THESIS:
Does membership in the World trade organization positively affect trade of its member countries?
IZJAVA

Študent/ka NINA KOŠIR izjavljam, da sem avtor/ica tega diplomskega dela, ki sem ga napisala pod mentorstvom dr. ČRTA KOSEVCA, in dovolim objavo diplomskega dela na fakultetnih spletnih straneh.

V Ljubljani dne ................. Podpis: .........................
Contents

Introduction  1

1. The role and significance of the World Trade Organization  2
   1.1 Principles and goals  2
   1.2 Organization and structure of the WTO  5
   1.3 Agreements  5
      1.3.1 Multilateral trading system and regional trade agreements  5
      1.3.2 From GATT to WTO  7
   1.4 Criticism of the WTO  7

2. Evolution of the international trade in the second half of the 20th century  9
   2.1 Tariff reductions  9
   2.2 Development of international trade in different sectors since 1947  12
   2.3 Selected long term trends in trade  15

3. Survey of empirical studies examining the role of WTO in the world trade dynamics  18
   3.1 Studies examining the role of GATT/WTO and its Dispute Settlement Procedure  18
   3.2 Studies suggesting WTO has no influence on member country trade  22
   3.3 Studies finding positive effect of WTO on trade  24

4. Analysis: A case study of three WTO member countries  27
   4.1 Choice of selected countries  27
   4.2 Analysis of trade of China and the results of the analysis  27
   4.3 Analysis of trade of Mexico and the results of the analysis  31
   4.4 Analysis of trade of Slovenia and the results of the analysis  34

Conclusions  37

References  39

Appendix
Introduction

Since the inception of the General Agreement on Tariffs and Trade (henceforth GATT) in the forties, debates have been going on regarding its impact on the economies of its member states. According to Arvind Subramanian and Shang-Jin Wei (2006), the membership in either GATT or later the World Trade Organization (henceforth WTO) has a positive effect on a country’s trade performance. On the other hand, some studies suggest the organization does not have any effect on trade whatsoever.

In this bachelor’s thesis I discuss the importance and effect of the WTO and its predecessor GATT on the member countries’ trade. The core question will be: Does the membership in the WTO positively affect the trade of members? A review of empirical studies shows that the majority of studies dealing with the subject find evidence proving that a member of either GATT or WTO will see its trade positively impacted, whereas not many studies have been able to prove the contrary. Therefore, I started my work with the hypothesis that the WTO membership has a positive effect on a country’s trade performance. My hypothesis was based on the work of Subramanian et al. (2006), and mainly the statement that it was a common knowledge that WTO had a positive effect on its countries’ economies.

First important issue is to understand, how the WTO works. (WTO Australia, 2009) The WTO has two general functions; managing rules which guide world trade and conducting negotiations to reduce barriers to world trade. The rules of trading are set through agreements among members, the central and the oldest agreement is the predecessor of the WTO the General Agreement on Tariffs and Trade (GATT) which was negotiated in 1948. When a country becomes a member of the WTO it promises to trade according to the rules guarantees not to block trade. Beside GATT there are other important agreements which relate to different issues in trade like intellectual property (GATS) or trade in services (TRIP). As concerning the negotiation WTO has replaced the GATT secretariat in 1994 which set up eight rounds of negotiation since 1984. Through different rounds of negotiation new rules have been agreed on, the average trading tariffs have lowered from 40% to 5% and the non-tariff barriers have been largely eliminated.

The thesis will be divided into four sections. The first one is a basic description of the organization, mission, vision and structure of the WTO. The second section describes the effects of the WTO, based on statistical data and long term trends; the third part is a review of empirical studies of WTO and its effects on member countries. The fourth section is an analysis of import and export of three member countries before and after the accession to the WTO. The final section offers conclusions.
1. The role and significance of the World Trade Organization

At first, I will discuss the purpose of the World Trade Organization through its principles, goals and its organizational structure. Then I will focus on the agreements signed that constitute the concrete tools allowing the WTO to accomplish its goals while remaining true to its principles. Agreements with other international organizations – also called regional trade agreements - will be mentioned but the emphasis will be put on the predecessor of the WTO, the GATT, its rounds, its goals and its outcomes. I will also focus specifically on the Uruguay Round which culminated in the establishment of the WTO.

1.1 Principles and goals

Principles are specific rules of the organization on which the founders agreed when they establish a new organization; they describe how the business in the organization should be done. These rules have to be followed by the people who work in the organization and in this way the goal is followed. “One way to think about the GATT-WTO approach to trade is to use a mechanical analogy: it’s like a device designed to push a heavy object, the world economy, gradually up a slope- the path to free trade.” (Krugman et al., 2008, pg. 230) The principles of the WTO originate in those the GATT was founded on, that had shaped the evolution of international trade throughout the years.

The principles:

- Trade without discrimination:
  Most-favored-nation (MFN): treating other nations equally
  All the agreements signed through the WTO framework apply to all the trading partners of a member country. This means that if a country tries to favor one of its trading partners with, for example, lower taxes then it will have to do the same for all the other countries in the WTO as well. This principle is included in all the most important agreements like GATT, GATS, etc. There are some exceptions allowed for example in the case of European Union countries which would set up a free trade agreement that applies only to goods traded within the EU, discriminating against goods from outside the Union.

  National treatment: Treating foreign and local suppliers equally
  All the imported goods and goods that are produced at home should be treated equally at least after foreign goods have entered the market. The same rule should apply to services, trademarks and copyrights. This principle is only applicable once a product, service or item of intellectual property has entered the national market. This implies that heavy taxation levels
at customs are not a violation of the national treatment principle, even if locally-produced products are not charged an equivalent tax.

- Freer trade: A goal to be reached gradually, through negotiation
The most obvious way to encourage trade is through lowering the trade barriers. Since 1947-48 when GATT was created eight rounds of trade negotiations have taken place. These negotiations were first focused on lowering tariffs on imported goods - also called customs duties. The result was impressive. Industrial countries’ tariff rates on industrial goods have been falling continuously and reached 4 percent by the mid 1990s. By the 1980s the negotiations covered other areas such as the trade of services and intellectual property. The WTO acknowledges, in a sense, that the efficiency of the open markets can be reached exclusively through adjustments, through allowing potential and actual member countries to introduce changes gradually. This also gives the opportunity to less developed countries to take advantage of the additional time to adjust.

- Predictability: through binding and transparency
Sometimes, promising not to raise a trade barrier can be as important as lowering one. This promise gives businesses a clearer view of the future opportunities in their operating environment. Indeed, through creating a stable and predictable environment, investment can be encouraged, jobs can be created and consumers can fully enjoy the benefits of competition — choice and lower prices. The multilateral trading system is an attempt by governments to make the business environment stable and predictable. (WTO, 2008)

When members of the WTO decide to open their markets they accept to abide by certain limitations regarding the tariff levels they will use on imported goods. The WTO sets ceilings on customs tariff rates. In developed countries these rates are often lower. These binding conditions can be set only after negotiations with the trading partners; they both have to compensate some loss of trade. Stability and predictability are encouraged also in other ways like limiting the use of quotas and other measures used to set limits on quantities of imports. They also have to make sure the trading rules of each country are known to the public. The obligation to inform the public of any new agreements is indeed mentioned in the legal text of many agreements.

- Promoting fair competition
The WTO is mostly described as an organization for a free trade but that is not completely correct. Indeed, sometimes it willingly allows higher tariffs and certain forms of protection. A more accurate definition would be to say that the WTO is an organization for a more open and fair competition. And many agreements tend to encourage just that.
• Encouraging development and economic reform
The WTO contributes to the development of some of its member countries, in the sense that it makes sure less developed countries have the possibility to take more time to implement certain agreements. Since the first negotiation round till now, 60 of the least developed member countries have implemented trade liberalization programs autonomously. And with every Round these countries are becoming more influential. Moreover, they are now capable of implementing the reached agreements and the Organization’s obligations just like developed countries.

The goals of the WTO:

The WTO's stated goal is to improve the welfare of the people of its member countries, specifically by lowering trade barriers and providing a platform for negotiation of trade. Its main mission is "to ensure that trade flows [run] as smoothly, predictably and freely as possible". This main mission is further specified in certain core functions serving and safeguarding five fundamental principles, which are the foundation of the multilateral trading system. (WTO, 2008)

It is also WTO's duty to review and monitor national trade policies in order to ensure the coherence and transparency of these trade policies in view of a global economic policy-making process. One of the priorities of the WTO is providing the necessary assistance to developing, least-developed and low-income countries in transition. The WTO helps these countries with training and technical cooperation to adjust to the rules. The WTO follows the world trade and annually published assessments of the global trade and research reports on specific topics.

1.2 Organization and structure of the WTO

Just like any other organization the WTO has a specific organizational structure which shows how the decision making process happens. Besides a purely informative function, it also has a functional use, that of providing the organization with more efficiency in its work. All WTO members may participate in all councils, committees, etc, except for the Dispute Settlement panels and the multilateral committees. (Appendix, Figure 1.)

1.3 Agreements

The WTO agreements always aim to respect the principles of freedom of trade. They include as well a formulation of the permitted exceptions to the deal agreed upon. They cover goods, services and intellectual property. Moreover, they include the commitments of individual countries and they strive to give some sort of special treatment for less developed countries.
1.3.1 Multilateral trading system and regional trade agreements

These are agreements\(^1\) which allow certain countries to set the same tariffs for trading amongst them. In recent years they have become a big part of the Multilateral trading system. Among the most known ones, we mention The European Union, The European Free Trade Association (EFTA), and The North American Free Trade Agreement (NAFTA). They might seem to be contradictory with the main raison d’être of the WTO, but in reality they support the Multilateral trading system; they even go beyond what was possible multilaterally. The most important examples are those groups that abolish or reduce tariffs between the member countries. The WTO acknowledges the fact that some countries might benefit from these side agreements, while on the other hand some other countries might get hurt. Normally this kind of agreements would not be allowed because they violate the WTO’s principle of equal treatment for all trading partners –the most-favored nation rule. But looking at article 24 of the GATT, we can see that these agreements are actually allowed. The article states that if a free trade area is established all members should benefit from it. The tariff reduction should apply to all the economic sectors of member countries and the trading with non-members should not be more restrictive.

In 1996 the WTOs’ General Council created the Regional Trade Agreements Committee, whose mission is to examine regional groups and assess whether they are legally consistent with the rules. It also examines how the regional agreements affect the multilateral trading system and whether the areas covered by both systems overlap. When a WTO member enters into a regional integration agreement through which it benefits from more favorable trading conditions with other parties to that arrangement than to other WTO members, then it deviates from the guiding principles of non discrimination defined in article 1 and 2 of GATT. The WTO members are however permitted to enter in such agreements under specific conditions, detailed in three sets of rules. The first one can be found in paragraphs 4 to 10 of article XXIV of GATT which describes the structure and operations of custom unions and free trade areas covering trade in goods. The second is also known as the Enabling Clause which refers to trade agreements between developing country members. Finally, the third set of rules is included in article V in GATS which governs the establishment of regional trade agreements. There are agreements that do not comply with some of these rules such as the agreements between developed and developing countries, namely for example the agreement between Mexico, United States and Canada (NAFTA). For enabling an agreement of this kind three quarters of WTO members have to agree to its formation.

If we take into account RTAs which are in force but have not been notified, those signed but not

\(^1\) The list of all regional trade agreements can be found on Regional Trade Agreements database, found on internet on January 15, 2009.
yet in force, those currently being negotiated, and those in the proposal stage, we arrive at a figure close to 400 RTAs scheduled to be implemented by 2010. Of these RTAs, free trade agreements (FTAs) and partial scope agreements account for over 90%. (WTO, 2008) From this, one can say that RTAs are becoming a sort of a substitute for the global trade liberalization movement and its organizations.

1.3.2 From GATT to WTO

The WTO exists since 1995 but its trading system is much older. Since 1948, the General Agreement on Tariffs and Trade (GATT) had provided the rules for the international trading system. When in 1948 the attempt to create an International Trade Organization failed GATT helped establish a strong and prosperous multilateral trading system that became more and more liberal through rounds of trade negotiations. By the 1980s the system needed a review and that led to the Uruguay Round and ultimately to the establishment of the WTO. From 1948 to 1994 the GATT provided the rules for much of world trade and presided over periods that saw some of the highest growth rates in international commerce. The first scope was to create an institution which would handle the trade side of international economic cooperation, joining the World Bank and the International Monetary Fund. For that reason International Trade Organization (ITO) was created in negotiations of over 50 countries in 1947. At the same time 15 countries were negotiating on lowering tariffs, this was when the first round of GATT negotiations started. (Appendix Table 2) In 1995 GATT was replaced by the WTO but the General Agreement still exists and got updated with the Uruguay Round.

1.4 Criticism of the WTO

Like every other organization, the WTO has had its share of criticism. That is mainly due to its work and its principles. One of the critics made was by Martin Khor, Director of Third World Network, on 28 January 2000 at the World Economic Forum at Davos, Switzerland. He addressed the problems brought by liberalization policies, the clash of interests of developed and developing countries and the lack of benefits for developing countries from the Uruguay round:

- Liberalization policies
What is the right approach developing countries should take towards integration in the world economy, and to liberalization of trade, finance and investment? On financial liberalization, there are new lessons to learn from the recent events. It is now clear that financial liberalization, especially when done inappropriately, can lead to a crisis, as was the case of the East Asian economic crisis. On trade liberalization, the issue is even more complex. There is a strong

---

2 More about this issues in: The World Trade Organization: The Debate in the United States (Sek et al., 2000)
paradox or contradiction in the attitude some developing countries in general and many scholars take towards this issue. On one hand, some still repeat that "we are committed to trade liberalization which is positive and essential for growth and development." On the other hand, many developing countries also note that trade liberalization has had net negative results on their economies. It is simply not true that "we are all gainers, there are no losers" some of these countries would say. Certain countries have gained more than others; and many (especially the poorest countries) have not gained at all but may well have suffered severe loss to their economic standing. The problem in trade liberalization is that a country can control how fast to liberalize its imports (and thus increase the inflow of products) but cannot determine by itself how fast its exports grow. Export growth partly depends on the prices of the existing exported products and also on having or developing the infrastructure - both human and material - capacity for new exports (which is a long term process and is not easily achieved).

- Lack of benefits for developing countries from the Uruguay Round:

This happened because most of developing countries have not yet reached a stage where they are able to meet the challenge of significantly exporting to foreign markets. It was initially believed however that the Uruguay Round would improve their chances by increasing their exposure to foreign markets as well as rendering easier their access to the said markets, therefore improving their chances of selling national products in some of the rich countries' markets. But this did not happen in reality; market access of industrial products has not improved, the high protection in agriculture continued etc.

The developing countries also had implementation problems of the plans from the Uruguay Round and one of the reasons the developing countries are reluctant to endorse new initiatives or new issues in the Seattle WTO meeting is because they are still struggling with serious problems in their having to implement the Uruguay Round.

2. Evolution of the international trade in the second half of the 20th century

In this section the long term trends of world trade since GATTs’ creation will be discussed. These trends reflect the functioning of the multilateral trade agreements. The crucial change and the main focus of the negotiations brought by GATT/WTO was to lower tariff levels. All main economical sectors were progressively included in the negotiations; the changes in the sectors will be mentioned as well as statistical data of trade in the different sectors.

2.1. Tariff reductions

In the next table we can follow the tariff reduction throughout the rounds of negotiation. These
data are of industrial countries for industrial products, petroleum is excluded.

Table 1: GATT and WTO – 60 years of tariff reduction

<table>
<thead>
<tr>
<th>Round</th>
<th>Year</th>
<th>Average Weighted tariff reduction (in percents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geneva</td>
<td>1947</td>
<td>-26</td>
</tr>
<tr>
<td>Annecy</td>
<td>1949</td>
<td>-3</td>
</tr>
<tr>
<td>Torquay</td>
<td>1951</td>
<td>-4</td>
</tr>
<tr>
<td>Geneva</td>
<td>1956</td>
<td>-3</td>
</tr>
<tr>
<td>Dillon Round</td>
<td>1960-1961</td>
<td>-4</td>
</tr>
<tr>
<td>Kennedy Round</td>
<td>1964-1967</td>
<td>-38</td>
</tr>
<tr>
<td>Tokyo Round</td>
<td>1973-1979</td>
<td>-33</td>
</tr>
<tr>
<td>Uruguay Round</td>
<td>1986-1996</td>
<td>-38</td>
</tr>
</tbody>
</table>


Before the birth of GATT, two trading groups with different tariffs existed. The first had lower tariffs – and comprised of Denmark, Norway, Sweden, and the Benelux countries – at an average of 10%, and the second was the one comprising of France, Italy, Portugal and the UK and that had higher tariffs, with average levels close to 20%. The first round of negotiations brought modest tariff reduction and not much change. Interesting to note is that the tariff negotiations were bilateral and on a single product basis. Before the negotiations started, the participating parties had to prepare their requests and exchange them. If they agreed – in the bilateral negotiations – on a certain tariff reduction this automatically extended to other trading partners and in this way MFN was respected. In the second round 11 new members entered the GATT and the 23 already existing members negotiated only with the new members not with each other. Consequently, little progress was made. All tariff reduction agreements from the first two rounds were only agreed up till the 1st January 1951. With the deadline approaching the members met in fall of 1950. They decided where the next round will be held and prolonged the tariff agreements for another three years. The estimated tariffs after the third round were approximately 5-9% for the countries in the low tariff trade group and approximately 16-24% in the group with higher tariffs. The second group at this point also included Germany and the United States of America. The forth round did not bring much change. At the same time EEC was formed which brought substantial tariff reduction and was the first step towards a European integration. For GATT this presented a challenge because it had to manage the relations between members and non members of the EEC.

The process toward an integrated European market was one of the driving forces behind the fifth round. The plan was to extend the tariff levels agreed upon between EEC countries to all other members of GATT into Common market. The result of the round was positive except in the agricultural sector.
The forces behind the Kennedy Round were two. One came from developing countries who hoped for a trading system that would give them new export opportunities. The second came from the United States, as they considered the EEC as a threat for their trading interests. The United States encouraged the integration into Common market. The president of the United States at the time, J. F. Kennedy, saw an opportunity to promote the unity of the Atlantic community. Presenting the political and economic arguments, J. F. Kennedy persuaded Congress to go for another round. The Kennedy Round brought substantial tariff reduction on the multilateral level. The 39 participants lowered their tariffs and covered a share of $41 billion of the international trade, which at that time presented one quarter of world trade. The reductions were implemented between 1968 and 1972. For the industrial countries, the average tariff cut on the industrial goods was approximately 38%. The cuts were not the same across trading sectors; the highest were in: chemicals, pulp and paper, machinery, and transport equipment. For iron, steel and textiles the cuts were lower than the average. Besides, and for the first time, the problem of non-tariff barriers was mentioned.

The Tokyo Round started in 1973 but the negotiations were postponed because of the economical turbulence as well as the first oil crisis – represented by the impressive increase in oil prices. When the round began, it was considered as one of the most wide-ranging rounds since the GATT’s creation. During that period Japan became one of the biggest world exporters and Tokyo was strategically picked to host the next round. On the agenda, a variety of development issues was present; and that was the reason for developing countries to participate in negotiations actively. Because of the oil crisis the developed countries started to underline the fact that the fairness of trade should be a top priority in the negotiations. They were again referring to the non-tariff barriers. Already in the previous round the parties present during the negotiations had realized the distortion in the agricultural sector; this time as well they did not agree on issues related to that sector. The United States and EEC failed to agree and decided to drop the controversial questions. The negotiations ended in 1979 and succeeded in lowering substantially the tariffs on industrial products of industrial countries. The tariff concessions concentrated on the industrial products which accounted for 90% of imported value of $141 billion. This time the highest cuts were made for raw materials (64%). The 34% tariff reduction was observed for finished products and 30% decrease for semi-manufactures. The implementation of the Tokyo Round results stretched over the period of 1980-87.

The Uruguay Round was the first to cover also agriculture in a relatively substantial way. The program for liberalizing agriculture was set for the next ten years; its approach was to divide measures in three categories: market access, domestic support and export subsidies. Many commentators have suggested that with the Uruguay Round Agreement on Agriculture the sector will not get more liberalized but it will at least become incorporated in the multilateral trading rules. This could make it possible for agriculture to become more liberalized in the future. Beside
agriculture, substantial tariff reductions were made in other sectors – especially for industrial products where the reduction is estimated at close to 40%. The reductions agreed varied between sectors. The smallest tariff reductions were applied in the following sectors: textiles and clothing, leather, rubber and footwear and transport equipment – the levels ranged between 18 and 26%. On the other hand, the levels ranged between 52 and 69% in the following sectors: wood, pulp, paper, metals, non-electric machinery, mineral products and manufactured. The Round was launched in September 1986.

2.2. Development of international trade in different sectors since 1947

Agriculture

Although the GATT theoretically included the agricultural trade, in practice it was not perfectly functioning. It allowed some non-tariff barriers which in the industrial sector were not allowed. Some of the examples for non-tariff barriers are import quotas and subsidies. Especially because of the subsidies in the agricultural sector, trade in that field became highly distorted. The first multilateral agreement dedicated to agriculture was produced at the time of the Uruguay Round and it was the first step towards putting some order in the sector. It was implemented in 6 years in developed countries and in 10 years in developing countries; the implementation began in 1995. The agreement contained the commitment to continue the reform with new negotiations which were launched in 2000 as it was required in the Agriculture Agreement. The objective of the Agriculture Agreement is to make more market-oriented policies and to reform trade. Predictability and security in the sector would improve the performance for both importers and exporters in this way.

Textiles

In this sector the situation was similar to the one in the agricultural sector. Multifibre Arrangement (MFA) governed the trade since 1947 until the end of The Uruguay Round. It was a foundation for bilateral agreements which included quotas limiting import into countries where the domestic production was facing serious damage because of growing imports. This was in conflict with the founding principles of the GATT, like MFN clause, through which the members commit themselves to give to the products of other members a treatment no less favorable than that granted to the products of any other country (Gandolfo, 1998). In 1995 the Agreement on Textiles and Clothing (ATC) took over and so the mentioned quotas stopped being taken into account and starting 1 January 2005 the sector was fully integrated into GATT rules. It had to undergo fundamental changes over ten years, and it was agreed upon in Uruguay Round. It happened therefore gradually as we can see in the Table 3, so the importers and exporters had enough time to adjust; some of the quotas were removed instantly and some evolved gradually.
Table 2: Four steps in 10 years

<table>
<thead>
<tr>
<th>Step</th>
<th>Since/Until</th>
<th>Percentage of products to be brought under WTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Step</td>
<td>From 1 Jan 1995 to 31 Dec 1997</td>
<td>16</td>
</tr>
<tr>
<td>2. Step</td>
<td>From 1 Jan 1998 to 31 Dec 2001</td>
<td>17</td>
</tr>
<tr>
<td>3. Step</td>
<td>From 1 Jan 2002 to 31 Dec 2004</td>
<td>18</td>
</tr>
<tr>
<td>4. Step</td>
<td>1 Jan 2005 Full integration into GATT; the ATC terminates</td>
<td>49</td>
</tr>
</tbody>
</table>


Some restrictions are still allowed if an importing country proves that its domestic industry is suffering from serious damage or is threatened by external factors. These safeguard restrictions are allowed if the parties involved agree to them. They get reviewed by the Textiles Monitoring Body (TMB), which can allow one importer to impose quotas for a period of time and under strict conditions. The agreement also covered the cases when importers make false declarations about origin of a product or when they try to import through third countries. Special treatment was foreseen for least developed countries, new entrants in the market, small suppliers etc. The TMB supervised the implementation of the agreements and ensured that actions as foreseen in the agreement were being applied correctly. It also dealt with disputes under Agreement on Textiles and Clothing. Unresolved disputes were brought under Dispute settlement procedure on 1st January 2005 when Textile and Clothing agreement expired.

Services

Services are one of the fastest growing sectors in global economy (Figure 1); they represent two thirds of global output, one third of global employment and 20% of global trade.
The idea to regulate the market of services surfaced for the first time in 1980s. In the beginning, many members were against it; but in 1995 the General Agreement on Trade and Services (GATS) came into force and it now regulates services as well.

It includes three important elements:

1. General obligations and disciplines;
   It covers all the internationally traded services like banking, tourism, telecommunications, etc. It defines four ways of trading services: services supplied from one country to another or “cross-border supply”, use of a service from another country by a firm or final consumer or “consumption abroad”, providing a service in another country through subsidiaries or branches also called “commercial presence”, individuals traveling and providing their services abroad, also called “presence of natural persons”

2. Most favored nation treatment (MFN)

3. Commitments on market access and national treatment
   The commitment of individual countries to open their market for a specific sector and how open the market will be. This depended on the negotiations. The commitments include the markets being opened, the extent to which the market would be freed and any limitations on national treatment.
Intellectual property

Knowledge constitutes an increasingly important part of trade; the value of certain products lies in innovation, creativity, research or design and not in the material factors that make up the products. The creators of these products should therefore be given a right to protect their inventions, thus the need to apply the Intellectual property rights. The extent of protection by these rights varied widely around the world. When the trade began to grow these differences began to create tension between trading partners. With Intellectual property rules the order was established in the sector. The Intellectual property rules were introduced for the first time in the Uruguay Round, the agreement is called Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

Areas covered by TRIPS:

- Copyright (computer games, literary works, rental rights of computer programs and sound recordings, films)
- Trademarks (signs of trademarks)
- Geographical indication (country of production, characteristics)
- Industrial design (lasts 10 years)
- Patents (last at least 20 years, protection for processes and products)
- Integrated circuits layout design (under World Intellectual Property Organization)
- Undisclosed information and trade secrets

2.3 Selected long term trends in trade

In this section we will present the trends in international trade and the production levels in different sectors since the GATT was signed; in particular we will focus on the growth in trade of agricultural products, fuels and mining products and manufactured products. We will be analyzing the movements in trade and the reasons behind them.
Table 3: World merchandise trade and production, 1950-05

<table>
<thead>
<tr>
<th>Year</th>
<th>All merchandise</th>
<th>Agricultural products</th>
<th>Fuels and mining products</th>
<th>Manufactures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>trade</td>
<td>production</td>
<td>trade</td>
<td>production</td>
</tr>
<tr>
<td>1950-63</td>
<td>7.7</td>
<td>5.2</td>
<td>4.5</td>
<td>2.9</td>
</tr>
<tr>
<td>1963-73</td>
<td>9.0</td>
<td>6.1</td>
<td>4.0</td>
<td>2.5</td>
</tr>
<tr>
<td>1973-90</td>
<td>3.8</td>
<td>2.5</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>1990-05</td>
<td>5.8</td>
<td>2.5</td>
<td>3.8</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Legend: Average annual percentage change in volume terms; unit of measurement is in %

Source: International trade statistic 2006 (WTO), pg. 25, Table 2.1.

Table 4 presents the annual percentage growth in trade and production. In general we can observe that trade and production have been growing in the last fifty years; until the seventies the trade and production were growing relatively faster than in the last three decades. Besides, this growth of production is decreasing each year relatively more than the growth in trade. The biggest reduction in growth occurred in the period from 1973 until 1990; that was a direct consequence of the oil shocks in the 70s and in fact the biggest change is perceivable in the sector of fuels and mining products.

Figure 2: World merchandise trade by major product groups, 1950-2005

Source: International trade statistics 2006, pg. 26, Table 2.2.

We can divide world trade into three major groups: trade of manufactured products, trade of fuels and mining products and trade of agricultural products. Throughout the years the growth in trade of manufactured products was fastest – as we can see from Figure 2.
After the Second World War the manufacturing output started to grow rapidly, as did the overall world trade, at a rate of 6% per annum. The Kennedy Round in 1967 brought tariff lower to 36%, and consequently this affected trade until 1972. From 1968 until 1974 the world trade grew on average 6.9% per annum which was the highest level of growth in the second half of 20th century. During the period of the oil crisis from 1973 to 1979/80 the volumes of international trade fell significantly; after the shock waves of the second crisis had ebbed away, trade levels started to grow again. The Tokyo Round ended in 1979 and managed to lower the tariffs by approximately 30%. But these changes started to be applied and to substantially affect trade after 1982; the reason for it was the oil shocks that paralyzed trade and production during a whole decade. Under the influence of the Tokyo Round world trade grew 5.7% per annum from 1982 until 1990. The breakdown of the socialist regime followed, and with it came slower levels of international trade – 4.5% - in the years from 1990 to 1994. In 1994 the signs of the application of agreements reached during the Uruguay Round started to manifest themselves: the tariffs were lowered again to approximately 30%. In parallel during the same period the European integration was deepening, the ex-socialist countries started to develop economically and the world trade started to rise again to 8.8% per annum.

Table 4: World merchandise trade by major product group in three periods, 1950-05

<table>
<thead>
<tr>
<th>Years</th>
<th>Average annual percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-1973</td>
<td><img src="chart.png" alt="Bar chart showing trade growth" /></td>
</tr>
<tr>
<td>1973-1990</td>
<td><img src="chart.png" alt="Bar chart showing trade growth" /></td>
</tr>
<tr>
<td>1990-2006</td>
<td><img src="chart.png" alt="Bar chart showing trade growth" /></td>
</tr>
</tbody>
</table>

Source: International trade statistics 2006, pg. 26, Table 2.1.

From Table 3 we notice that trade levels of fuel, mining products and agricultural products are slightly less significant. On the other hand, trade of manufactured products was the highest in all three periods even if significant differences can be noted between the periods. From 1950 to 1973 the average growth in world trade of manufactured products was 9.8% while the trade of fuels and mining products grew at approximately 7.4% per annum. In the next period - from 1973 until 1990 - the growth in trade in both of these sectors slowed significantly. Trade of fuels and mining products slowed significantly, as it grew only by 0.5% per annum in this period because of the oil shocks that led to a raise in the price of oil and its derivates. The growth in trade levels of
agricultural products also slowed down and grew throughout this period by about 5.5%. In the last period the trade of fuel and mining products rose again to 3.5% per annum. The levels of trade of manufactured products did not vary much in this period and remained at approximately 6.4% per annum. Throughout these three periods the trade of agricultural products managed to grow through significant ups and downs, as it reached an average yearly growth of 4%, while rising on average by 204% during the period of 1973 until 1990.

3. Survey of empirical studies examining the role of WTO in the world trade dynamics

In this section empirical studies done on the role of GATT and the WTO will be surveyed. Empirical research in world trade is quite complicated, Andrew K. Rose referred to it as a 'messy business', implying that considering so many variables the calculations can easily lead to very different results. This chapter is divided into three parts; first we will go through a quick overview of the studies referring to the role of the WTO/GATT, the theory behind the enforcement technique and the Dispute Settlement Procedure which is crucial to understand how the organization works and where its power comes from. The second part is a review of the studies suggesting that GATT/WTO has no effect on the trade of its members while the third part will focus on the studies suggesting the positive effect of GATT/WTO.

3.1 Studies examining the role of GATT/WTO and its Dispute Settlement Procedure

To understand the effect of GATT/WTO and to judge whether its effect is positive or not, first we need to review some studies concerning its role in the international trade, its Dispute settlement procedure and some of its dysfunctions regarding the custom unions and free trade areas.

The first two works reviewed examined the relationship between GATT and preferential agreements (Bagwell and Staiger, 1998, 1999). In both of the works they studied the effect of preferential agreements on the multilateral trading system and more specifically whether these agreements undermined the system or not. In both studies, it was argued that the preferential agreements do indeed undermine the multilateral trading system. In the first one the authors examined the free trade areas and custom unions and asked themselves why do governments decide to participate in the trade agreements. The simple reason is to eliminate the inefficient trade restrictions like tariffs\(^3\). In the second one they examined GATT with a general equilibrium trade model considering government preferences to maximize national income. They argued that although GATT allows the preferential agreements between certain members it does not allow it to deliver efficient outcomes on a multilateral basis. They got to these results through studying

\(^3\) More about the effects on tariff by preferential agreements in Bagwell and Staiger (1997), pg.: 291-319
the benefits of the non-discrimination principle and of the reciprocity principle. Following a specific path, they show that reciprocity assists governments in achieving efficient trade-policy outcomes. But when exceptions to MFN occur with preferential agreements the multilateral trading system does not deliver an efficient outcome.

Giovanni Maggi (1999) tried to understand what kind of role the international organization plays, how it stimulates multilateral trade, and if it brings advantages when compared with the net result that could be achieved through bilateral trading. His interest was the Dispute settlement procedure (DSP) of the WTO and its effect on the trade considering that WTO has no direct enforcement power.

Maggi (1999, pg. 1) studied two potential roles of the WTO:

1. It can report on the violations of the agreement and inform third countries, thus facilitating multilateral enforcement efforts.

2. It can promote multilateral rule-making procedure instead of a web of bilateral negotiations.

His idea was the following; sometimes, country X might commit a violation against country Y that is noticed neither by the country Y nor by the rest of the trading community. The potential role of the Dispute settlement procedure (DSP) in this case would be to identify the violation and bring it to the attention of third-party countries. By exposing these actions, the violating country would suffer damages to its reputation in the trading community. This is the difference between multilateral trade and bilateral trade; in bilateral trade the monitoring institution is not present and the violations can not come to the knowledge of third-party countries. In this case the multilateral institution can improve the monitoring of actions taken by any country by the whole community of member states.

Now an interesting question is whether the GATT’s DSP has improved the enforcement of trade agreements. Maggi (1999) does not answer directly; he looks at the history of the DSP and reviews the disputes between 'weaker' and 'stronger' countries:

(1) In 1949, Chile filed a complaint against Australia for a subsidy on ammonium sulfate that allegedly violated the MFN rule. Australia complied. (2) In 1961, Brazil filed a complaint when the United Kingdom increased tariffs on bananas for non-Commonwealth countries. The United Kingdom was found in violation, and agreed to comply. (3) In 1972, Israel brought the United Kingdom before the DSP for GATT-illegal import restrictions on cotton textiles. The United Kingdom complied. (4) In 1979, Chile filed a complaint against the European Community (EC) for its illegal quotas on imports of apples from Chile. The EC did not renew the quota. (5) In 1980, India alleged that the United States had imposed a GATT-illegal countervailing duty
without making the required determination of "material injury." The United States agreed to withdraw the duty before the DSP panel was formed (Maggi, 1999, pg. 22).

This data can be interpreted in different ways but one thing was clear to the author, the DSP had some kind of impact on the behavior of governments. The outcome probably would not be the same without the presence of this institution.

While Maggi (1999) was referring to the DSP in GATT, Bernard M. Hoekeman and Petros C. Mavroidis (1999, pg. 1) were referring to the DSP in the WTO and its defects, they wrote: “The use of DSP in the first five years of the WTO would appear to support the optimistic expectations. Over 160 requests for consultations were brought to the WTO in its first five years of operation; three times more on a per annum basis than under the GATT. Developing countries are more often involved than in the past—about 25 percent of all cases were brought by or against developing countries. Some developing countries have successfully contested actions by large players (e.g., Costa Rica—US restrictions on cotton textiles; Venezuela and Brazil—US gasoline regulations). However, least developed countries are not involved in the DSP at all: there have been no cases involving sub-Saharan countries.”

The WTO dispute settlement procedures have four characteristics which were important for their argument. These characteristics are the reasons the developing countries are not as involved in dispute settlement procedures as they should be according to them:

1. Only governments have standing
   This gives governments a role as filters; it also means the cases are not presented to the governments if the private sector believes the case will not be filed by the government. The reasons for not presenting a case to the WTO are mostly non-trade reasons. For example if one country is receiving aid from another country the government of the first country probably would not file a case against the second country.

2. Compensation for damages is customarily not requested and awarded
   This is the reason not to bring a case to the government beside this it could also be a reason for a government not to bring a case to WTO.

3. The ability to enforce rulings is very asymmetric

4. The costs of process are significant
   Often the costs of process are too heavy for the least developed countries.

---

4 More about the DSP in GATT, Dispute Settlement and Cooperation by Dan Kovenock Marie Thursby (1992), pg.: 151-170
These four characteristics appear to be a consequence of decentralized enforcement of international obligations in a case of a difference between bargaining powers of the countries involved in disputes. Also solutions are mentioned for each of the characteristics. But as a standard solution they refer to multilateralization of sanctions and compensations, though this could prove to be politically impossible. For this reason they point out the importance of transparency and information. As shown before by Maggy (1999), the costs to a country’s reputation can play a crucial role in leading the trading players to WTO compatible behavior. For the developing countries Hoekeman et al. (1999) suggest reducing costs in using WTOs’ DSP. Beside this developing countries brought up the fact that they need help with legal assistance. But this can be easily provided by the WTO. And finally they suggest the creation of an ‘Independent Prosecutor’ which would be responsible for identify the violations.

3.2 Studies suggesting WTO has no influence on member country trade

One of the major authors who consider the WTO to have no impact on trade levels for its member countries is Andrew K. Rose (2004a) who has shown through his studies that WTO has at least no positive effect on trade. He was particularly interested in the trade policy of the member countries; he used 68 measures of trade policy and trade liberalization to see if membership in the WTO and its predecessor GATT is synonymous of a more liberal trade policy. According to him almost no measures of trade policy are significantly correlated with a GATT/WTO membership. According to him, the trade liberalization has a possible effect in the long term, therefore many years after the country becomes a member of GATT/WTO. Moreover, the GATT/WTO often admits as new member countries with closed economies and that maintain this system for years following their accession to the agreements.

Figure 3: The level of openness of WTO/GATT members

![Figure 3: The level of openness of WTO/GATT members](image)

Source: A., K., Rose, 2004a, Do we really know that the WTO increases trade? pg.29, Figure 3.

Figure 3 shows the level of openness of the member countries. The data used is of years 1950 until 1998. On the vertical axis the percentage of openness of the members is plotted while the
The horizontal line shows the average openness level of the member countries, approximately 65%. The vertical line is the point of accession (t) to the GATT/WTO by a country. The rest of the lines are openness data of different member countries. On the left side of the vertical line the openness data of a country before its entrance in the GATT/WTO is shown and on the right the data after entry is presented. The average openness of the GATT/WTO members is shown by the horizontal line. The graphic of the event of entrance in GATT/WTO shows that not much of a difference occurs after the country enters into the agreement. The simple example of this kind of situation according to Rose (2004a) is Mexico who joined the GATT in 1986; at that time the tariff average of imports was 6.4%. After being a member of GATT for 5 years the tariff rate actually rose to 7.1%. On the other hand, its tariff levels were lowered only after the NAFTA was signed in the mid 90s. Similar was the situation with Colombia and Venezuela.

The next table was also mentioned in Rose’s work (2004a). It presents data taken from the 28 member countries described as “closed” by Sachs and Warner (1995). This list was compiled in 1994 when 28 of 35 countries were already members of GATT/WTO for a while, most of them for over twenty years. This means that GATT/WTO repeatedly admitted “closed” countries and continued to remain closed in spite of the fact that they are members of GATT/WTO.

Table 5: List of closed countries in 1995 with the year of accession to GATT/WTO

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of Accession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>1994</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1972</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>1983</td>
</tr>
<tr>
<td>Burundi</td>
<td>1965</td>
</tr>
<tr>
<td>Chad</td>
<td>1963</td>
</tr>
<tr>
<td>Congo</td>
<td>1963</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>1963</td>
</tr>
<tr>
<td>Dom. Rep.</td>
<td>1950</td>
</tr>
<tr>
<td>Egypt</td>
<td>1970</td>
</tr>
<tr>
<td>Gabon</td>
<td>1963</td>
</tr>
<tr>
<td>Haiti</td>
<td>1950</td>
</tr>
<tr>
<td>Madagascar</td>
<td>1963</td>
</tr>
<tr>
<td>Malawi</td>
<td>1964</td>
</tr>
<tr>
<td>Mauritania</td>
<td>1963</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1992</td>
</tr>
<tr>
<td>Myanmar</td>
<td>1948</td>
</tr>
<tr>
<td>Niger</td>
<td>1969</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1960</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1948</td>
</tr>
<tr>
<td>Pap. N. Guinea</td>
<td>1994</td>
</tr>
<tr>
<td>Rwanda</td>
<td>1966</td>
</tr>
<tr>
<td>Senegal</td>
<td>1963</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>1961</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1961</td>
</tr>
<tr>
<td>Togo</td>
<td>1964</td>
</tr>
<tr>
<td>Zaire</td>
<td>1971</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1948</td>
</tr>
</tbody>
</table>


Rose did not try to provide a new way to measure trade policy. He wanted to exploit the already existing ones, created and used by others, mostly with the purpose to show the connection between growth and trade. His strategy was to examine a mass of trade policy measures and try to find a connection between them and GATT/WTO membership. The data of 168 countries from the year 1950 until 1998 were used. Rose (2004a) concluded that almost no measures of trade policy are significantly correlated with GATT/WTO membership. According to him the trade liberalization, when it happens, is noticeable years after the country has become member of GATT/WTO. This fact has not been denied by the GATT/WTO.

Rose (2004b) studied the connection between stability of trade and membership of GATT/WTO.
He estimated the effects on the trade of the multilateral agreements under WTO, its predecessor GATT and the Generalized System of Preferences (GSP). He used standard gravity model and used a data set covering 175 countries between 1950 until 1999. According to him a highly significant positive effect of the WTO/GATT membership was observed if two variables were excluded from his gravity model: distance between trading countries and output of trading countries. The estimate showed that two members have a trade levels that surpass by 345% the ones of two non-member countries. It seems that WTO/GATT has a huge effect if one does not hold other variables constant; ‘ceteris non paribus’.

In conclusion Rose (2004b, p. 13) stated: “In this short paper I have searched for indications that membership in the World Trade Organization (WTO) and its predecessor the General Agreement on Trade and Tariffs (GATT) lowers trade volatility. My hunt has been unsuccessful; I find no reliable evidence that membership increases the predictability of trade flows. I use both bilateral and multilateral data sets that span over 175 countries and 50 postwar years. I use a number of different econometric techniques, relying extensively on estimators that include fixed effects, and control for a host of potential factors. Yet despite an extensive search and a number of robustness checks, I have not been able to find strong indications that the GATT/WTO makes trade flows more stable and predictable.”

3.3 Studies finding positive effect of WTO on trade

Tomz, Goldstein and Reves (2007) commented on the results and showed different ones when compared with Rose (2004a). They have described the institutional reach of GATT. They have shown through collected documents of GATT that the institution gave rights and obligations to formal members but also to other non member participants like colonies, de facto members and provisional members. Then they showed what Rose (2004a) had missed in his work; the important role of the non member participants by grouping them with the countries which had no rights and obligations under GATT. The most important fact was that they showed GATT substantially increased trade of both formal members and non member participants compared to countries outside the agreement.

In the following table they compared their results with those of Roses (2004a); on the left side of the table, under “formal members” are the data of the countries considered by Tomz et al (2007) and on the right side the countries which were considered by Rose (2004a). In the table so called formal members are actually formal members and others to which the same rules apply. Participation refers to GATT/WTO membership or as we mentioned before, the countries to which the rules apply as they do for the formal members.
Table 6: Relationship between participation and formal membership

<table>
<thead>
<tr>
<th>Participation</th>
<th>Formal membership</th>
<th>Rose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Both in</td>
<td>One in</td>
</tr>
<tr>
<td>Both in</td>
<td>112,520</td>
<td>37,237</td>
</tr>
<tr>
<td>One in</td>
<td>0</td>
<td>63,161</td>
</tr>
<tr>
<td>None in</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>


Tomz et al (2007, pg. 6) wrote that non member participation was not a rare phenomenon, and said in relation to the Table: “Over half (54 percent) of the 21,037 dyad-years that Rose codes as “none in” involved at least one GATT participant, and more than a third (36 percent) of the cases in Rose’s “one in” category actually involved two participants. Likewise, Rose’s “both in” classification misses over a quarter of the 152,986 dyad-years in which both countries had rights and obligations in GATT.”

Also Arvind Subramanian and Shang-Jin Wei (2006) were studying the effects of WTO and did not agree with Rose. From their work, it transpires that the WTO promotes trade strongly but unevenly. They noted that GATT and WTO increased trade levels significantly. Their aim was to demonstrate GATT/WTO has increased trade and explain the apparent inconsistency between common knowledge that WTO promotes trade and the results which Rose (2004a) got from his studies. In their work they refer to certain asymmetries which Rose (2004a) did not take into account and which change the results of empirical studies significantly.

Four asymmetries were mainly pointed out:

1. Developed versus developing countries:
Before the Uruguay Round and the WTOs’ creation the developing countries were not pressured to undertake the liberalization obligations, consequently they were reluctant to participate in the tariff liberalization as they had to biding obligation to do so.

2. Imports of member countries from other members versus imports from non member countries:
The members of the WTO are obliged to comply to the MFN principles only towards other members but it seems that in practice when a country lowered the non tariff barriers, all trading partners would benefit from the reached agreement. This also means that the countries not having signed the WTO would take advantage of new regulations put in place. Consequently, this would have a positive affect on trade between members and non members of the WTO.

3. Liberalized versus exempted sectors:
Through the rounds of negotiation there have been asymmetries across sectors included in the reached agreements. Since developing country members were not as actively involved in liberalization as developed country members, liberalization should occurred on products of export interest to developed countries but did not occur on products which are of export interest to developing country members and non members.

4. New versus old developing country members:
After the Uruguay Round there was also difference between developing countries that joined the WTO and the countries that joined GATT previously to WTOs' creation. The pre-WTO members had to undertake fewer obligations in the terms of lowering tariffs in industrial or agricultural sector. The extreme example of the principle of the greater liberalization demanded from a new country which entered the WTO was China which entered in 2001. China was given a shorter period to complete the liberalization obligation and at the end of this phase-in period China's trade regime will be more open than most of the existing developing country members of the WTO today. Without taking into account these asymmetries the results of Subramanian et al. (2006) were more pessimistic than the results of Rose (2004a). He found that membership of the WTO had no significant effect on trade, but Subramanian et al. (2006) found that WTO according to Rose's (2004a) empirical method had negative effect.

4. Analysis: A case study of three WTO member countries

In the last chapter we analyze international trade of selected WTO member countries and try to understand the connection between the growth in trade and membership status; considering their trading policy and the changes in that policy. We have chosen very different countries in terms of levels of development and size; besides some were members of the GATT while others only joined its successor, the WTO. Under WTO the level of development is established in a particular way. A new entrant in the WTO announces its development level to other members after that the old members have a right to challenge that announcement. The reason for that is the “special treatment” towards the developing countries. The special treatment is for example longer period to adopt al the requirements of a certain agreement.

4.1 Choice of selected countries

For the analysis we have chosen China, Mexico and Slovenia. The reasoning behind this choice is quite clear. We chose China because it is an exception in terms of size and it is a fast growing country. Also the trading policy of China has changed substantially in recent decades; we would

---

5 More on the special treatment in: Procedure to enhance transparency of special and differential treatment in favor of developing country members (WTO, 2009).
like to understand what kind of affect the WTO had in terms of China’s trading policy. We are interested in Mexico because Andrew K. Rose (2004a) specifically mentioned it as a country that did not benefit much from accessing to the GATT/WTO. So we will be analyzing the data in the period of Mexico’s accession and what kind of effect this had on the trade levels of Mexico. As for Slovenia it was a small country in transition when it entered in GATT. The independence in 1991 changed its trading partners completely.

4.2 Analysis of trade of China and the results of the analysis

Up till 1979 China maintained a centrally planned economy. This means it was relatively self-sufficient and that the country was closed to international trading except of importing raw materials it did not have like oil or natural gas. After 1979, China launched several economic reforms. The government established four special economic zones along the coast for the purpose of attracting foreign investment, boosting exports, and importing high technology products into China. Coastal regions and cities were designated as open cities and development zones, which allowed them to experiment with free market reforms and to offer tax and trade incentives to attract foreign investment. In addition, state price controls on a wide range of products were gradually eliminated (Morrison, 2007, pg. 3).

Because of these reforms China began to grow economically. Economists generally attribute much of China’s rapid economic growth to two main factors: large-scale capital investment (financed by large domestic savings and foreign investment) and rapid productivity growth. (Morrison, 2007, pg 4) The reforms have influenced also the trade patterns of China; it became a major trading player on the international scene. Chinese exports rose from $14 billion in 1979 to $969 billion, while imports over this period grew from $16 billion to $792 billion. In 2004, China surpassed Japan as the world’s third-largest trading economy (after the European Union and the United States) (Morrison, 2007, pg. 9).

But the central question remains: Did the WTO contribute to the growth of China’s trade? Before China became a member of the WTO in December 2001 it became a member of OECD in October 1995. OECD is the Organization for economic co-operation and development which (OECD web site, 2009) brings together the governments of countries committed to democracy and the market economy from around the world to:

- Support sustainable economic growth
- Boost employment
- Raise living standards
- Maintain financial stability
• Assist other countries’ economic development
• Contribute to growth in world trade

It has thirty member countries and five countries under so called enhanced engagement; China is one of these five countries. The role of OECD is offering advices and recommendations to a country to improve certain conditions like for example trading openness, which means that it could influence the international trade of China. In the reports of OECD the challenges which China faces are mentioned as well as improvements. Through this it is hard to establish a certain effect of OECD on the growth of China’s international trade. One of the mentioned achievements of OECD in connection to China was the Co-operation programmes with emerging market economies. Unlike OECD the WTO works differently, it obligates a member countries to implement the agreements until the established date, which means that the effect on the international trade should be noticeable and clearer.

Before China entered in the WTO it signed bilateral agreements with United States and European Union. After its accession to the WTO these agreements extended to all trade partners respecting the MFN principle.

In the next figure we will present the export of China in different sectors in the period from 1997 until 2005, which are four years before and four years after the accession of China to the WTO.

*Figure 4: Export of China in different sectors*

Source: Statistic Database of the WTO, 2007

From Figure 5 we can observe a faster growth in export of manufactured products than in export of agricultural products or fuels and mining products. The reason for this is low-cost labor available in China which made it possible for the international corporations to move their
manufactures to China and then export the finished products or parts of them to target markets. All of this already started in early 90’s and it generated to the export of manufactured products a relatively modest growth throughout the years. It is relatively modest because on average the growth of export in manufactured products was approximately 11% (Figure 5). But it is much slower than the growth of export in manufactured products after 2001. China entered in the WTO at the end of the year 2001; after that, the growth of export in manufactured products grew on average by approximately 31% per year. The export of fuels and mining products and agricultural products is much lower than the export of manufactured products throughout the years. But we can notice that the export of commercial services is growing faster than the export of agricultural products or fuels and mining products.

China has experienced big changes in the composition of its exports. It has moved from the first stage of agriculture and apparel to more sophisticated manufactured goods. Rapid export growth has been associated with a move out of agriculture and apparel into the machinery and transport sectors. (Amiti and Freud, 2008, pg. 4)

The export in total grew from 1997 until 2001 when China entered in the WTO by approximately 10% and after 2001 started to grow faster by around 29% per year.

![Figure 5: China’s import in different sectors](image)

It is interesting that the figure of import is quite similar to the figure of export of China. The main difference we can observe is the faster growth in importing fuels and mining products which is a direct consequence of the growth in manufacturing that requires more fuel and that China has consequently to import. Beside this we can observe in this figure the growth in imported manufactured products which start to grow faster after 2001. The total import from 1997 until
2001 grew at approximately 14%, from 2001 until 2005 it grew at about 27% per year.

Because of the relatively faster growth of exports compared with imports we can expect a surplus in trade. Morrison (2007, pg. 2) wrote: “In July 2007, the government reported that during the first six months of 2007, exports surged by 29%, while imports increased by 18.3%, over the same period in 2006. The trade surplus during this period hit $113 billion.”

Overall we can state that WTO had a positive influence on China’s trade. We can confirm that by looking at the combination of the previous figures. But the truth is that the matter is not that simple. There are a number of other factors which could influence China’s trade. For example, the U.S. was considering China already a member in certain ways and applying the MFN, as it was mentioned in the CRS Report for Congress: China and the world trade organization (2001).

4.3 Analysis of trade of Mexico and the results of the analysis

After the Second World War Mexico’s economy was growing at a relatively stable rate; in the 70s the growth of the GDP was so high – on average 8, 4% - that it was referred to as economic boom. About the following decade Hoshino (1996, pg. 34) wrote: “The decade of the 1980s was of historic significance in the development of Mexico’s economy. The economic crisis brought on by the country’s external debt problem which surfaced in 1982 compelled the government to abandon its long-standing development strategy.”

According to Alba (1998, pg. 1223): “The development strategy, based on import-substituting industrialization (ISI), protection, and government direction, was no longer sustainable. Fundamental disequilibria were present in public finances (the “traditional” or financial deficit in 1982 was 17.7% of the GDP) and in the current account of the balance of payments (in 1981 this deficit amounted to US$ 12.6 billion). Foreign debt had grown to high proportions (more than US$ 90 billion in 1982, equivalent to more than 50% of the GDP) and one devaluation was followed by another in 1982.” The migration to U.S. followed the crisis: in 1983 wages of Mexicans lost one third to one forth of their purchasing power. After the crisis the government completely changed its strategy. Before the crisis the government was protecting the domestic markets and the economy in general. As mentioned before it was leading the import-substituting industrialization. Afterwards the government started with the neo-liberal principles, the easing of controls and the total withdrawal of government form the economy.

Mexico stood fourth in the world, behind only England, Germany, and Japan, in the amount of revenues it earned from the sale of public enterprises between 1988 and 1992. Following this complete turn around in economic strategy, the Mexican economy experienced a transformation of unprecedented scale, a process that is still ongoing today (Hoshino, 1996, pg. 34-35).
Mexico entered the GATT in 1986, so we will be referring to the data taken from 1982 until 1990 - that is four years before and four years after the accession to GATT. As mentioned before and in the work of Arvind Subramanian and Shang-Jin Wei (2006) the developing countries which entered the GATT before the creation of WTO were much less pressured to implement the agreements and there was the so called ‘special treatment’ allowing certain elasticity in the implementation of the agreement’s requirements. That is the reason why in the graphs there is not much of a difference to be noted in the years before and after accession.

Until 1986 oil accounted for nearly 80% of the total export of Mexico (Figure 7). The government was borrowing heavily to invest in economic development. But in 1982 the debt crisis came as a severe shock to the Mexican economy. In 1986 the commodity market collapsed, the price of oil dropped, which led to a substantial drop in the exports of fuel and mining products. The exports of manufactured products grew throughout the 80s. On the other hand, we can see that the exports of manufactured products started to rise faster after the 1986 when the government started the withdrawal from all economic matters. A boom in exports of manufactured products followed due to the geographical neighbors, namely the U.S. and Canada. And that was a consequence of the accession to the GATT which was the first sign of liberating the trade and freeing it of governmental control.

Figure 6: Export of Mexico in different sectors from 1982 until 1990

![Graph showing export trends](image)


Just as the 1982 crisis was exceptional, so were the measures taken to overcome it. The priority was to achieve basic macroeconomic equilibrium. This adjustment meant: a reduction of economic activity in 1983; a substantial decrease in imports (42%); reduction of domestic private consumption (7.5%) (Alba, 1998, pg. 1224).
Because of the falling purchasing power after the crisis in 1982 the imports slowed significantly in 1983, especially in manufactured products, commercial services and fuel and mining products. Also here we can notice a faster growth of import in manufactured products after 1986 to which the accession to GATT contributed. After 1987 also the import of commercial services started to grow fast.

*Figure 7: Import of Mexico in different sectors from 1982 until 1990*

Because of the other influences on Mexico’s trade we can not affirm GATT’s positive effect. GATT was not pressuring hard enough the members to enforce the agreements and beside that Mexico was a developing country at the time and was entitled to special treatment.

4.4 Analysis of trade of Slovenia and the results of the analysis

With the downfall of the Austro-Hungarian Empire at the end of First World War, a united kingdom of Serbs, Croats and Slovenes was proclaimed in 1918. Yugoslavia became communist in 1945 but broke with Moscow in 1948, developing its own version of socialism (Heath, 1993, pg. 144).

Yugoslavia benefited from the distance in the relationship with Russia and remained partly open. Slovenia started to grow fast in the 50s’ because of the fast industrialization and the urge of the government to be self-sufficient. It remained the most developed part of Yugoslavia. According to Heath (1993, pg. 144): “The last two decades have seen Yugoslavia gradually slipping into political and economic crisis.”
In December 1990 the referendum was held and the majority of Slovenes voted in favor of independence. Slovenia declared itself independent in 1991. After three years of its independence (in 1994) Slovenia entered the GATT; we should therefore refer to the data from 1990 until 1998 – that is four years before and four years after the accession. Until 1991 Slovenia was a part of Yugoslavia and was the first of the nations to become independent. After Slovenia, Croatia, Macedonia, Bosnia and much later, in 2006 Monte Negro declared their independence. This means that all data before 1992 refers to Yugoslavia.

Between the mid 1980s and the mid-1990s the orientation of Slovenian trade changed dramatically. In 1985 around 40% of exports and 44% of imports were exchanged with the countries of the European Community (EC). At the end of 1996, however, about two-thirds of Slovenia’s international trade was with the member states of the European Union (EU-as the EC was known from November 1993). The countries of former Yugoslavia remained in second place, accounting for 16.7% of Slovenia’s export and 7.5% of imports, with the Central European Free Trade Area (CEFTA-comprising, apart from Slovenia, which joined at the beginning of 1996, the Czech Republic, Hungary, Poland and Slovakia) in third place (5.4% and 6.5% respectively). The countries that lost the greatest amount of business with Slovenia were the states of the former USSR and, to a greater extent, developing countries. A free-trade agreement was reached with the European Free Trade Association in February 1995 (Eastern Europe and the Commonwealth of Independent States, 1999, pg. 788).

In Figure 9 we can follow Slovenia’s export performance from 1992 until 1998. The biggest part of exported goods represented the manufactured products, beside them the level of export in commercial services is relatively high pointing to a post-industrial economy. After 1992 we can notice the fall in growth of export in manufactured products and reaching the lowest point in 1993. The reasons for this fall lies in the fact that Slovenia became independent and has lost its exporting market which before were the other members of Yugoslavia. We can observe the fastest growth of export in manufactured products from 1993 until 1995; it can be interpreted as the faster growth of export in manufactured products to other markets outside Yugoslavia it might be partially due to the GATT accession.
Looking at the figure 10 we can assume that becoming independent did not have a big influence on import this is because of the gradual opening of the trading system. Before 1990 Yugoslavia, hence Slovenia was oriented towards import substitution and after Slovenia became independent many kinds of import protections were present like: quotas, licenses, special import licenses and conditionally free imports together with the complicated system of payment for imported goods in almost all industrial sectors. (Mrak et al., 2004, pg. 134) We can follow very fast growth of import in manufactured products after 1994 which was the consequence of the restructuring in transition and it could be partially contributed also to GATT accession. The growth in import of agricultural products, fuel and mining products and in commercial services is not significant.
Slovenia reported a positive balance of trade in goods in 1992, although this could be explained to a significant degree by the decline in imports as a result of economic dislocation. During the first half of 1993 this surplus became a deficit, which reached US $954.3m. by 1995. The trade deficit decreased somewhat in 1996 and 1997, to $881.7m. and $771.6m. respectively. Overall, however, there were generally small surpluses on the current account of the balance of payments in 1990s. Machinery and transport equipment were the most significant items of export, accounting for about one-third of total exports in 1996, followed by manufactured goods, chemicals and related products (Eastern Europe and the Commonwealth of Independent States, 1999, pg. 788).

Just as for China and Mexico we can not declare with certainty that WTO had a positive impact on trade of Slovenia. That is mostly because of the transition, from a centrally planned economy to a liberal international trade; it takes more time to reshape the economy which than would be suitable to produce the products for export.

Conclusions

I conclude on the basis of my analysis and on the analysis of other studies mentioned in the third chapter. My hypothesis was that WTO has a positive effect on trade of the member countries,
reviewing the scientific studies I have realized that the matter is complicated and with the relatively small difference in the approach to the analysis we can come to very different results. For example the work of Rose (2004a) shows that the membership in WTO does not increase the trade of a country, on a contrary the comment on the Roses’ (2004a) conclusion of Tomz at al. (2007) with relatively small modifications of analysis show totally different results.

On the basis of my analysis I can conclude that there is no substantial evidence of positive effect on the export and import of the examined countries, the reason for that might lay in the fact that they were first members in GATT which was not that strict with the countries which became new members. Or it might be because of the other factors, Mexico went through an economic crisis four years before entering the GATT. Which might reflect on its international trade and Slovenia became independent and started transition from socialist to a market economy two years before entering in GATT which changed the structure of its trading partners completely. I conclude that on the basis of the analysis of three countries it is difficult to confirm or reject my initial hypothesis because every country is unique in addition to the fact that international trade of a country is sensitive to any kind of changes of the economy (e.g. economic crisis in the case of Mexico). Because of this the analysis should not be based on the level of a country or even a sector, but on a more disaggregated level. We should namely observe data of international trading companies and how much they benefited from the GATT/WTO tariff lowering. On average the tariffs have lowered from 40% to 5% since GATT has been established and big multinational companies were likely among the primary beneficiaries of this. The fundamental idea of the foreign trade and WTO is that everyone (I am refereeing to countries), that is part of it should benefit from it, but as I concluded, for the members of WTO we cannot claim that. From this follows that also the countries which are considering entering the WTO should understand that the actual international trade of a country might not benefit as a whole but maybe just certain sectors or even just certain companies.
References


21. *Organization for Economic Co-operation and Development [OECD]*. Found on December 15, 2008 on the internet address http://www.oecd.org/pages/0,3417,en_36734052_36734103_1_1_1_1_1_1,00.html


Appendix

Figure 1: Organizational structure of the WTO

Ministerial Conference

General Council meeting as Dispute Settlement Body

General Council meeting as Trade Policy Review Body

Appellate Body
Dispute Settlement panels

Council for Trade in Goods

Council for Trade-Related Aspects of Intellectual Property Rights

Council for Trade in Services

Committees on
Trade and Environment
Trade and Development
Subcommittee on Least-Developed Countries
Regional Trade Agreements
Balance of Payments
Restrictions
Budget, Finance and Administration

Working parties on
Accession

Working groups on
Trade, debt and finance
Trade and technology transfer

Committees on
Market Access
Agriculture
Sanitary and Phytosanitary Measures
Technical Barriers to Trade
Subsidies and Countervailing Measures
Anti-Dumping Practices
Customs Valuation
Rules of Origin
Import Licensing
Trade-Related Investment Measures
Safeguards

Working party on
State-Trading Enterprises

Doha Development Agenda:
Trade Negotiations Committee

Special Sessions of
Services Council / TRIPS Council / Dispute Settlement Body / Agriculture Committee and Cotton Sub-Committee / Trade and Development Committee / Trade and Environment Committee

Negotiating groups on
Market Access / Rules / Trade Facilitation

Plurilateral
Information Technology Agreement Committee

The General Council also meets as the Trade Policy Review Body and Dispute Settlement Body

Source: WTO, 2008
Table 1: The Rounds of GATT negotiations:

<table>
<thead>
<tr>
<th>Year</th>
<th>Place/ Name</th>
<th>Subject covered</th>
<th>Countries</th>
<th>Outcome</th>
<th>Weighted tariff reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947</td>
<td>Geneva</td>
<td>Tariffs</td>
<td>23</td>
<td>Concessions on 15,000 tariff lines</td>
<td>-26</td>
</tr>
<tr>
<td>1949</td>
<td>Annecy</td>
<td>Tariffs</td>
<td>13</td>
<td>5,000 tariff concessions; 9 accessions</td>
<td>-3</td>
</tr>
<tr>
<td>1951</td>
<td>Torquay</td>
<td>Tariffs</td>
<td>38</td>
<td>8,700 tariff concessions; 4 accessions</td>
<td>.4</td>
</tr>
<tr>
<td>1956</td>
<td>Geneva</td>
<td>Tariffs</td>
<td>26</td>
<td>Modest reductions</td>
<td>-3</td>
</tr>
<tr>
<td>1960-1961</td>
<td>Geneva/Dillon Round</td>
<td>Tariffs</td>
<td>26</td>
<td>4,400 concessions exchanged; EEC proposal for a 20 percent linear cut in manufactures tariffs rejected</td>
<td>-4</td>
</tr>
<tr>
<td>1964-1967</td>
<td>Geneva/Kennedy Round</td>
<td>Tariffs and anti-dumping measures</td>
<td>62</td>
<td>Average tariffs reduced by 35 percent; some 33,000 tariff lines bound; agreements on customs valuation and antidumping</td>
<td>-38</td>
</tr>
<tr>
<td>1973-1979</td>
<td>Geneva/Tokyo Round</td>
<td>Tariffs, non-tariff measures, “framework” agreements</td>
<td>62</td>
<td>Average tariffs reduced by one-third to six percent for OECD manufactures imports; voluntary codes of conduct agreed for all non-tariff issues except safeguards. Guards.</td>
<td>-33</td>
</tr>
<tr>
<td>1986-1994</td>
<td>Geneva/Uruguay Round</td>
<td>Tariffs, non-tariff measures, rules, services, intellectual property, dispute settlement, textiles, agriculture, creation of WTO, etc</td>
<td>123</td>
<td>Average tariffs again reduced by one-third on average. Agriculture and textiles and clothing subjected to rules; creation of WTO; new agreements on services and TRIPs; majority of Tokyo Round codes extended to all WTO Members.</td>
<td>-38</td>
</tr>
</tbody>
</table>

Source: WTO, 2008