATT 1947. However, it imposes non-discrimination principle thus technical regulations and standards should be practiced under Article I General Most-Favored-Nation Treatment and Article III National Treatment on Internal Taxation Regulation.

1.2 GATT Article I

GATT Article I stipulates Most Favored Nation (MFN) principle. As long as

the occasion involves “like products,” the MFN principle of GATT Article 1 extends identical advantages, favors, or privileges to all WTO members.” as the paragraph 1 of this article states:

“... any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.”¹²

Six criteria: physical characteristics and uses of the merchandise; interchangeability; channels of distribution; common manufacturing facilities, production processes, and employees; customer and producers’ perceptions; and price are examined to determine “likeness” of products. Member-states should treat imported products of a given nation no less favorably than similar products from other member-states. Thus, Article I precludes discrimination among imported “like products” and this similar concept again appears throughout the agreement including Article III. ¹³

¹² GATT Article I

¹³ Trebilcock, M. J., Howse, R., & Eliason, A. (2012).

1.3 GATT Article III

GATT Article III specifies National Treatment principle. It aims to avoid trade discrimination between imported products and domestic products by requiring member-states to treat imported products no less favorably than its own domestic products. This principle prohibits contracting parties from imposing internal taxes or other internal charges on imported products as a means to protect domestic products as Article III:2 states:

*“The product of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products.”*¹⁴

Additionally, Article III:4 claims that discrimination of imported products by all laws, regulations, and requirement is prohibited. It is described in the text:

*“The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products.”*¹⁵ Therefore, any kind of

¹⁴ GATT, Article. III:2.

¹⁵ GATT, Art. III:4

taxation and legal discrimination against like imported products is violation of Article III:2 and III:4.

2. GATT Article XX(b) and Chapeau of Article XX

The General Exception clause to GATT provision is stipulated in Article XX. Member-states can use trade measures that are otherwise illegal by invoking an enumerated exception for the purposes of valid public policy. This exceptional clause can only be invoked by a member-state after WTO Panel concludes that the measure truly violates GATT provision. The member-state invoking Article XX should carry the burden of proof and WTO Panel decides whether such measure falls within the exceptions described in the Article XX. Article XX(b) states the exceptional case regarding “protection of human, animal, or plant life or health” and Chapeau of Article XX.

2.1 GATT Article XX(b)

Although measure used by a member-state is inconsistent with GATT principle, Article XX(b) allows member to adopt such measure if the case is “necessary to protect human, animal or plant life or health.” Here, it is

important to aware that the measure is “necessary” to achieve main objective. The Panel takes the role of analyzing whether the measure is the one and only means without any other alternatives that is less trade restrictive to achieve the goal of member nation’s public health policy.

2.2 Chapeau of GATT Article XX

In addition to GATT Article XX(b), chapeau of GATT Article XX states the condition for the exceptional case. The chapeau of GATT Article XX presents:

“Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures...”¹⁶

Application of arbitrarily or unjustifiable trade restrictive measures are prohibited under chapeau of GATT Article XX. It aims to prevent discrimination and minimize trade barriers among member-states. Thus, without

¹⁶ GATT, Art. XX

satisfying both Article XX(b) and the chapeau Article XX, all member-states have to maintain consistent trade measures and policies under MFN and NT principle of GATT Article.

3. TBT under the WTO System

3.1 Establishment of the WTO

Creation of International Trade Organization in the late 1940s failed and GATT had no formal institution for almost fifty years. However, as the outcome of the Uruguay Round, GATT became a binding treaty under the WTO.¹⁷

This new organization is to administer “an integrated more viable and durable multilateral trading system encompassing the General the General Agreement on Tariffs and Trade, the results of past liberalization efforts, and all the results of the Uruguay Round of Multilateral Trade Negotiations.” WTO Preamble has much of the language that is from the GATT. Thus the Original GATT text (GATT 1947) is still in effect under the WTO system. Also, principal objectives of the WTO, as of the GATT, are “raising standards of living,

¹⁷Kevin Buterbaugh and Richard Fulton. (2008), *The WTO Primer*; Palgrave MacMillan

ensuring full employment, expanding production and trade, and allowing optimal use of the world's resources." While GATT only deals with trade in goods, WTO Preamble includes trade in services as well. Moreover, it states the objective of sustainable development and recognizes the need of supporting members of developing countries economic development. ¹⁸

Six primary functions are given to the WTO: "(1) to administer the WTO trade agreements, (2) to act as a forum for trade negotiations, (3) to handle trade disputes among members, (4) to monitor the trade policies of its members, (5) to provide technical assistance and training for developing countries, and (6) to cooperates with other international organizations." Ministerial Conference, the highest governing body within the WTO, is a representative body composed of all members. Ministerial Conference is responsible for making decisions regarding changes to the GATT, WTO agenda setting, and operation of WTO. General Council is the body beneath the Ministerial Conference that is consists of a representative from each member country. General Council performs not only the day-to-day tasks but most importantly serves as the WTO's Dispute Settlement Body and reviews member-states' trade policies.¹⁹

¹⁸ Ibid.

¹⁹ Ibid.

WTO dispute settlement system “is a central element in providing security and predictability to the multilateral trading system.”²⁰ If a trade related dispute occurs among member-states, they go through sixty days of consultation period. If the consultation fails, then parties may submit the dispute case to a WTO Panel. The Panel, three-to-five independent trade experts appointed from the Dispute Settlement Body, evaluates the facts, review GATT principles, and submits a report with the conclusion. Unless the Dispute Settlement Body unanimously decides to reject the Panel’s conclusion or either party decides to appeal the decision to the Appellate Body within sixty days, the decision by the Panel is adopted as the report and it binds the parties.²¹

MFN, National Treatment, transparency, and reciprocity are the fundamental principles the every WTO members share and must follow. MFN and National Treatment principles are non-discrimination principles that are established under GATT while transparency is to ask member-states to publish their trade policies and regulations. Reciprocity is to require member-states to act consistent with the trade obligations. ²²

²⁰ Marrakesh Agreement Establishing the World Trade Organization, Article 3.2

²¹ Elvira, C. (2007). Total Recall on Chinese Imports: Pursuing an End to Unsafe Health and Safety Standards through Article XX of GATT. *American University International Law Review*, 23, 915

²² Ibid.

3.2 TBT under the WTO Agreement

TBT was first mentioned during the Tokyo Round as one of the six codes. The code on technical barriers to trade was an attempt to assure nondiscrimination and granting of national treatment with respect to standards, technical regulations, testing methods, and certification system. Code for TBT was argued for international standards to be adopted in order to eliminate problems of health, safety, environmental protection, and labeling becoming means of limiting imports. However during the Tokyo Round, it did not articulate specific rules. Instead it approved procedures for notification of national standards and transparency in processes in order to allow for international input into domestic decisions.²³ Tokyo Round Standard Code was strengthened and clarified into WTO Agreement on Technical Barriers to Trade which was an integral part of the WTO Agreement during the Uruguay Round negotiation.²⁴

Article XX(b) and the chapeau of Article XX of GATT got developed into TBT Agreement and such process is stated:

²³ Gilbert R. Winham (1985), *International Trade and the Tokyo Round Negotiation*, Princeton Univ. Press, Princeton, New Jersey

²⁴ Technical information on TBT, Trade topics, WTO official website. Retrived November 3, 2015. http://www.wto.org/english/tratop_e/tbt_e/tbt_info_e.htm

“...Desiring to further the objectives of GATT 1994;...Desiring to ensure that technical regulations and standards, including packaging, marking and labeling requirements and procedures for assessment of conformity with technical regulations and standards do not create unnecessary obstacles to international trade;...Recognizing that no country should be prevented from taking measures necessary to ensure the quality of its exports, or for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices, at the levels it considers appropriate, subject to the requirement that they are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail or disguised restriction on international trade, and are otherwise in accordance with the provisions of this Agreement;...”²⁵

III. ANALYSIS ON LIBERALIZATION OF TBT IN KOREA’S FTA

1. Analysis on TBT Provisions

Technical regulations, standards, and conformity assessment procedures are

²⁵ TBT, The Preamble.

the main categories that compose TBT provisions.²⁶ The OECD Trade Policy Working paper utilized analytical framework that includes categories of ‘reference to the WTO TBT Agreement’, ‘harmonization of technical regulations, standards, and conformity assessment procedures’, ‘acceptance of technical regulations as equivalent’, ‘mutual recognition of conformity assessments’, ‘transparency’, and ‘enforcement and dispute settlement.’²⁷ Each category has two or three sub-questions that are relevant to finding out how much liberalization such provision has achieved in TBT Agreements. The analytical framework is shown in Table 1.

<Table 1. Analytical framework for examining TBT provisions in RTAs>²⁸

| Category | Questions |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference to the WTO TBT Agreement | <ul style="list-style-type: none"> - Does the agreement make reference to the WTO agreement (i.e., its objectives, rules and/or provision? - Does the TBT Chapter in the agreement have more far-reaching goals? |
| Harmonization | <ul style="list-style-type: none"> - Does the agreement require or encourage Parties to harmonize their technical regulations, standards, and conformity assessment procedures? - Does the agreement promote the use of international and/or |

²⁶ WTO, “What is the WTO?”. Retrieved November 02, 2015.
http://www.wto.org/english/thewto_e/whatis_e/who_we_are_e.htm

²⁷ Meyer, N. *et al.* (2010), “Bilateral and Regional Trade Agreements and Technical Barriers to trade: An African Perspective”, *OECD Trade Policy Working Papers*, No. 96, OECD Publishing.

²⁸ Sampson and Woolcock, 2003 and Piermartini and Budetta, 2006

| | |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | regional standards and guidelines as a basis for setting national regulations, standards and conformity assessment procedures? |
| Acceptance of technical regulations as equivalent | <ul style="list-style-type: none"> - Does the agreement require or encourage Parties to accept as equivalent other Parties technical regulations and standards? - Does the agreement call Parties to explain the reasons for not accepting the other Party's technical regulations as equivalent? |
| (Mutual) recognition of conformity assessments | <ul style="list-style-type: none"> - Does the agreement call for a (mutual) recognition of conformity assessment result? - Does the agreement require that the Parties explain the reasons for non-recognition? - Is the agreement accompanied by a (separate) mutual recognition arrangement or does it promote the conclusion of such agreements? |
| Transparency | <ul style="list-style-type: none"> - Does the agreement include transparency provisions? - Does the agreement require members to hold consultations and notify regulations and procedures at bilateral and regional level before they are adopted? - Is a time period for the receipt of comments by other Parties defined? Is it longer than 60 days? - Does the agreement require the establishment of a (separate) regional enquiry point? |
| Enforcement and dispute settlement | <ul style="list-style-type: none"> - Does the agreement call for the establishment of, and participation in, a regional TBT body (e.g. committee) to monitor and review the TBT commitments and process? - Does the agreement include specific provisions for the resolution of regional TBT-related disputes? - Does the agreement foresee consultations and recommendations, or a more formal mechanism at the regional level to resolve disputes? |

Another useful analytical framework used by Choi and Goh (2010) for analyzing TBT provision is similar to the one used in the OECD paper but it divides the measures into 'direct measures affecting trade liberalization' and 'indirect measures affecting trade liberalization.' 'Direct measures affecting

trade liberalization' includes factors related to 'standards', 'technical regulation', and 'conformity assessment' and evaluates whether the related provisions ask the Parties for either mutual recognition or harmonization. On the other hand, 'indirect measures affecting trade liberalization' is composed of 'transparency measures' which includes notification requirement and existence of enquiry point and 'institutional support' that examines the existence of TBT Committee, dispute settlement mechanism, and technical assistance. Higher weight is given to the direct measures than the indirect measures when assessing the level of trade liberalization in terms of TBT aspect.²⁹

Choi and Goh (2010) then categorized TBT into 6 different types depending on the level of liberalization. Type A indicates the least liberalized TBT trade agreements that do not include TBT Chapters at all. Israel-EC FTA is included in Type A. Trade agreements which adopts WTO TBT Chapters is Type B. EFTA-Mexico FTA, Canada-Israel FTA, New Zealand-Singapore FTA, EC-Bulgaria FTA are the examples of Type B. Type C includes trade agreements with WTO TBT Chapters and transparency related commitments. It also pursues cooperation among trade partners. Trade agreements that respect WTO TBT commitments and partially accept either harmonization or mutual

²⁹ Choi & Goh (2010)

recognition of technical regulations are categorized under Type D. US's FTAs with Australia, Chile, and Singapore include TBT commitments that covers characteristics of Type D. NAFTA is an example of Type E which satisfies significant level of TBT liberalization. Complete acceptance of harmonization or mutual recognition of technical regulations explains Type E, the most liberalized form of TBT commitments³⁰.

< Table 2. Level of liberalization of TBT measure in major FTAs>³¹

| Level of liberalization of TBT | LOW | | | HIGH | | |
|--------------------------------|-------------------------------|----------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| | Type A | Type B | Type C | Type D | Type E | Type F |
| Types of TBT | Non-existence of TBT Chapters | Adoption of WTO TBT Chapters | WTO TBT + Transparency + Cooperation | WTO TBT + partial acceptance of harmonization/ mutual recognition of technical regulations | WTO TBT + significant level of acceptance of harmonization/ mutual recognition of technical regulations | Complete acceptance of harmonization / mutual recognition of technical regulations |
| Name of RTAs | ·Israel-EC | ·EFTA – Mexico ·Canada-Israel ·New Zealand-Singapore ·EC-Bulgaria | ·EC-Mexico | ·US-Australia ·US-Chile ·US-Singapore ·Japan-Singapore ·Mexico-Chile | ·NAFTA | ·EU |

³⁰ Ibid.

³¹ Ibid.

2. Analysis on the TBT Commitments in Korea's FTAs

This part examines Korea's TBT commitments through analyzing twelve FTAs which already entered into force and three additional signed FTAs that includes Korea-Colombia FTA Korea-New Zealand FTA, and Korea- Vietnam FTA. Fourteen questions compose the framework for analyzing Korea's TBT commitments in its FTAs.

< Table3. Analytical framework for examining TBT commitments of Korea's FTAs >

| Category | Questions |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reference to the WTO TBT Agreement | 1. Does the agreement make reference to the WTO agreement? |
| Harmonization | 2. Does the agreement require or encourage Parties to harmonize their technical regulations, standards, and conformity assessment procedures? |
| | 3. Does the agreement promote the use of international and/or regional standards and guidelines as a basis for setting national regulations, standards and conformity assessment procedures? |
| Acceptance of technical regulation as equivalent | 4. Does the agreement require or encourage Parties to accept as equivalent other Parties technical regulations and standards? |
| | 5. Does the agreement call Parties to explain the reasons for not accepting the other Party's technical regulations as equivalent? |
| (Mutual) recognition of conformity assessments | 6. Does the agreement call for a (mutual) recognition or conformity assessment result? |
| | 7. Does the agreement require that the Parties explain the reasons for non-recognition? |
| Transparency | 8. Does the agreement include transparency provisions? |
| | 9. Does the agreement require members to hold consultations and notify regulations and procedures before they are adopted? |
| | 10. Is a time period for the receipt of comments by other Parties defined? Is it longer than 60 days? |

| | |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enforcement and dispute settlement | 11. Does the agreement call for the establishment of, and participation in, TBT body (e.g. committee) to monitor and review the TBT commitments and process? |
| | 12. Does the agreement include specific provisions for the resolution of TBT related disputes? |
| Technical assistance | 13. Does the agreement call for technical assistance? |

2.1 Korea-Chile FTA

Korea-Chile FTA entered into force in April, 2004. Chile became the first country to sign FTA with Korea. TBT Agreement in Korea-Chile FTA has clear reference to the WTO agreement. It promotes the use of international standards as a basis for establishing national regulations, standards, and conformity assessment procedures. Both Parties agreed to accept counter Party's technical regulations as equivalent to their own regulations. Moreover, it requires Parties to explain the reasons for not accepting the other Party's regulations. Call for mutual recognition of conformity assessment result is also mentioned in the TBT Agreement and effort to achieve transparency in the TBT measure is concluded in the transparency provision. TBT Committee does exist to monitor and review TBT related commitments and processes and both Parties agreed for technical assistance as well. ³²

³² Korea-Chile FTA

2.2 Korea-Singapore FTA

In the year 2006, Korea had signed two FTAs. Korea-Singapore FTA entered into force on March, 2006. TBT Agreement in both FTAs shares similar characteristics. Korea-Singapore FTA includes reference to the WTO Agreement and Article 9.4.5. of the TBT Agreement promotes the use of international standards and guidelines as a basis for setting domestic regulations, standards, and conformity assessment procedures. There is no agreement regarding mutual acceptance of technical regulation. On the other hand, call for mutual recognition of conformity assessment result does exist. It is agreed to have TBT Body to review and monitor Parties' TBT commitments. Article 8.7 addresses commitments regarding Joint Committee and paragraph 5 specifically illustrates one of the TBT Joint Committee's roles as "resolving any questions or disputes related to the interpretation or application of this chapter and applicable Sectoral Annex(es)."³³

2.3 Korea-EFTA FTA

FTA with European Free Trade Association (EFTA) entered into force on September, 2006. Reference to WTO TBT agreement, acceptance of

³³ Korea-Singapore FTA

international standards, mutual recognition of conformity assessment result, and establishment of TBT Body are included in Korea-EFTA FTA TBT Chapter. ³⁴

2.4 Korea-ASEAN FTA

TBT related commitments in Korea-ASEAN FTA represent low level of liberalization. It only satisfies basic level of liberalization. It contains the reference to the WTO Agreement and encourages Parties to use of international standards as a basis for their national regulations, standards, and conformity assessment procedures. Although both Parties agreed to establish TBT Body, there are no commitments to provide technical assistance or harmonize technical regulations, standards, and conformity assessment procedures among Parties.³⁵

2.5 Korea-India CEPA

Korea-India CEPA entered into force on January, 2010. Addition to having reference to the WTO Agreement and encouraging the usage of international

³⁴ Korea-EFTA FTA

³⁵ Korea-ASEAN FTA

standards for national regulation and standards, Korea and India have agreed to encourage both Parties to mutually accept technical regulations and conformity assessment result. Also, call for the establishment of TBT Committee does exist according to the Article 2.28.3.³⁶

2.6 Korea-EU FTA

On July 2011, Korea-EU FTA entered into force. Reference to the WTO Agreement as well as harmonizing national technical regulations, standards, and conformity assessment procedures with international standards is mentioned in the TBT related Chapter. In addition, both Parties include commitments to mutually recognize conformity assessment result. Although TBT Agreement does not include transparency provision, it requires Parties to hold consultations and notify technical regulations and procedures before adopted. According to Article 4.4.1.(f) minimum sixty days should be given to the other Party for comments regarding the regulations and procedures. Moreover, Korea-EU FTA includes harmonization commitments which encourage Parties to harmonize their technical regulations, standards, and conformity assessment procedure. According to Article 4.3 Joint

³⁶ Korea-India FTA

Cooperation ;³⁷

“2. In their bilateral cooperation, the Parties shall seek to identify, develop and promote trade facilitating initiatives which may include, but are not limited to:

...

(c) where the Parties agree, and where appropriate, for example where no international standard exists, avoiding unnecessary divergence in approach to regulations and conformity assessment procedures, and working towards the possibility of converging or aligning technical requirements”

2.7 Korea-Peru FTA

Korea-Peru FTA which entered into force on August 2011 is the most liberalized TBT Agreement among FTAs that Korea has signed. Korea-Peru FTA states that both Parties agree to have the reference to the WTO TBT Agreement and encourages Parties to harmonize domestic technical regulations, standards, and conformity assessment procedures with international standards. It also requires Parties to accept the other Party’s technical regulations as

³⁷ Korea-EU FTA

equivalent as its own. Parties need to explain the reasons for not accepting. Moreover, mutual recognition of conformity assessment result is required to both Parties and when the Party decides not to accept the result reasons must be explained. Article 7.7 states transparency provision. Both Parties are required to notify regulations and procedures before adoption and minimum sixty days should be given to the counter-Party. Article 7.9.1 states the call for maintaining TBT Committee and Article 7.8 asks Parties to provide technical assistance.³⁸

4.8 Korea-US FTA

Korea and US concluded FTA which entered into force in March 2012. In the Korea-US TBT Agreement, reference to the WTO Agreement is included and it encourages Parties to use international standards as a basis for Parties' national regulation, standards, and conformity assessment procedure. According to Article 9.3, Parties are encouraged to accept the other parties technical regulation as equivalent as their own. Article 7.6.2 calls for mutual recognitions of conformity assessment result and it requires Parties to explain the reasons for non-recognitions. Transparency provision exists and minimum sixty days of time period must be given to the counter-Party for consultation and notification

³⁸ Korea-Peru FTA

before adoption of technical regulations and standards.³⁹

4.9 Korea-Turkey FTA

On May 2013, FTA between Korea and Turkey entered into force. Reference to WTO Agreement is made and harmonization with international standards is encouraged between two Parties. Additionally, call for mutual recognition of conformity assessment result is articulated in Article 5.6.1 in the TBT Agreement. TBT Agreement includes transparency provisions and it requires Parties to have at least sixty days to hold consultation and notify regulations before adoption.⁴⁰

2.10 Korea-Australia FTA

Korea-Australia FTA entered into force on December 2014. Reference to the WTO Agreement and promotion of international standards are articulated in the TBT Agreement. Also Article 5.4.1 requires Parties to accept the other Party's technical regulations as equivalent as its own. Parties need to explain

³⁹ Korea-US FTA

⁴⁰ Korea-Turkey FTA

the reasons for not accepting. Moreover, mutual recognition of conformity assessments result is required to both Parties. When rejecting the results of the other Parties' conformity assessment procedure, reasons have to be explained according the Article 5.6.3. Article 5.8 states transparency provisions and the Agreement requires Parties to hold consultations and notify regulations and procedures before adoption. In addition at least sixty days of time period for the receipt of comments by other Parties should be given according to Article 5.8.3.⁴¹

2.11 Korea-Canada FTA

Korea and Canada signed FTA which entered into force on January 2015. TBT commitments in Korea-Canada FTA contain reference to the WTO agreement. It promotes the use of international standards as a basis for establishing national regulations, standards, and conformity assessment procedures. Mutual recognition of conformity assessment result has been agreed under Article 6.4.3.(b) and Parties must explain the reasons for non-recognition. Moreover, Transparency provision exists and minimum sixty days of time period should be given to the counter-Party for consultation and

⁴¹ Korea-Australia FTA

notification before adoption of technical regulations and standards.⁴²

2.12 Korea-China FTA

Korea-China FTA has entered into force on December, 2015. Clear reference to the WTO TBT Agreement is stated. Promotion of utilizing international standards and guidelines as a basis for setting national regulations and standards is also mentioned under Article 6.4.3. Korea and China has agreed to encourage both Parties to mutually accept technical regulations and conformity assessment results. Article 6.5.2 call Parties to explain the reasons for not accepting other Party's technical regulations as equivalent as their own. TBT commitments include transparency provisions and require Parties to have at least sixty days to hold consultation and notify regulations before adoption. Furthermore, the Agreement requires for the establishment of TBT Committee to monitor and review each Parties' TBT related commitments and process.⁴³

⁴² Korea-Canada FTA

⁴³ Korea-China FTA

2.14 FTA with Colombia, New Zealand, and Vietnam

Korea has also signed FTAs with Colombia, New Zealand, and Vietnam which also contain TBT commitments. All three FTAs share similarities in terms of TBT commitments as these FTAs basically include reference to WTO TBT agreement and promote the use of international standards as a basis for setting their national regulations, standards, and conformity assessment procedures. Additionally, all three FTAs require Parties to accept the other Party's technical regulations as equivalent as their own regulations and include obligation to explain reasons for not accepting. Call for mutual recognition of conformity assessment results as well as requirement for explaining the objection is stated in all three FTAs. Transparency provisions appear in these FTAs with requirements to hold consultation and notify regulations and procedures before Parties adopt them. Minimum 60 days are given to the Parties to comment on the other Party's behavior. Committee for TBT is established to monitor and review TBT commitments and processes. Lastly, Korea-Colombia FTA and Korea-Vietnam FTA include technical assistance commitments as well.

3. Summary of the Results

Every TBT Chapter in FTAs that Korea has signed includes the reference to the WTO TBT Agreement and develops the provisions by intensifying the rules in the WTO TBT Agreement. Moreover, in accordance with Article 2.4 of the WTO TBT Agreement, use of international standards and guidelines as a basis for setting national regulations, standards, and conformity assessment procedure is highly proposed in all TBT Chapters of fifteen Korean FTAs. Call for the establishment of TBT body and committee or at least TBT coordinator and working group exist in all fifteen FTAs. On the other hand, agreement requiring or encouraging Parties to harmonize their technical regulations, standards, and conformity assessment procedures does not exist among Korea's FTAs except Korea-EU FTA. TBT Chapters in Korea-Chile FTA, Korea-India CEPA, Korea-Peru FTA, Korea-US FTA, Korea-Australia FTA, Korea-China FTA, and three additional FTAs with Colombia, New Zealand, and Vietnam require or encourage Parties to accept counter Parties' technical regulations and standards as equivalent as their own. In addition, these Parties need to explain the reasons for not accepting the other Party's technical regulation as equivalent. Except Korea-ASEAN FTA, all other fourteen FTAs call for (mutual) recognition of conformity assessment result. Among these eleven FTAs, Korea-Peru FTA, Korea-US FTA, Korea-Australia FTA, Korea-Canada FTA, Korea-Colombia

FTA, Korea-New Zealand, and Korea-Vietnam FTA even require the Parties to explain the reasons for not recognizing other Parties' result of conformity assessment. Korea-Chile FTA, the first FTA that Korea signed, contains transparency provision in TBT Chapter although it does not require members to hold consultation or notify regulations and procedure before regulations or standards are adopted. Also Korea-Chile FTA does not ask Parties to provide defined time period for the receipt of comments by other Parties. Transparency provision with advanced conditions appears after Korea-Peru FTA. Korea-Peru FTA, Korea-US FTA, Korea-Turkey FTA, Korea-Australia FTA, Korea-Canada FTA, Korea-China FTA, Korea-Colombia FTA, Korea-New Zealand, and Korea-Vietnam FTA contain transparency provision within the TBT Chapter as well as requirement to hold consultations with members about the regulations and procedures before adoption. Also Parties need to have minimum sixty days of time period for the receipt of comments by other Parties. Korea-EU FTA, Korea-Turkey FTA, and Korea-Australia FTA do not mention about the establishment of TBT body. Other eleven FTAs include the role of TBT committee to monitor and review the TBT commitments and processes. Korea-Singapore FTA is the only case that includes specific provisions for the resolution of TBT related disputes. Lastly, Korea-Chile FTA, Korea-ASEAN FTA, Korea-Peru FTA, Korea-Colombia FTA, and Korea-Vietnam FTA

mention technical assistance in their FTA's TBT Chapter.

IV. FURTHER DISCUSSIONS AND CONCLUSION

Among twelve Korea's FTAs, Korea-Peru FTA is the FTA with the most liberalized TBT Agreements which has achieved mutual acceptance of technical regulations as well as mutual recognition of conformity assessments. Korea-US FTA, Korea-Australia FTA and Korea-China FTA also have achieved relatively high level of TBT liberalization. These four FTAs do have three or more provisions stating the harmonization or mutual recognition of technical regulations, standards, and conformity assessment procedures. Moreover, these four FTAs include transparency provisions which allow Parties to hold consultation regarding the adaptation of technical regulations and provide sufficient amount of time to share comments. Korea-Singapore FTA, Korea-India CEPA, Korea-EU FTA, Korea-Turkey FTA, and Korea-Canada FTA present moderate level of TBT liberalization. Mostly, these FTAs include provisions of either one; acceptance of technical regulations as equivalent or mutual recognition of conformity assessment procedures. Even though Korea-India TBT Agreement encourages both acceptances of technical regulations as equivalent and mutual recognitions of conformity assessment procedures, it

does not articulate specific obligations. Korea-Canada FTA has reached high level of liberalization in mutual recognition of conformity assessments however liberalization in terms of technical regulations did not occur. FTAs with the least liberalized TBT Agreements are Korea-EFTA FTA and Korea-ASEAN FTA. Korea-EFTA FTA has progressed to promote international standards when establishing national regulations, standards, and conformity assessment procedures and reached an agreement to encourage mutual recognition of conformity assessment result. However it lacks strong obligation to liberalize TBT measures and there is no transparency mechanism under the TBT Agreement. In case of Korea-ASEAN FTA, despite the existence of TBT Committee there is no obligation to mutually accept technical regulation or the conformity assessment procedures.

< Table4. Liberalization of technical regulation in Korea's FTAs >

| Level of liberalization of TBT | LOW | | | HIGH | |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------|
| Types of TBT | Type A | Type B | Type C | Type D | Type E |
| Adoption of WTO TBT Chapters (Q1) | WTO TBT + Indirect measures affecting trade liberalization (Q8-Q13) + Harmonizing with international regulations (Q3) | WTO TBT + (Q8-Q13) + partial acceptance of harmonization/ mutual recognition of technical regulation (Q4, Q6) | WTO TBT + (Q8-Q13) + significant level of acceptance of harmonization/ mutual recognition of technical regulation (Q2, Q4, Q5, Q6, Q7) | WTO TBT + (Q8-Q13) + Complete acceptance of harmonization / mutual recognition of technical regulation (Q1-Q13) | |
| Name of FTAs | Korea-ASEAN | Korea-Singapore Korea-EFTA Korea-India Korea-Turkey | Korea-Chile Korea-EU Korea-Peru Korea-US Korea-Australia Korea- Canada Korea-China Korea-Colombia Korea-New Zealand Korea-Vietnam | | |

Obtained outcome from the analysis can be categorized into five different types of groups depending on the degree of liberalization. Here the categorization is different from the original framework developed by Choi and

Goh (2010)⁴⁴. Types of TBT are categorized by how much obligation mentioned in each FTA satisfies the contents of thirteen questions discussed earlier as a framework to analyze the level of TBT liberalization. First type of TBT (Type A) has the lowest degree of liberalization which only adopts WTO TBT Chapters. Second type of TBT (Type B) is more liberalized in term of technical regulations which not only adopts WTO TBT Chapters but also pursue harmonization with international regulations. Furthermore, it explains the type of TBT that encourages Parties to pursue transparency, establish TBT body, or call for technical assistance. Korea-ASEAN FTA's TBT commitments fit into the Type B. TBT of Type C refers to partial acceptance of harmonization and mutual recognition of technical regulations as it includes commitments that require or encourage Parties to accept other Parties technical regulations and standards as its own and call for recognition of conformity assessment result addition to requirements of Type B. TBT commitments of Korea-Singapore FTA, Korea-EFTA FTA, Korea-India CEPA, and Korea-Turkey FTA satisfy requirements under Type C. Type D refers to significant level of acceptance of harmonization and mutual recognitions of technical regulations. Addition to commitments listed in Type C, Type D aims further liberalization as it requires

⁴⁴ Choi & Goh (2010)

Parties to even explain reasons for not accepting the other Parties' technical regulations as equivalent to their own and for not accepting the other Parties' conformity assessment results. TBT commitments in Korea's FTAs with Chile, EU, Peru, US, Australia, Canada, China, Colombia, New Zealand, and Vietnam fit into Type D. Lastly, Type E represents complete acceptance of harmonization and mutual recognitions of technical regulations as it pursues the most liberalized form of technical regulations in trade. None of Korea's FTA TBT commitments satisfies Type E.

In 2006, four APEC Members which are Brunei, Chile, New Zealand, and Singapore established a Trans-Pacific Strategic Economic Partnership sharing the objective of achieving free trade and investment in the Asia Pacific region.⁴⁵ This organization known as P4 later transformed into the Trans-Pacific Partnership (TPP) expanding its membership to include twelve countries. Controversial issues in the TPP negotiation in respect of technical barriers to trade would have been regarding how much to harmonize or mutually accept technical regulations and conformity assessment.⁴⁶ Advanced economies would seek "WTO-plus" features whereas developing countries would desire to avoid

⁴⁵ Fergusson, I. F. & Vaughn, B. (2010). *The Trans-Pacific Partnership Agreement*. Washington, DC: Congressional Research Service.

⁴⁶ Ibid.

ambitious TBT commitments and potential trade protectionism. The outcome of TPP negotiation indicates that TPP pursues high level of TBT liberalization. Applying the framework for analyzing TPP's TBT commitments, it satisfies eleven categories among thirteen of them. TPP's TBT Chapter includes reference to the WTO's TBT Agreement and it promotes members to use international standards and guidelines as a basis for setting national regulations, standards, and conformity assessment procedures. Moreover, it requires members to accept the other members' technical regulations and standards as equivalent as its own and call members to explain the reasons or not accepting the other members' technical regulations. Similarly, members are asked to call for mutual recognition of conformity assessment results and explain reasons for non-recognition. TPP's TBT Chapter has transparency provisions and within the transparency provisions it requires members to hold consultations and notify regulations and procedures before final adoption. Also, minimum 60 days are given to the members for any comments regarding to other members' technical regulations. The agreement calls for the establishment of TBT Committee to monitor and review members' commitments on TBT issues and members are encouraged to provide technical assistance. However, TPP's TBT Chapter does not cover requirements to harmonize members' technical regulations, standards, and conformity assessment procedures. Additionally, specific provisions for

resolving TBT related disputes do not exist in TPP's agreements.⁴⁷ Among five different categories which define the types of TBT depending on its level of liberalization, TPP fits into the Type D. TPP's TBT commitments represent significant level of harmonization and mutual recognition of technical regulations thus its level of TBT liberalization is relatively high. When considering the possibility of Korea entering TPP regime, Korea is expected to have less concerns satisfying TPP's TBT related commitments.

In addition, three major countries in Northeast Asia region, China, Japan, and Korea (CJK), have been working toward accomplishing trilateral economic cooperation by signing CJK FTA. In May 2010, the official study for CJK FTA began with its aim to complete its mission by 2012. During the fifth trilateral summit which was held in May 2012, leaders of the three countries announced that CJK FTA would be launched soon. Three countries account for approximately 16% of world trade in goods and services, about 20% of world GDP and about 22% of global population.⁴⁸

TBT commitments in CJK FTA can be predicted by examining other preferential trade agreements signed by China, Japan, and Korea. Since Korea-

⁴⁷ TPP Agreement

⁴⁸ World Bank, World Development Indicators Dataset, 2012

China FTA has already entered into force it is important to analyze how Japan deals with TBT issues. Japan and India signed CEPA which has entered into force in 2011. This CEPA includes reference to WTO TBT Agreement and promotion of using international standards. It also includes obligation to form sub-committee and establish enquiry points which are responsible for answering all reasonable enquiries from the other Party. One of the latest trade agreements that Japan has signed is Japan-Mongolia FTA. This FTA contains relatively more commitments compared to Japan-India CEPA. Japan-Mongolia FTA's TBT commitments are based on WTO TBT Agreements. Additionally, it promotes the use of international standards when establishing domestic technical standards and regulations. Both Parties are encouraged to accept the other Party's technical regulations as equivalent as their own and reasons should explained for non-acceptance. Also, Parties are required to mutually recognize the results of conformity assessment and explain reasons for non-recognition. Establishment of sub-committee and enquiry points are also stated as Japan and Mongolia's FTA TBT commitments.

TBT commitments in trade agreements of Japan imply that Korea's recent FTAs have stronger commitments to liberalize trade and minimize trade barriers regarding technical issues. However, as Japan decided to join TPP and TPP's TBT commitments are much similar to ones that Korea is pursuing in its FTAs,

there should be not much obstacle when coordinating TBT matters in CJK FTA.

In conclusion, as Korea's recent FTAs include higher level of TBT liberalization commitments compared to the FTAs signed in the earlier years it is clear that Korea is pursuing further trade liberalization in terms of technical regulations, standards, and conformity assessment procedures. Korea's effort to remove technical barriers to trade is consistent with the movement made by TPP members. Thus, TBT related negotiations for either TPP or CJK FTA should create no obstacles. However, there should be further discussion and researches on how to quantify the trade effects of including TBT commitments in trade agreements to develop policies for advancing trade environment.

REFERENCES

- Amrita Narlikar. (2005). *The World Trade Organization: A Very Short Introduction*, Oxford University Press.
- B. Hoekman and M. Kostecki. (2009). *The Political Economy Of the World Trading System: The WTO and Beyond*, B. Hoekman and M. Kostecki, Oxford University Press.
- Ed., A. Kreuger. (1998). *The WTO As An International Organization*, University of Chicago Press.
- Elvira, C. (2007). Total Recall on Chinese Imports: Pursuing an End to Unsafe Health and Safety Standards Through Article XX of GATT. *American University International Law Review*, 23, 915.
- Fergusson, I. F. & Vaughn, B. (2010). *The Trans-Pacific Partnership Agreement*. Washington, DC: Congressional Research Service.
- Fliess, B., et al. (2010). "The Use of International Standards in Technical Regulation", *OECD Trade Policy Papers*, No. 102, OECD Publishing, Paris.
DOI: <http://dx.doi.org/10.1787/5kmbjgkz1tzip-en>
- Gilbert R. Winham (1985). *International Trade and the Tokyo Round Negotiation*, Princeton Univ. Press, Princeton, New Jersey
- Jiacheng, Z., and Lu, Hongjie. (2013). Analyzing China Harmonization of Technical Barriers to Trade in the EU and US Markets. The Twelfth Wuhan International Conference on E-Business – Emerging Operations & Services Management Track.

Keith, E. M., John, S. W., and Tsunehiro, O. (2000). Quantifying the Impact of Technical Barriers to Trade: A Framework for Analysis. *Policy Research Working Paper*. Development Research Group. The World Bank.

Kevin Buterbaugh and Richard Fulton. (2008). *The WTO Primer*, Palgrave MacMillan.

Korea Institute of International Economic Policy (KIEP), (2005). Rationale for a China-Japan-Korea FTA and Its Impact on the Korean Economy.

Meyer, N. et al. (2010). "Bilateral and Regional Trade Agreements and Technical Barriers to Trade: An African Perspective", OECD Trade Policy Working Papers, No. 96, OECD Publishing. doi: 10.1787/5kmdbgfrgnbv-en

Trebilcock, M. J., Howse, R., & Eliason, A. (2012). The regulation of international trade. Abingdon, Oxon: Routledge.

국문자료

안상욱, "EU 양자간 무역협정 전략 변화와 한-EU FTA," 유럽연구, 제30권 2호, p 213-240, 2012

윤성욱, "자유무역협정(FTA)을 통한 국제표준경쟁: 한-EU FTA 전기전자분야를 중심으로," 국제지역연구, 제16권 제4호, p151-174, 2013

최현경&고준성, "표준과 경쟁우위- 성장과 국제무역을 중심으로," 산업연구원 연구보고서, 584, p11-154, 2010

서민교&김희준, "한-중 FTA의 무역기술장벽 대응방안에 관한 연구," 통상정보연구, 제14권 제4호, p489-514, 2012

장용준&서정민, "무역상 기술장벽이 한국의 교역에 미치는 영향," 국제통상연구, 제19권 제11호, p1-33, 2014

GATT/WTO DOCUMENTS

The Technical Barriers to Trade Agreement.

The General Agreement on Tariffs and Trade 1994.

WTO, Technical information on TBT, Trade topics. Retrieved November 02, 2015.

http://www.wto.org/english/tratop_e/tbt_e/tbt_info_e.htm

WTO, Twentieth Annual Review of the Implementation and operation of the TBT Agreement,

Retrieved November 02, 2015. https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm

WTO, “What is the WTO?”. Retrieved November 02, 2015.

http://www.wto.org/english/thewto_e/whatis_e/who_we_are_e.htm

LEGAL TEXTS

Japan-India CEPA

Japan-Mongolia FTA

Korea-ASEAN FTA

Korea-Australia FTA

Korea-Chile FTA

Korea-China FTA

Korea-EFTA FTA

Korea-EU FTA

Korea-India CEPA

Korea-Peru FTA

Korea-Singapore FTA

Korea-Turkey FTA

Korea-US FTA

Trans-Pacific Partnership Agreement

Annex 1. Schematic overview of the TBT provisions of the Korea's FTAs

| Category | Questions | Korea - Chile FTA | Korea-Singapore FTA | Korea-EFTA FTA | Korea-ASEAN FTA | Korea-India CEPA | Korea-EU FTA |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|--------------------------|-------------------------|-------------------------|----------------------|
| Reference to the WTO TBT Agreement | Does the agreement make reference to the WTO Agreement? | Yes | Yes | Yes | Yes | Yes | Yes |
| Harmonization | Does the agreement require or encourage Parties to harmonize their technical regulations, standards, and conformity assessment procedures? | No | No | No | No | No | No |
| | Does the agreement promote the use of international and/or regional standards and guidelines as a basis for setting national regulations, standards and conformity assessment procedures? | Yes (Article 9.4.5) | Yes (Article 8.2.4) | Yes (Article 2.8.2.a) | Yes (Article 14.1.f) | Yes (Article 2.28.2) | Yes (Article 4.5) |
| Acceptance of technical regulation as equivalent | Does the agreement require or encourage Parties to accept as equivalent other Parties technical regulations and standards? | Yes (Article 9.5.4) | No | No | No | Yes (Article 2.28.2) | No |
| | Does the agreement call Parties to explain the reasons for not accepting the other Party's technical regulations as equivalent? | Yes (Article 9.5.5) | No | No | No | No | No |

| Category | Questions | Korea - Chile FTA | Korea-Singapore FTA | Korea-EFTA FTA | Korea-ASEAN FTA | Korea-India CEPA | Korea-EU FTA |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------|------------------------|-----------------|-------------------------|--------------------------|
| (Mutual) recognition of conformity assessments | Does the agreement call for a (mutual) recognition or conformity assessment result? | Yes (article 9.6.4) | Yes (Article 8.5) | Yes (Article 2.8.4) | No | Yes (Article 2.28.2) | Yes (Article 4.6.1) |
| | Does the agreement require that the Parties explain the reasons for non-recognition? | No | No | No | No | No | No |
| | Is the agreement accompanied by a (separate) mutual recognition arrangement or does it promote the conclusion of such agreements? | No | Designating Authority | No | No | No | No |
| Transparency | Does the agreement include transparency provisions? | Yes (Article 9.8) | No | No | No | No | No |
| | Does the agreement require members to hold consultations and notify regulations and procedures before they are adopted? | No | No | No | No | No | Yes (Article 4.4.1.e) |
| | Is a time period for the receipt of comments by other Parties defined? Is it longer than 60 days? | No | No | No | No | No | Yes (Article 4.4.1.f) |

| Category | Questions | Korea - Chile FTA | Korea-Singapore FTA | Korea-EFTA FTA | Korea-ASEAN FTA | Korea-India CEPA | Korea-EU FTA |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|------------------------|-------------------------|-------------------------|--------------|
| Enforcement and dispute settlement | Does the agreement call for the establishment of, and participation in, TBT body (e.g. committee) to monitor and review the TBT commitments and process? | Yes (Article 9.10) | Yes (Article 8.7) | Yes (Article 2.8.4) | Yes (Article 5.3) | Yes (Article 2.28.3) | No |
| | Does the agreement include specific provisions for the resolution of TBT related disputes? | No | Yes (Article 8.7.6) | No | No | No | No |
| Technical assistance | Does the agreement call for technical assistance? | Yes | No | No | Yes (Article 14.1.h) | No | No |

| Category | Questions | Korea-Peru FTA | Korea-US FTA | Korea-Turkey FTA | Korea-Australia FTA | Korea-Canada FTA | Korea-China FTA |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|------------------------|-------------------------|------------------------|------------------------|
| Reference to the WTO TBT Agreement | Does the agreement make reference to the WTO Agreement? | Yes | Yes | Yes | Yes | Yes | Yes |
| Harmonization | Does the agreement require or encourage Parties to harmonize their technical regulations, standards, and conformity assessment procedures? | No | No | No | No | No | No |
| | Does the agreement promote the use of international and/or regional standards and guidelines as a basis for setting national regulations, standards and conformity assessment procedures? | Yes (Article 7.4) | Yes (Article 9.3) | Yes (Article 5.4.b) | Yes (Article 5.3.1) | Yes (Article 6.4.5) | Yes (Article 6.4.3) |
| Acceptance of technical regulation as equivalent | Does the agreement require or encourage Parties to accept as equivalent other Parties technical regulations and standards? | Yes (Article 7.5.1) | Yes (Article 9.3) | No | Yes (Article 5.4.1) | No | Yes (Article 6.5.1) |
| | Does the agreement call Parties to explain the reasons for not accepting the other Party's technical regulations as equivalent? | Yes, (Article 7.5.2) | No | No | Yes, (article 5.4.2) | No | Yes (Article 6.5.2) |

| Category | Questions | Korea-Peru FTA | Korea-US FTA | Korea-Turkey FTA | Korea-Australia FTA | Korea-Canada FTA | Korea-China FTA |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------|---------------------------|-------------------------|--------------------------|------------------------|
| (Mutual) recognition of conformity assessments | Does the agreement call for a (mutual) recognition of conformity assessment result? | Yes, (Article 7.6.2) | Yes (Article 9.5.1) | Yes (Article 5.6.1) | Yes, (Article 5.6.1) | Yes (Article 6.4.3.b) | Yes (Article 6.6.1) |
| | Does the agreement require that the Parties explain the reasons for non-recognition? | Yes (Article 7.6.2) | Yes (Article 9.5.2) | No | Yes (Article 5.6.3) | Yes (Article 6.4.4) | No |
| | Is the agreement accompanied by a (separate) mutual recognition arrangement or does it promote the conclusion of such agreements? | No | No | No | No | No | No |
| Transparency | Does the agreement include transparency provisions? | Yes (Article 7.7) | Yes (Article 9.6) | Yes (Article 5.10) | Yes (Article 5.8) | Yes (Article 6.6) | Yes (Article 6.7) |
| | Does the agreement require members to hold consultations and notify regulations and procedures before they are adopted? | Yes (Article 7.7.1) | Yes (Article 9.6.3) | Yes (Article 5.10.3.c) | Yes (Article 5.8.3) | Yes, (Article 6.6.1) | Yes (Article 6.7.1) |
| | Is a time period for the receipt of comments by other Parties defined? Is it longer than 60 days? | Yes (Article 7.7.4) | Yes (Article 9.6.3) | Yes (Article 5.10.3.d) | Yes (Article 5.8.3) | Yes (Article 6.6.5) | Yes (Article 6.7.1) |

| Category | Questions | Korea-Peru FTA | Korea-US FTA | Korea-Turkey FTA | Korea-Australia FTA | Korea-Canada FTA | Korea-China FTA |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------|------------------|---------------------|------------------|-------------------------|
| Enforcement and dispute settlement | Does the agreement call for the establishment of, and participation in, a TBT body (e.g. committee) to monitor and review the TBT commitments and process? | Yes (Article 7.9.1) | Yes (Article 9.8) | No | No | No | Yes (Article 6.13.1) |
| | Does the agreement include specific provisions for the resolution of TBT related disputes? | No | No | No | No | No | No |
| Technical Assistance | Does the agreement call for technical assistance? | Yes (Article 7.8) | No | No | No | No | No |

Annex 2. Schematic overview of the TBT provisions of Trans-Pacific Strategic Economic Partnership (TPP)

| Category | Questions | TPP |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Reference to the WTO TBT Agreement | Does the agreement make reference to the WTO Agreement? | Yes |
| Harmonization | Does the agreement require or encourage Parties to harmonize their technical regulations, standards, and conformity assessment procedures? | No |
| | Does the agreement promote the use of international and/or regional standards and guidelines as a basis for setting national regulations, standards and conformity assessment procedures? | Yes (Article 8.7) |
| Acceptance of technical regulation as equivalent | Does the agreement require or encourage Parties to accept as equivalent other Parties technical regulations and standards? | Yes (Article 8.8.1) |
| | Does the agreement call Parties to explain the reasons for not accepting the other Party's technical regulations as equivalent? | Yes (Article 8.8.2) |
| (Mutual) recognition of conformity assessments | Does the agreement call for a (mutual) recognition of conformity assessment result? | Yes (Article 8.9.1) |
| | Does the agreement require that the Parties explain the reasons for non-recognition? | Yes (Article 8.9.5) |
| Transparency | Does the agreement include transparency provisions? | Yes (Article 8.10) |
| | Does the agreement require members to hold consultations and notify regulations and procedures before they are adopted? | Yes (Article 8.10.1) |
| | Is a time period for the receipt of comments by other Parties defined? Is it longer than 60 days? | Yes (Article 8.10.2) |
| Enforcement and dispute settlement | Does the agreement call for the establishment of, and participation in, a TBT body (e.g. committee) to monitor and review the TBT commitments and process? | Yes (Article 8.11) |
| | Does the agreement include specific provisions for the resolution of TBT related disputes? | No |
| Technical Assistance | Does the agreement call for technical assistance? | Yes (Article 8.12) |

국문초록

세계무역기구(WTO) 체제 아래 세계 각국의 관세장벽은 지난 수년 동안 상당히 큰 폭으로 감소해왔다. 하지만 관세장벽이 낮아진 만큼 비관세장벽을 높이는 경우와 이를 보호무역의 수단으로 활용할 수 있다는 가능성에 대한 국제사회의 고민은 증가하는 추세이다. 비관세장벽의 대표적인 보호장치는 기술표준 및 기술규제방안이다. 국가간의 기술표준 차이는 무역 장벽을 형성하며 효율성을 저해한다. 이러한 기술표준의 차이를 극복하는 방안으로는 기술 표준 및 규제 조화 혹은 합치, 적합성평가의 상호인정, 투명성 확대, TBT 위원회 설치 등이 있다. 자유무역협정(FTA)에 체결하는 국가 수가 증가함에 따라 기술표준과 관련된 무역장벽을 낮추려는 노력 또한 FTA에 반영되는 양상을 보이고 있다.

본 논문은 대한민국과 자유무역협정을 발효 혹은 타결한 15개국과의 협정문을 13개의 질문을 토대로 분석하여 무역상 기술장벽(TBT)의 자유화 정도를 살펴보고 대한민국의 무역상 기술자유화를 평가해보았다. 앞으로도 세계 각국은 무역을 통한 시장확대와 경제성장에 힘쓸 것이다. 따라서 양자간 자유무역과 대규모 다자간 자유무역에 대한 체결은 지속될 것으로 판단된다. 대한민국 또한 환태평양경제동반자협정(TPP)이나 한중일 자유무역협정(CJK FTA)을 체결을

계획하고 있는 만큼 TBT 자유화에 대한 이해와 분석은 유의미할 것으로 예상된다.

키워드: 자유무역협정, 무역상 기술장벽협정, 무역자유화, 기술규제자유화, 기술표준

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