

Chapter 3

International regulatory frameworks

Since decades, numerous regulatory frameworks have been developed in an effort to simplify, harmonize and standardize the cross-border operations. A series of Treaties, Agreements, Conventions, Arrangements or guidelines have been concluded. Some 489 RTAs have been notified to the World Trade Organization, counting goods and services notifications separately on the 15th May 2011⁷⁷. Each agreement covers many areas which are often related to trade facilitation. Earlier, Wille and Redden (2006) showed that a series of trade facilitation principles are recurring in most modern RTAs, followed by Duval (2007), Bin (2008) and recently Duval (2011). These agreements can be classified according to their level of integration and should provide some benefits to their Members⁷⁸. However, as stressed earlier by Messerlin and Zarrouk (2000) and recently by Freund and Ornelas (2010), they also raised several concerns about trade diversions or the noodle bowl effects. Hamanaka et al. (2010) and Duval (2011) also pointed out the possible discriminatory treatments of a trade agreement between Members and non Members. Many trade facilitation provisions are -usually- non exclusives, such as Customs transparency or the adoption of international conventions, while others such as mutual recognition or fees could have discriminatory elements. Finally, trade facilitation provisions vary across trade agreements. Due to their potential impacts on trade, these agreements have been studied since a while and, as noted by Disdier and Head (2008), Kepaptsoglou et al. (2010) or Arvis et al. (2010), almost always included into gravity regressions even if such dummies encompass econometric issues, such as endogeneity (Baier and Bergstrand, 2007, 2009b).

Beyond the growing development of the multilateral and bilateral trade agreements, numerous international bodies which aim to enhance trade flows, such as the World Trade Organization (WTO), the World Customs Organization (WCO), the UN Conference on Trade and Development (UNCTAD), the UN Economic Commission for Europe (UNECE) or the International Maritime Organization (IMO), have develop uniform standards or their mutual recognition, through a series of conventions, arrangements or guidelines. Conventions cover a wide range of topics which are more

⁷⁷Some 295 RTAs are still in force, according to the Regional Trade Agreements Information System (RTA-IS) of the WTO.

⁷⁸See Pomfret (2005) for a review. A recent report of the Productivity Commission showed that benefits of bilateral agreements are not systematic (Commission, 2010).

focused than in Trade Agreements. Unfortunately, Conventions are rarely used in economic models and particularly gravity regressions. According to the agreed definition, a wide range of areas could be related to trade facilitation issues. There is no trade facilitation convention *per se*, but many conventions include a section or underlying elements related to it, as noted by Staples (2002) or Grainger (2007b). In addition, Alburo and Duval (2010) showed that many Conventions spread the use of ICT. Such links have been explored during the WTO negotiations on trade facilitation (WTO, 2009a, 2010), following the pre-existing work of the United Nations Center for Trade Facilitation and Electronic Business (UN/CEFACT)⁷⁹. These arrangements will be a useful counterpart to the traditional trade facilitation indicators. However, such an index is not obvious to build due to the absence of a consistent interpretation and application of those agreements by several countries (Widdowson, 2008).

This chapter reviews the main Agreements, Conventions and guidelines used in the following indicators and regressions. Firstly, I build a new database on the trade agreements notified to the WTO, which covers more agreements than traditional dummies and focuses on trade facilitation issues. Secondly, I study a series of useful Conventions related to trade facilitation and build another database, to compute a specific index based on the rate of ratification. Thirdly, I detail some specific guidelines which belong to the trade facilitation literature. Finally, I explain some limits to the use of such variables.

3.1 Trade Agreements and Trade Facilitation

Since a decade, with the elimination of tariff barriers, trade agreements have increasingly dealt with many trade facilitation dimensions. It was noted earlier by Moisé (2002), who showed the growing share of provisions related to trade facilitation. Wille and Redden (2006), then Duval (2007) and Bin (2008) explored these provisions for the Asia-Pacific trade agreements⁸⁰. They relied on various trade facilitation dimensions, from Customs procedures to standards, fees, transit issues or ICT provisions, showing the significance of such provisions. Recently, based on the on-going WTO trade facilitation negotiation focusing on a *narrow* definition of trade facilitation, Duval (2011) showed that trade facilitation provisions have known a new boom. In addition, new agreements often include dedicated chapters. Maur (2008) explained that trade facilitation issues are particularly fitted to the regional level, RTAs being a good complement to multilateral and national initiatives. However, beyond the trade creation effects, Hamanaka et al. (2010) have shown the potential discriminatory impacts of such provisions.

Trade agreements rely on trade facilitation provisions, leading to substantial impacts for their Members and non-Members too. That is why, it seems necessary to use the information incorporated

⁷⁹The UN/CEFACT provided a series of Recommendations on various trade facilitation dimensions.

⁸⁰Generally, such provisions are found in different parts of the agreements, but not in a separate chapter related to trade facilitation issues *per se*.

into trade agreements, in order to improve the measure of the impact of trade facilitation policies. It may be relevant to include some dummies or variables into the gravity regressions to account for such provisions. Even if, as stressed by Duval (2011), only rely on the fact that a dimension is covered by an agreement, “*may not be good enough to capture how trade facilitating an agreement really is*”. It will be necessary to explore in details such provisions.

3.1.1 Existing compilations

The UNESCAP Review The UNESCAP has reviewed such provisions in the Asia Pacific regional trade agreements, classifying them according to several dimensions. Some of them are related to trade facilitation, such as Customs procedures, Customs valuation, Trade regulations publication and administration, use of ICT, mobility of business people, Freedom of transit, transport and logistics and trade finance⁸¹. Based on the UNESCAP observations, I built a database which covers each dimension from 1976 to 2011⁸². The database covers 111 agreements (in 2010), from all types, but only signed between Asian countries and their partners. I created a series of dummies for each trade facilitation area covered, which take the value of one when an Agreement includes it. I also built a variable reporting the percent of trade facilitation areas covered for each agreement, measuring the “*trade facilitation intensity*” of it. Finally, I made this database “gravity friendly”, sorted by country, partner and year. This database includes variables measuring the number of agreements for each pair of countries that cover each trade facilitation dimension, and the related percentage of all agreements concluded. I also built a variable for each trade facilitation dimension that takes the value of one if at least one agreement covers it. In addition, the database includes a membership dummy for each trade agreement⁸³.

The scope of these variables are restricted to the Asian region, but they provide new insights on the nature of the trade agreements in force in 2010⁸⁴. Firstly, it appears that almost a fifth (17.12%) of the trade agreements reviewed by the UNESCAP in 2010 were not notified to the WTO. This rate is lower for the agreements related to trade facilitation (8.22%). Nevertheless, it means that the trade agreements dummies based on the WTO notification database do not encompass all existing agreements. Secondly, the number of the *-Asian-* trade agreements has increased since the last decade and around 70% of them are related to trade facilitation, at least to one of the dimensions covered by the UNESCAP (figure B.2 in the Appendix). This is much more than the rate found by Duval (2007), but in line with Bin (2008) who stressed that almost all FTAs include Customs procedures

⁸¹Bin (2008) provided an explanation about these various dimensions.

⁸²I download the UNESCAP observations resumed in an *Excel* file and a report in *pdf*, at the 04 June 2011. Unfortunately these two sources do not match, the former being more accurate. That is why I rely on the *Excel* file.

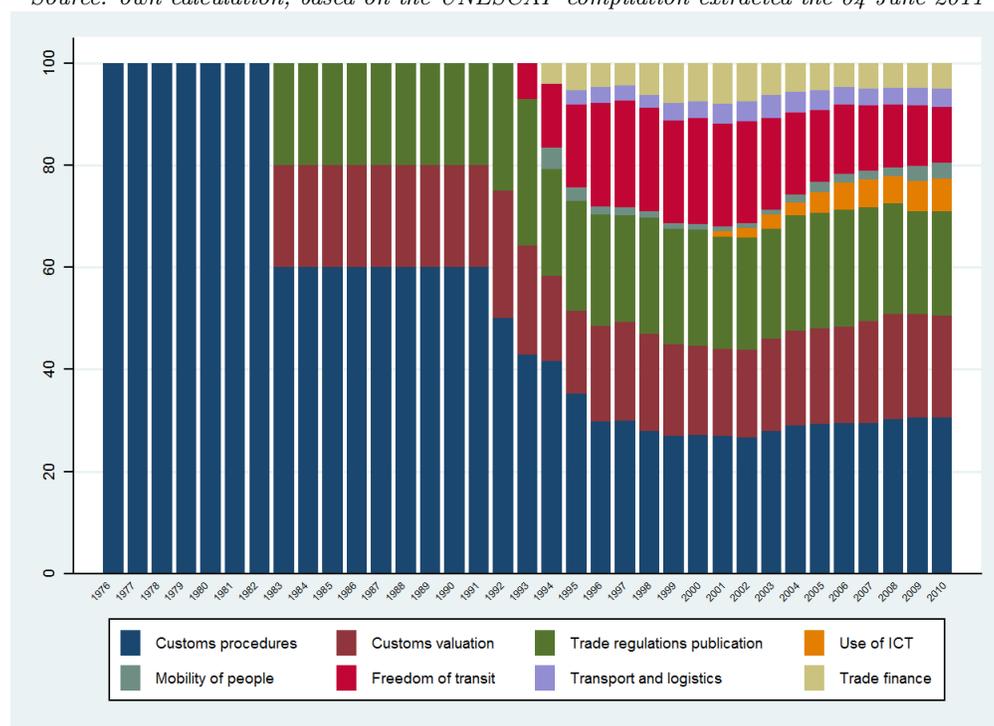
⁸³The two databases are available in STATA format on my website, www.thomas-orliac.eu

⁸⁴Around one third of the world stock of trade agreements is composed by Asian agreements.

provisions and other “core elements” of trade facilitation⁸⁵. Thirdly, since a decade the use of ICT is increasingly included in the trade agreements related to trade facilitation, even if it remains a small share of the seven dimensions covered by the UNESCAP (figure 3.1). Customs procedures are still the main dimension, followed by the Customs valuation and the trade regulations publication. Fourthly, some countries participate to many agreements covering trade facilitation issues. About 30% of country pairs have at least one common agreement that includes a reference to Customs procedures, but a third of them (10% of the total) have more than one common agreement sharing this issue (table B.1 in the appendix). Such duplicates illustrate the noodle bowl effects, but can also be used as an indirect measure of the intensity of the trade facilitation provisions. However, as stressed by Duval (2011), “a key issue for a given country is to ensure that these [trade facilitation provisions] remain consistent across the various trade agreements in enters to”.

Figure 3.1: Trade agreements related to trade facilitation, by dimensions (%)

Source: own calculation, based on the UNESCAP compilation extracted the 04 June 2011



The WTO agreements database RTAs are legally based on the article XXIV of the GATT 1994, the enabling clause for developing countries⁸⁶ and article V of the GATS. WTO members are

⁸⁵However, note that only a quarter (28.48%) of the *country pairs* covered by the database in 2010 have at least one agreement that includes one -or more- trade facilitation dimension (as classified by the UNESCAP review).

⁸⁶Around 14% of all RTAs in force in 2011 rely on the enabling clause.

bound to notify the regional trade agreements in which they participate. That is why, the World Trade Organization has developed a database covering the trade agreements notified by its Members. It provides information on each trade agreement that is in force, which is classified according to a series of criteria, *i.e. the coverage and the type of Agreement as well as its status*. By the mid 2011, there were 210 agreements in force, at least reported to the WTO⁸⁷ (table 3.1). Free Trade Agreements and Partial Scope Agreements account for 90%, while Customs Unions account for 10 % (table B.2 in the Appendix).

Table 3.1: Trade Agreements reported to the WTO, by Status

Source: own calculation, based on the WTO RTA-IS extracted the 6 June 2011

Status	Freq.	Percent
Early announcement-Signed	11	2.55
Early announcement-Under negotiation	27	6.26
In Force	210	48.72
Inactive	183	42.46
Total	431	100.00

Numerous usual trade agreement dummies are based on this source. It is the case of the traditional dummy built by Baier and Bergstrand (2007), which measures whether or not a country pair shares at least one trade agreement. Unfortunately, such databases are not updated on a regular basis and do not encompass all the information provided by the RTA-IS. The coverage of each agreement is particularly useful. Indeed, each agreement is classified according to the topics it covers, such as Customs related procedures, Rules of origin, Sanitary and Phyto-Sanitary measure or Technical regulations and standards. As explained previously, RTAs include many trade facilitation provisions which should be reported into trade facilitation models. As noted by Duval (2011), relying on broad cross-references do not ensure that the agreement is really “trade facilitating”. Nevertheless, I think that such variables can be viewed as a second best. At least, they are best fitted than traditional agreement dummies.

3.1.2 A database on Trade Agreements related to trade facilitation issues

In order to take into account of trade facilitation provisions included into trade agreements, I built a database by using the WTO categories classification previously listed. This database provides a Membership dummy for each agreement, a dummy if the country pair is part of at least one trade agreement and a dummy if the pair only shares one bilateral agreement. I built several databases classified according to the topic covered by each agreement⁸⁸. It is not a detailed database on trade

⁸⁷It is a limit of the RTA-IS which only reports agreements in force, dropping the inactive ones.

⁸⁸Each database is based on a “gravity friendly” format. They cover *all RTAs reported*, agreements related to *Customs procedures*, to *Rules of origin*, *SPS* and *TBT*. They are available in a STATA format on my website.

facilitation provisions but it has a World coverage, from 1958 to 2010. Regarding to the Baier and Bergstrand (2007) database (BBD) which covers 5142 unique country pairs from 1960 to 2005, this new database covers 7072 unique country pairs (5763 from 1960 to 2005). In addition, the BBD accounts for 80590 country pairs while mine covers 136120 pairs (dropping all duplicates by *cou par year*). It is a huge improvement. Such disparities come from a bigger set of agreements and range of years, despite the number of agreements which currently became inactive⁸⁹ and the missing data of the WTO database⁹⁰. Additional statistics are available in the Appendix, section B.2.

It should be possible to upgrade this new database by including inactive agreements and checking with additional sources. However, it seems that this base is well fitted, providing some good proxies of broad trade facilitation issues. It remains a second best, without details on the commitments and conditionality of each agreement, but it has the advantage to cover a wide set of countries, to date. Based on the RTA-IS online database, I calculate that 41% of RTAs in force in 2010 were classified as agreements linked to Customs-related procedures.

3.2 Conventions and trade facilitation

As explained previously, Conventions refer on several trade facilitation provisions too. In addition, trade agreements rely also on the use of international standards provided by such Conventions, Arrangements or guidelines (Duval, 2011). The OECD has also raised the power of such Conventions and included them in its Trade Facilitation Indicators. Based on this seminal work and the pre-existing work developed by the UN/CEFACT through its series of Recommendations, the UNCTAD technical notes (UNCTAD, 2011b), the WTO compilations of Member's proposals (WTO, 2009a) and the current draft WTO (2011) on trade facilitation negotiations⁹¹, it has been possible to highlight a set of core Conventions related to trade facilitation various dimensions.

Recent drafts do not refer to a list of conventions to use as baseline for international standards, but earlier compilations did. The sixth draft (WTO, 2010) refers to the Conventions in the following way:

ARTICLE 7: RELEASE AND CLEARANCE OF GOODS

7.3. Risk Management

7.3.5 [Members shall, where practicable, refer to relevant international standards and practices including the Revised Kyoto Convention and the WCO Risk Management Guideline as a basis for its risk management.]

ARTICLE 10: FORMALITIES CONNECTED WITH IMPORTATION AND EXPORTATION

10.3. Use of International Standards

10.3.6 [For the purposes of this Agreement, the term "international standards" shall be understood to refer to [international Conventions or Agreements] [standards, guidelines and recommendations] relating to facilitating

⁸⁹According to the WTO, a large amount of agreements became inactive in 2004 and, as stressed before, the current RTA-IS only provides a snapshot of active Agreements.

⁹⁰Remember that 17.12% of the trade agreements reviewed by the UNESCAP in 2010 were not notified to the WTO. That is why, Baier and Bergstrand (2007) have completed their database with additional sources.

⁹¹The WTO Negotiating Group on Trade Facilitation provided regular compilations of Member's proposals.

international trade, inter alia those administered by the World Customs Organization (WCO) and United Nations Center for Trade Facilitation and Electronic Business.]

Countries are well aware that such conventions aiming to facilitate international trade play a crucial role in the trade facilitation process and should be taken into account as a reference tool. Previous compilations of Member's proposals pointed out a more explicit list of conventions:

J. FORMALITIES CONNECTED WITH IMPORTATION AND EXPORTATION

3. Use of International Standards

3.5 [*Alternative*: For the purposes of this Agreement, the term "international standards" shall be understood to refer to International Conventions or Agreements related to facilitating international trade and administered by relevant international intergovernmental organizations: World Customs Organization (WCO), United Nations Organizations Center for Trade Facilitation and Electronic Business, International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO). In particular, the following conventions shall apply: Convention (2005) on Facilitation of International Maritime Traffic, Convention (2006) on International Civil Aviation, Convention (1990) on the Temporary Admission of Goods (Istanbul Convention), International Convention (1986) on the Harmonized Commodity Description and Coding System (HS Convention), General Annex of the International Convention (1999) on the Simplification and Harmonization of Customs procedures (Revised Kyoto Convention). As appropriate, the lists of relevant international organizations and conventions may be complemented as identified by the Trade Facilitation Committee]."

The United Nations Center for Trade Facilitation and Electronic Business (UN/CEFACT) provides a series of Recommendations to facilitate the international transactions, through the simplification and harmonization of processes, procedures and information flows⁹². Based on the involvement of the public and private sectors, they remain a valuable tool. The 35 Recommendations refer to a series of Arrangements, such as the Customs Convention on Containers, the Convention on the Facilitation of International Maritime Traffic, the International Convention on the Harmonization of Frontier Control of Goods, the International Convention on the Harmonized Commodity Description and Coding System, the Convention on International Civil Aviation, the International Convention on the Simplification and Harmonization of Customs Procedures (Kyoto), or the Customs Convention on the International Transport of Goods under cover of TIR Carnets.

I review the core Conventions related to trade facilitation in the following sub-sections. Firstly, I explore their provisions, particularly the ones related to some trade facilitation dimensions, their objectives and their history. Secondly, I provide several explanations about the construction of each database.

3.2.1 The core Conventions

The Convention on the ATA carnet for temporary admission of goods The Convention entered into force on 30 July 1963 and accounts 65 Members by the mid of 2010. The ATA Carnet (for "*Admission Temporaire-Temporary Admission*") is a Customs document used for goods under temporary admission that allows its holder, against a collateral, to import goods without payment

⁹²The United Nations Center for Trade Facilitation and Electronic Business (UN/CEFACT) is an intergovernmental body with a global remit. Its objectives are to develop and promote simple, transparent and effective processes for global trade (including related government-to-business and government-to-government processes). A full description could be found in its home page, <http://www.unece.org/cefact/about.htm>

of duties and taxes. These Carnets apply mainly to three categories of merchandise: commercial samples, professional equipment and goods for use at exhibitions and fairs. The ATA Carnets are now part of the Convention on the Temporary Admission of Goods.

The TIR Convention After the end of the second world war, there was a rapid growth in trade in goods in Europe. It became clear that lengthy and cumbersome Customs procedures each time goods crossed a border put a severe strain and burden on trade. The negotiations started at the United Nations Economic Commission for Europe, with the objective of drawing up an international Agreement which would facilitate the movement of goods in Europe. The first TIR Agreement was launched in 1949 between a small number of European countries and its success led to the creation of the TIR Convention in 1959. As a result of this Agreement a guarantee system was introduced in a number of European countries which would cover the duties and other charges at risk on goods moving in Europe, in the course of international trade. Following the changes in Customs and transport requirements, such as the arrival of the maritime container (Levinson, 2006) and the development of multimodal transport techniques, the TIR Convention was revised in 1975⁹³ and, since, amended 28 times (UNECE, 2010). The TIR framework has formed the basis of many regional transit system and contributed to the facilitation of international transport, not only in Europe but also in Africa or Latin America⁹⁴. By the end of 2010, the Convention had 68 contracting parties. The number of Carnets issued has grown from 3000 TIR in 1952 to 2.822 million in 2010 (UNECE statistics), despite the enlargement of the European Community⁹⁵.

The TIR procedure enables goods to move from a Customs office of departure in one country to a Customs office of destination in another country under cover of an internationally accepted Customs transit document, which also provides a financial guarantee for the payment of the suspended duties and taxes⁹⁶. The aim of this procedure is to facilitate *“to the greatest possible extent the movement of goods under Customs seals in international trade and to provide the required Customs security and guarantees”* (UNECE, 2010) while reducing Customs formalities. If such advantage is obvious for economic operators, it is also the case for Customs which save times and avoid expensive use of manpower and facilities. The TIR transit system is founded on the following five pillars: the use of secure vehicles or containers, the international guarantee chain, the TIR carnet, the mutual recognition of Customs controls⁹⁷, and controlled access to the TIR system. The successive amendments to the TIR Convention (1975) has improved the transparency of the international guarantee system and

⁹³Note that the former convention is still in place since one of its contracting parties - *i.e.* Japan - has not yet acceded to the Revised convention of 1975.

⁹⁴In 1984, the Economic and Social Council of the United Nations (ECOSOC) adopted a resolution (1984/79) which recommends that countries world-wide examine the possibility of acceding to the TIR Convention. This procedure is promoted by the UNESCAP, ESCWA, the World Bank, the Asian Development Bank and the OECD.

⁹⁵The European Community has its own community transit system (see section 6.2.2.3) and does not use TIR Carnets for transit operations within the its Members States.

⁹⁶The guarantee system is managed by an international organization, which is currently the International Road Transport Union.

⁹⁷Customs control measures of the country of departure should be accepted by the country of transit and destination.

the responsibility of the different operators, but also led to a modernization of the TIR procedure using modern electronic data processing mechanisms such as the TIR Procedure Computerization Project (eTIR).

The International Convention for Safe Containers This convention has followed the huge increase in international trade and the use of freight containers for consignment of goods by sea. In 1972, the Convention had two goals, to protect the human life and to facilitate the transport of goods by containers by providing uniform international regulation. The UN/CEFACT mentioned this conventions as related to Customs and other official procedures concerning the means of transport and transport equipment including containers. According to the International Maritime Organization (IMO), the contracting parties represent 60.95% of world tonnage and only 6.18% in its revised form of 1993. This Convention is not very followed but containers are extremely standardized anyway. Note that other conventions refer to this particular convention, generating possible double counting *-weighting-* issues.

The Convention on the Harmonized Commodity Description and Coding System Entered into force on 1st January 1988 and commonly known as the “HS Nomenclature”, this Convention provides an international nomenclature. Elaborated by the WCO, it comprises about 5000 commodity groups classified by a six digit code. By the mid of 2010, the Convention was ratified by 135 countries and the system used by more than 200 economies according to the WCO, covering around 98 % of the international trade of goods.

The Convention on the Temporary Admission of Goods This Convention, known as the Istanbul Convention, has entered into force on 27 November 1993 and was ratified by 53 countries by the mid 2010. Through a series of annexes, the Convention describes in detail the rules applicable to temporary admission papers (ATA and CPD carnets); goods for display or use at exhibitions, fairs, meetings or similar events; professional equipment; containers, pallets, packings, samples and other goods imported in connection with a commercial operation; goods imported in connection with a manufacturing operation; goods imported for educational, scientific or cultural purposes; travellers’ personal effects and goods imported for sports purposes; tourist publicity material; goods imported as frontier traffic; goods imported for humanitarian purposes; means of transport; animals; goods imported with partial relief from import duties and taxes.

The Revised Kyoto convention One of the most important instruments for the development of modern Customs processes is the International Convention on the simplification and harmonization of Customs procedures, commonly known as the Kyoto Convention (Messerlin and Zarrouk, 2000). Originally adopted in 1974, the Convention was revised in 1999 and entered into force on 3 February 2006. The Convention consists of 31 Annexes, each contains basic principles for Customs processes. Indeed, as explained by the World Customs Organization, the revised Kyoto Convention elaborates several key governing principles such as the transparency and predictability of Customs

actions, the standardization and simplification of the goods declaration and supporting documents, the simplified procedures for authorized persons, the maximum use of information technology, the minimum necessary Customs control to ensure compliance with regulations, the use of risk management and audit based controls, and the coordinated interventions with other border agencies. The revised Kyoto Convention promotes trade facilitation and contains new rules that binding to all contracting parties, without reservation. As stressed by the Global Facilitation Partnership for Transportation and Trade (GFPTT), “*the revised Kyoto Convention is regarded as the blueprint for trade facilitation*”.

The Convention on Facilitation of International Maritime Traffic This Convention aims to reduce delays in maritime traffic and to increase the standardization of formalities and procedures. According to the International Maritime Organization (IMO), the Convention has successfully reduced the number of declarations which can be required by public authorities⁹⁸. This Convention came with the necessity to facilitate the international maritime traffic, by reducing many burdens of the 50ies such as the excessive number of documents and copies required, translation issues, or the different authentication standards. The number of required copies is now limited and the types of document standardized. In force since 1967, the main revisions related to trade facilitation matters occur in 1992, 1996 and 2005. Different amendments have been introduced, respectively on electronic data processing, consular formalities and fees, submission of pre-import information in 1992, on national facilitation committees in 1996, on recommended practices for public authorities to develop necessary procedures in order to use pre-arrival and pre-departure information, on the necessity to submit all information to a single point to avoid duplication, on the encouragement of electronic transmission of information, and on the reference to the International Ship and Port Facility Security (ISPS) Code in 2005. This convention has been signed by the main actors of the containerized trade, accounting for almost 90% of world tonnage and 114 contracting parties (figure 3.2). The UNCTAD also linked this convention to several trade facilitation areas⁹⁹.

The Convention on International Civil Aviation The Standards and Recommended Practices (SARPs) on Facilitation (FAL) can be found in Annex 9 of the convention on International Civil Aviation, since its first edition (1949). Until the 10th edition provisions aim to reduce paperwork, standardize documents and simplify procedures. It was clearly trade facilitation related. Indeed, as pointed out by the International Civil Aviation Organization (ICAO), delays due to cumbersome formalities “*must be reduced, not just because there are unpleasant but, in practical terms, because they are costly to all*”¹⁰⁰. Following the growth of international trade, the focus shifted then to the new congestion issues. In its 11th edition (2002) the SARPs added several provisions on inspection

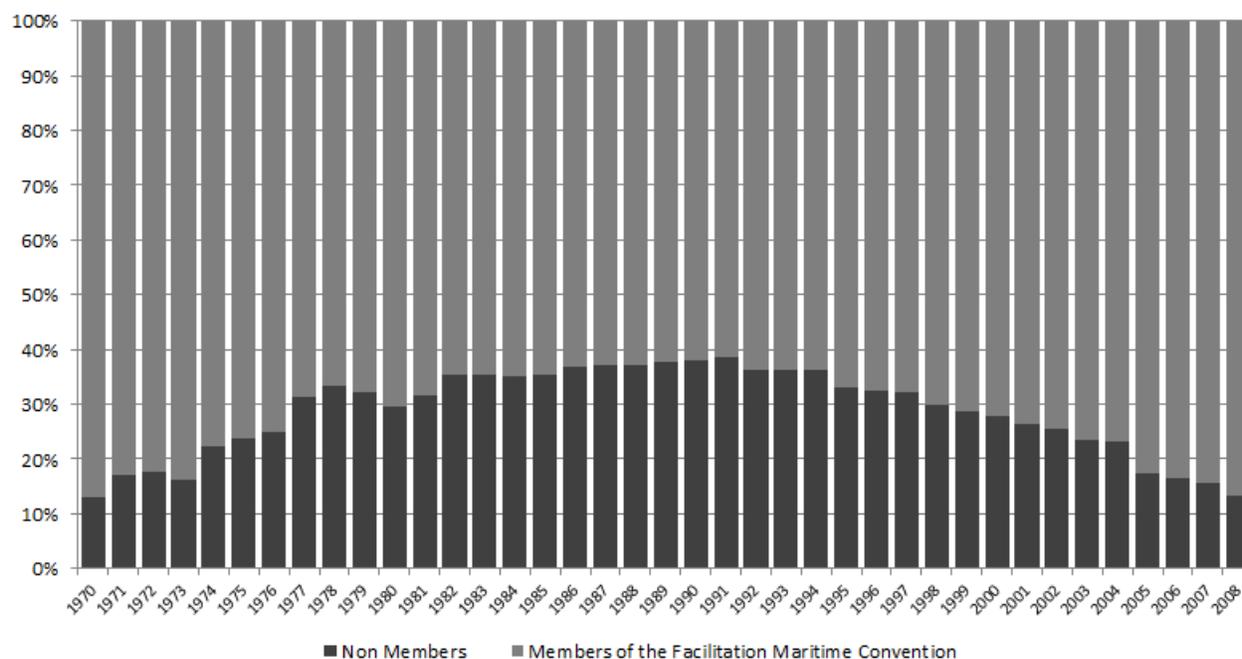
⁹⁸<http://www.imo.org/About/Conventions/ListOfConventions/Pages/Default.aspx>

⁹⁹General provisions to facilitate trade, Measures relating to official controls, Measures relating to transport, Measures relating to Customs and other official procedures concerning the means of transport and transport equipment including containers. <http://www.unece.org/cefact/refer/comp/reclist.htm>

¹⁰⁰The annexes to the Convention on International Civil Aviation are available on the ICAO website, http://www.icao.int/eshop/annexes_list.htm

Figure 3.2: Traffic in TEU handled by Members of the Facilitation Maritime Convention, since 1970

Source: Own calculation, Traffic data come from Containerization International (CI)



techniques based on risk management. Finally in its 12th edition (2005), growing concerns on security lead to added provisions on security, international cooperation and the use of current ICT. Earlier the UNCTAD¹⁰¹ also pointed out that this convention relies on general provisions to facilitate trade, on measures relating to official controls, measures relating to transport, measures relating to the use of computers and EDI, measures relating to Customs and other official procedures concerning the means of transport and transport equipment including containers, measures relating to official requirements for imported goods, and also measures relating to the Customs clearance of export. These trade facilitation areas are structured through their impact on formalities, procedures and documents¹⁰².

The ILAC Mutual Recognition Agreement The increasing development of standards and the lack of reliability of exporter's test certificates have spurred the growth of laboratories and accreditation programmes. Created in 1977, the International Laboratory Accreditation Cooperation (ILAC) encourages the adoption of common technical requirements for testing and calibration laboratories. Since a decade, the number of signatories has grown. It reached 71 accreditation bodies in December

¹⁰¹In preparation for the 1994 United Nations International Symposium on Trade Efficiency, the UNCTAD provided a Compendium which contains recommendations and other provisions extracted from a number of international conventions or agreements, in order to bring about suitable solutions to facilitate trade. We note that its structure is quite close to the one used by the WTO for the current Trade Facilitation negotiations. <http://www.unece.org/cefact/refer/comp/reclist.htm>

¹⁰²Formalities stand for the official, commercial, institutional, operational requirements ; Procedures stand for the steps to be followed in order to comply with formalities, or the way in which the required information reaches the party concerned ; and Documents stand for the data carriers which contain the information.

2010, involving more than 30000 laboratories¹⁰³. This effort to standardized procedures is essential to create -or preserve- trade opportunities. Indeed, such a cooperation through the mutual recognition of accreditation bodies limits and reduces the Technical Barriers to Trade (TBT) in place. Moreover, all accreditation bodies publish various information related to the accredited laboratories on the internet, helping traders to select a laboratory in the exporting country for testing products before their physical import. The ILAC MRA is clearly “trade facilitation friendly” and should be taken into account in the set of conventions and agreements used in trade facilitation studies.

Table 3.2: Members to the ILAC MRA (countries)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Calibration	27	29	30	34	36	42	42	43	45	50
Testing	29	31	33	36	38	44	45	47	49	55

Source: own compilation, from www.ilac.org

3.2.2 A database of Conventions related to trade facilitation issues

I built a database in STATA format, which is a compilation of the previous Conventions¹⁰⁴. I followed a common methodology and I tried to underline the trade facilitation areas covered by each Convention, by focusing on the related chapters. Indeed, some Conventions are divided by chapters or revisions. I built a year dummy to indicate whether or not a country is a member of a Convention and also a dummy to underline countries who have ratified more than 50% of chapters¹⁰⁵. The reporting year is the year of enter into force of the convention for each signatory. Apart specific cases, Conventions which enter into force after August are reported to the following year, to account of potential transition periods. The global database includes a rate of ratification of each listed conventions, taking into account their first introduction. I introduced an intensity variable in the ILAC database to capture the number of accreditation bodies by country.

3.3 Useful guidelines and tools

A Guideline is also a valuable tool to improve Customs clearance procedures. Many guidelines are “trade facilitating”. That is why, Moïsé and Orliac (2009) used various of them, mainly developed by the World Customs Organization, to find some useful proxies candidates. The main guidelines are the

¹⁰³A charter establishing a network of mutual recognition agreements among accreditation bodies was created in 1996 and the arrangement came into effect on 31 January 2001 with 28 initial countries. Table 3.2 shows the evolution of countries who have joined ILAC since 2001.

¹⁰⁴A gravity friendly database covering 193 countries since 1940 is available on www.thomas-orliac.eu. The database provides information about the HS Convention, the ATA and TIR convention, the Civil Aviation Convention, the Container Convention, the FAL Convention, the Istanbul Convention and the Revised Kyoto Convention. The IMO Convention(s) and the ILAC database are provided separately. Additional detailed databases and *do files* are available on demand.

¹⁰⁵Thus *Istanbul_50* takes the value of one when the country is an active Member of the Istanbul Convention and that 6 chapters at least have been accepted

SAFE Framework of Standards to Secure and Facilitate Global Trade, the guidelines for immediate release of consignments by Customs, or the WCO integrity principles. Trade facilitation relies also on various United Nations layouts and internationally-agreed standards (UNLK, UN/EDIFACT, UNeDocs) to design trade documents and electronic interchanges.

The SAFE Framework of Standards to Secure and Facilitate Global Trade This framework was adopted in 2003 and is part of the WCO strategy “*to secure the movement of global trade in a way that does not impede but, on the contrary, facilitates the movement of that trade*”. Thus, the framework introduces a series of standards and improves the cooperation between Customs administrations and private operators. It provides numerous standards which are “trade facilitating”, such as the need for advance electronic information, the use of automatic risk management systems or the development of the status of Authorized Economic Operators (AEO). Finally, the SAFE framework of standards relies also on various existing guides or conventions.

The WCO integrity principles The WCO has developed a series of tools and best practices to improve the integrity of Customs. Adopted in 1993 (and revised in 2003), the Arusha Declaration on Customs Integrity is the key element, a toolbox based around ten components: Leadership and Commitment, Regulatory Framework, Transparency, Automation, Reform and Modernization, Audit and Investigation, Code of Conduct, Human Resource Management, Morale and Organizational Culture, and Relationship with the Private Sector. The Arusha Declaration has also lead to design a model of a comprehensive code of conduct which explores the standards of ethic expected of all Customs officials. These tools, as the review of best practices, are very useful to design relevant indicators in the area of transparency and good governance. Thus, in one hand, the WCO pointed out that exclusive prerogatives, discretionary power, low sanctions, low incomes, poor management, long-time procedures, or numerous direct contacts (*i.e no automated and electronic systems*) favor corruption issues. While, in the other hand, the availability of a clear Code of conduct, the use of the Kyoto Convention, the publication of procedures, the right of appeal, an active Customs support, the involvement of public, the use of an automated risk management, the use of automation (reducing human issues), the development of post-audits, the use of Advance Rulings and the development of the cooperation between each border operators (public and private) are part of the best practices.

The Automated System for Customs Data The UNCTAD’s Automated System for Customs Data (ASYCUDA) is an automated Customs data management system designed to handle a series of Customs clearance procedures. Since its introduction in 1981, the ASYCUDA has known several upgrades since¹⁰⁶. This programme aims to facilitate trade by developing the simplification and the standardization of Customs procedures. It also improves the use of ICT and modern techniques such as the automated risk management system. As stressed by the UNCTAD (2011b), the ASYCUDA

¹⁰⁶The first version was launched in 1981. The two successive versions in 1986 and 1992 has developed the use of ICT, leading to the ASYCUDA++. Introduced in 2002, ASYCUDA^{WORLD} is the last version and a veritable *e-Customs* edition.

is also often accompanied by a trade facilitation component and relies on several Conventions and Guidelines. The ASYCUDA programmes have spread across the world and has been adopted by 106 countries in 2010 (table 3.3).

Table 3.3: ASYCUDA installations around the World

Source: own compilation, based on the map of ASYCUDA user countries in 2010

Status	Freq.	Percent
ASYCUDA v2.xx	13	12.26
ASYCUDA World	42	39.62
ASYCUDA++	51	48.11
Total	106	100.00

3.4 Issues and limits of the use of such arrangements

Previous sections have underlined some potential issues by using such agreements and conventions without care. The related databases have dealt, to some extent, with the two following key issues.

Consistency in interpretation and application As pointed out by Widdowson (2008), the members of a Convention -or an Agreement- usually achieve a reasonably high level of consistency in interpretation, as reflected in their national legislation. However, the application of each provision is heavily dependent upon the capacity of an administration to effectively apply it. According to Widdowson (2008), the international standards which rely on technical issues are quite consistent, but significant inconsistencies are apparent in other areas. Based on the SAFE Framework of Standards, he provided an example of such disparities through the interpretation of the concept of Authorized Economic Operator (AEO), more or less broadly interpreted. It is confirmed by the OECD questionnaire on the trade facilitation indicators and the review of the European trade facilitation patterns in the following chapter 6.

Trade Facilitation relevance and Ratification issues The nature and the application of trade agreements and conventions vary. Firstly, they encompass several chapters and, unfortunately, all members do not ratify each of them. Secondly, these arrangements follow numerous revisions which are not always ratified by the original members. In addition, some revisions may include trade facilitation provisions which were not encompassed previously. Finally, it may have some differences between the ratification date and the date of entry into force. Such specifications have to be taken into account, which is not usually the case. Another issue relies on the intensity, the “in-depth application”, of trade facilitation provisions across each Convention and Agreement. As stressed by Duval (2011), some of them have dedicated sections or chapters, while others only refer to trade

facilitation across various sections. In addition, they refer on broad and narrow definitions of trade facilitation.

The non-discriminatory nature of trade facilitation provisions It is usually accepted that most trade facilitation provisions are non-discriminatory by nature, *i.e.* that trade facilitation measures benefit to members and non-members too. Improving Customs transparency is a typical example of such a non-exclusivity nature. However, as stressed by Moisé (2002) or more recently by Hamanaka et al. (2010), despite the non-discriminatory objectives of such measures some FTAs may be discriminatory. Indeed, some specific provisions, operational guidelines between contracting partners or implementing rules can lead to such issues. Hamanaka et al. (2010) provides a series of examples where such issues arise. Thus, even if transparency is non-discriminatory by nature, some provisions may limit comments on new rules only to partners, simplification of Customs procedures may be applicable for members only, as fees exemptions¹⁰⁷, origin provisions, or conformity assessment standards which are often territorial in nature. These issues are encouraged by the lack of constraints under the WTO system on such measures adopted by FTAs, which allow tailor-made provisions. It also raises the issue of differentiated treatment across FTAs¹⁰⁸.

The first issue can not be dealt broadly and requires a detailed approach, studying each agreement and its application on a case by case basis. Such an approach has been followed for the European Customs Union (chapter 6), showing some disparities in the application of Customs provisions among the Member States. The second issue has been dealt by introducing specific variables related to the different chapters and revisions of each Agreement or Convention. Some kind of “intensity variables” have also been built, based on the number of chapters ratified or the number of agreements including trade facilitating provisions. The third issue may require the use of dummies to measure possible discriminatory agreements and a deep review of each provision to evaluate its potential discriminatory power.

3.5 The international regulatory frameworks and gravity models

This chapter underlines that numerous trade facilitation provisions are covered by the international regulatory frameworks. Such provisions should be accounted for when studying the impact of trade facilitation measures. That is why I built several indicators (databases) that will be possible to include into traditional studies on trade facilitation, particularly with gravity models. Such variables suffer of various limitations as stated previously, but another restriction arises in gravity models. These variables may encompass other dedicated variables which share the same provisions. It leads to double counting issues, multicollinearity, etc.

¹⁰⁷He quotes the example of digital products in the Korea-Singapore FTA.

¹⁰⁸As explained by Hamanaka et al. (2010), “*trade facilitation provisions covered by different FTAs are not necessarily harmonized, even if there are common members*”.

In the following chapter I develop a series of trade facilitation indicators covering numerous trade facilitation dimensions - and so provisions. The proximity between these two sets of variables do not allow me to use them in this particular study which -in addition- covers OECD countries only¹⁰⁹. However, I used this research to build several specific variables such as the variables accounting for the international harmonization or the laboratory issues. For future research, these databases exploring the international regulatory frameworks can be used as a proxy of several trade facilitation provisions to enlarge the country coverage of traditional studies¹¹⁰. In addition this research has provided some insights about the nature, the distribution and the frequency of trade facilitation provisions as include into various international agreements.

¹⁰⁹These developed countries have signed many agreements, arrangements and conventions.

¹¹⁰Note that it would be difficult to divide an agreement into specific provisions (apart by chapters as explained previously).