

WORKING PAPERS

35

Saleh Mothana Obadi

**YEMEN'S REVEALED COMPARATIVE
ADVANTAGE VIS-Á-VIS BOTH
THE EU AND THE USA**

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ABSTRAKT

Odhalené komparatívne výhody Jemenu voči EÚ a USA

Táto štúdia skúma vývoj obchodných vzťahov medzi Jemenskou republikou a Európskou úniou a Spojenými štátmi americkými počas obdobia 2000 – 2011. Ťažisková časť tejto práce je snaha pomocou empirickej analýzy identifikovať odhalenú komparatívnu výhodu (RCA) Jemenu voči EÚ a USA a zisťovať možnosti rastu jemenského exportu na trhy spomínaných významných obchodných partnerov. Podľa spomínanej analýzy sme zistili, že Jemenská republika má odhalené komparatívne výhody voči trhom EÚ a USA v niekoľkých komoditách (od 7 do 10 komodít) ako napríklad ropa a ropné produkty (33 SITC), čerstvé ryby a mäčkyše (03 SITC) a zemný plyn a spracovaný plyn (34 SITC).

KLÚČOVÉ SLOVÁ:

Jemenský zahraničný obchod, Európska únia, USA, odhalené komparatívne výhody, intenzita obchodu

ABSTRACT

Yemen's Revealed Comparative Advantage vis-à-vis both the EU and the USA

This study examines the development of mutual trade relations between Yemen and member countries of the European Union (EU) and United States of America (USA) during the period of 2000 to 2011. In addition, this study tries to identify the comparative advantage of Yemen relative to EU and USA and the possibilities of increasing the Yemen's export to the above mentioned trade partners. According to the results of the empirical analysis we found that, Yemen has a comparative advantage in relation with EU and USA in a few of commodities (about 7 to 10 commodities), like petroleum and petroleum products (SITC-33) Fish & crustacean, mollusc & other aquatic invertebrate (SITC-03) and Gas, natural and manufactured (SITC-34) etc. We also found that the trade intensity between Yemen and both the EU and USA is lower than it would be expected, in view of Yemen's weak exploitation of the preferential system and the advantages provided by the European Union and USA for Least Developing Countries (LDCs) in the frame of General Preference System (GSP) and Everything but Arms Initiative.

KEYWORDS:

Yemen's international trade, revealed comparative advantage, European Union, USA, trade intensity.

JEL CLASSIFICATION: F1, F13, F14

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**YEMEN'S REVEALED COMPARATIVE ADVANTAGE
VIS-Á-VIS BOTH THE EU AND THE USA**

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ACRONYMS

CSP	Country Strategy Paper.
EBA	Every Thing but Arms.
EC	European Commission.
EU	European Union.
GSP	Generalized System Preferences.
IBRD	International Bank for Reconstruction and Development.
IDA	International Development Association.
IFC	International Finance Corporation.
IMF	International Monetary Fund.
LDCs	Least Developed Countries.
LNG	Liquefied natural gas.
MFN	Most Favored Nation.
NGO	Non-Government Organization.
NIP	National Indicative Programme.
RCA	Revealed Comparative Advantage.
SITC	Standard International Classification.
TRI	Trade Intensity Index.
UK	United Kingdom.
UN	United Nations.
USA	United States of America.
USD	United States Dollar.
WTO	World Trade Organization.

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1. INTRODUCTION

The International financial and economic crisis has an impact on all the regions of the world, either directly or indirectly. The impact of this crisis on Yemeni economy was indeed indirect, through the trade flows. We will try to examine and answer the question of the extent of the crisis' impact on Yemeni economy and others in this paper.

Yemen as one of the *LDCs* needs to participate more fully in international trade and the global economy. Otherwise, it will remain underdeveloped and dependent on the rich countries and international organizations for aid or loans. How can that be achieved? I think as many studies pointed out that peace, stable democracy, reducing corruption and increasing transparency and the rule of law would be a good starting point.

Globalisation and free trade offer opportunities and dangers to a less developing country such as Yemen. This increases and secures market access and allows exporters to boost production and thus revenues and employment.

However, free global trade leads to greater competition for domestic market producers, and an erosion of the preferences that Yemen exporters enjoy in developed markets. This causes problems for traditional exports, which will have to become more competitive through increased efficiency in order to retain their market share. Thus there is a need to diversify the export base to goods and services that have a more secure comparative advantage.

Increased trade with developing countries as well as *LDCs*, with Yemen being one of them, will enhance their export earnings, promote their industrialisation and encourage the diversification of *LDC*'s economies.

Therefore, the political boundaries that divide geographical areas into nations do not change the fundamental nature of trade, nor do they remove the benefits it confers on the trading partners. So, nations or firms trade with each other because they benefit from it. However, before an international business activity can take place, a country has to have a commodity to exchange with other nations. There must be somehow a basis for international trade in goods and services. As international trade is a two-way process of exchange, it must be mutually beneficial to both sides; otherwise no trade would be possible.

Yemen, as many other developing countries, relies on exports of primary commodities. For more than twenty two years, its exports of oil account to almost 96 per cent of total exports. In other words, Yemen relies on fuel to finance government consumption including imports of all commodities with the exception of vegetables and some fruits.

The goal of this study is to examine the impact of the international financial and economic crisis on the mutual trade relations between Yemen and member countries of the European Union and the USA and look at the behavior of trade flows between Yemen and the aforementioned countries during the period of 2000 to 2011. In addition, this study tries to identify the comparative advantages of Yemen relative to EU and USA and the possibilities

of increasing the Yemen's export to the above mentioned trade partners, particularly after the enlargement of the EU, to confer the theory and reality of international trade between dissimilar countries or partners. On the other hand, the study examines how Yemen has been exploiting the advantages provided by the European Union and USA for LDCs in the frame of General Preference System (GSP) and everything but Arms.

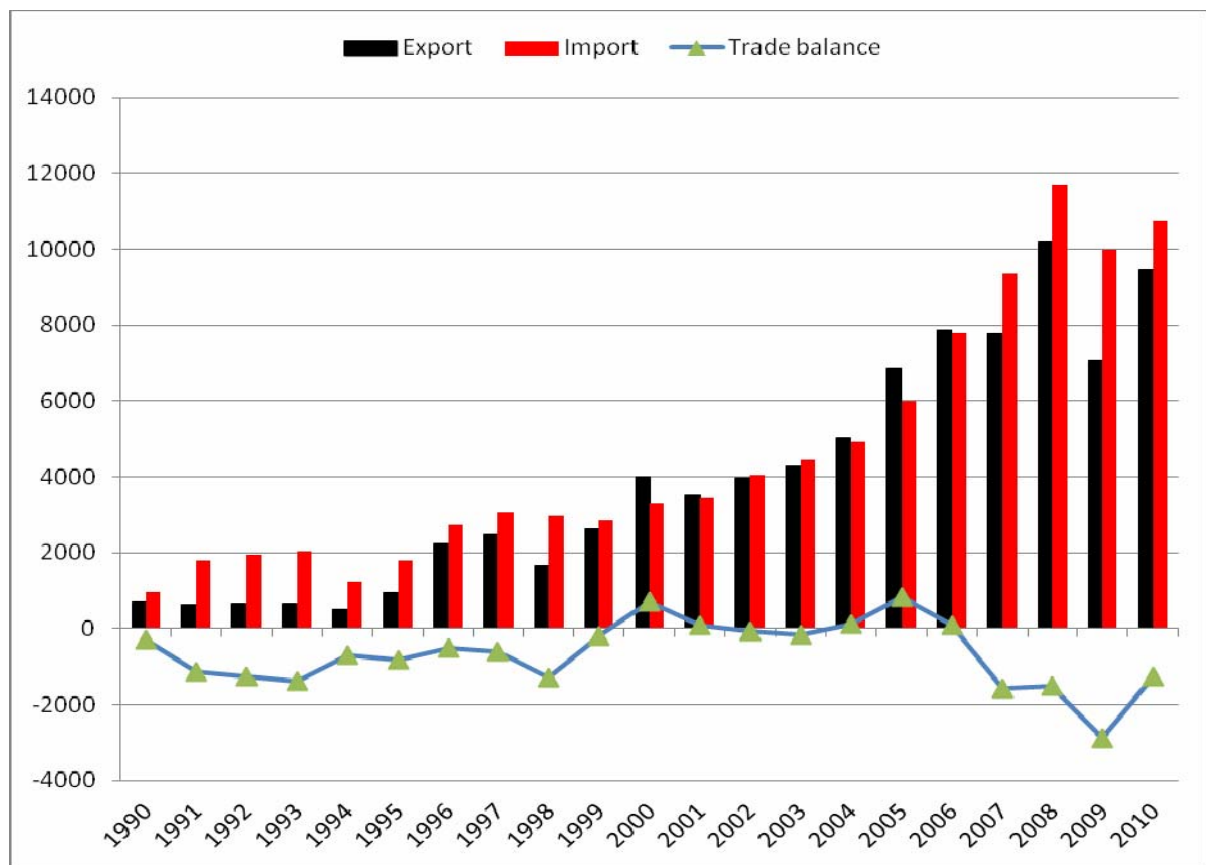
This paper consists of six parts. The first two parts describe inter alia, an overview of the Yemen's overall economic situation. The third and fourth parts describe an overview of the Yemen's trade relation with the European Union and with the United States of America in the last decade. In order to identify the position of Yemen in the world trade and its comparative advantage we used statistical indicators, which are presented in the fifth part. The subsequent last part is concerned with the conclusion and export possibilities of Yemen to EU and USA.

2. YEMEN'S INTERNATIONAL TRADE

Yemen is a small and relatively open economy. It relies on import of almost all goods and services and relies on export of two primary commodities, crude oil and natural gas. Export of fuel accounted in the last 10 years about 93 per cent of merchandise exports. The openness of the economy in the last decade (1995-2010) has on average reached about 75 per cent GDP, the export has accounted on average about 36.5 per cent GDP.

Chart 1

Yemen international trade in million USD



Source: Own based on online UN COMTRADE Database, 2012.

As it is clear in Chart 3, the Yemeni international trade has registered a dynamic growth in the period 1990-2000, especially since 1995 up to 2000. In this period the Yemeni international trade has quadrupled from 1658 million USD to 7259 million USD. While in the period 1990-2000 the Yemeni international trade registered on average about 20 per cent growth annually. In the period 2000-2010 it has tripled and reached in 2010 20199 million USD.

Yemen has registered a negative trade balance in the period 1990-1999. In this period the import registered a more dynamic trend than export and accounted on average about 64 per cent of total international trade annually. After that (in the period 2000-2010) it has

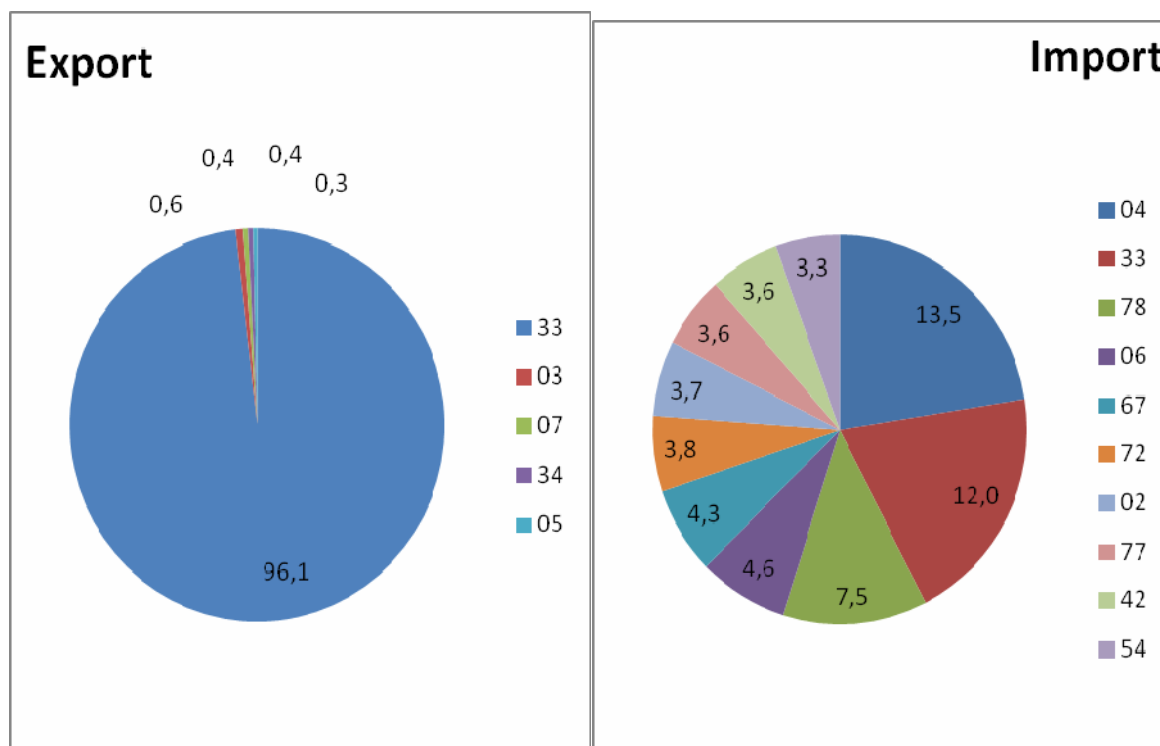
registered a fluctuating trend, between a positive and negative trade balance. In this period the crude oil prices registered recovery after the period of a rising price of crude oil slowdown. It is important to remember that the crude oil export accounted about 93 per cent of Yemeni total export.

Commodity structure of Yemeni international trade

As it is mentioned that, Yemen in majority exports fuel commodities, otherpar commodities accounting a small percentage of total export.

Chart 2

The five export and (the ten import) major commodities and their share in total export and (in total import) in 2000 by 2 digits SITC in %



- *Note:* 33 SITC (Petroleum, petroleum products and related materials), 02 SITC (Dairy products and birds' eggs), 03 SITC (Fish, crustacean and molluscs, and preparations thereof), 04 SITC (Cereals and cereal preparations), 06 SITC (Sugar, sugar preparations and honey), 07 (Coffee, tea, cocoa, spices, and manufactures thereof), 34 (Gas, natural and manufactured), 05 (Vegetables and fruit), 42 SITC (Fixed vegetable oils and fats), 54 SITC (Medicinal and pharmaceutical products), 67 SITC (Iron and steel), 77 SITC (Electric machinery, apparatus and appliances, nes, and parts, nes), 78 SITC (Road vehicles).

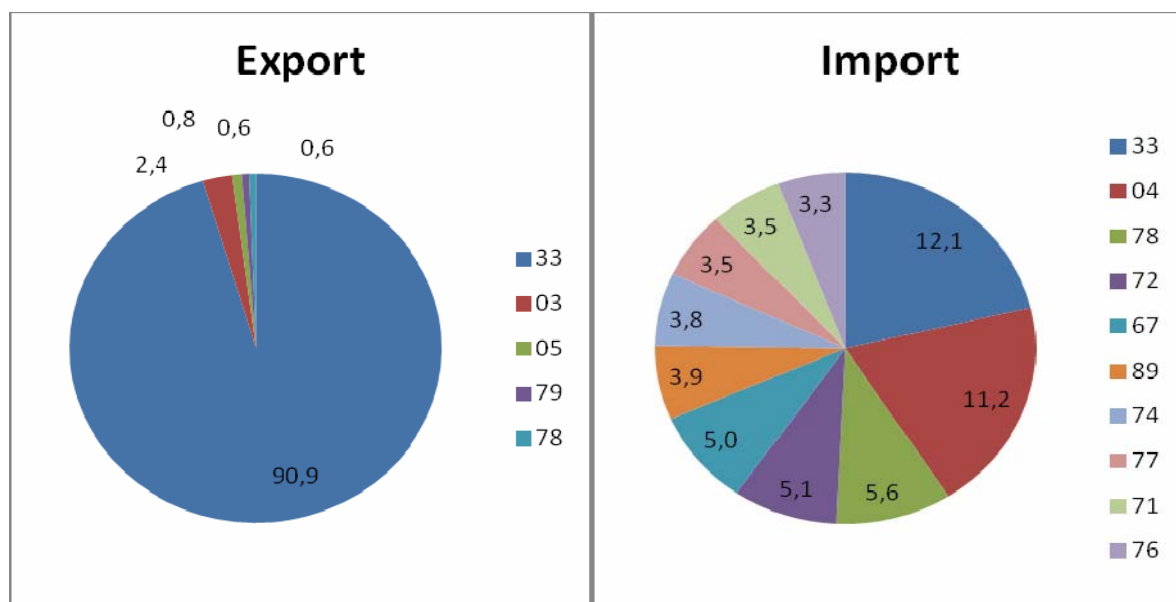
Source: Author's based on online UN COMTRADE Database, 2012.

As it is shown in Chart 4, that Yemeni export relies almost entirely on one commodity (33 SITC – Petroleum, petroleum products and related materials for 96.1 per cent of total exports. The other four major export commodities shown in Chart 4 accounted in 2000 about 1.8 per cent of total exports.

The structure of Yemeni import in 2000 was more diversified than export. The major two import commodities are 04 SITC – Cereals and cereal preparations that accounted in 2000 about 13.5 per cent of total export and 33 SITC – Petroleum, petroleum products and related materials that accounted for 12.0 per cent of total exports.

Chart 3

The five export and (the ten import) major commodities and their share in total export and (in total import) in 2004 by 2 digits SITC in %



- *Note:* 33 SITC (Petroleum, petroleum products and related materials), 02 SITC (Dairy products and birds' eggs), 03 SITC (Fish, crustacean and molluscs, and preparations thereof), 04 SITC (Cereals and cereal preparations), 06 SITC (Sugar, sugar preparations and honey), 05 (Vegetables and fruit), 42 SITC (Fixed vegetable oils and fats), 54 SITC (Medicinal and pharmaceutical products), 67 SITC (Iron and steel), 71 SITC (Elec mach. Appar., parts, nes), 72 SITC (Special industrial machinery), 74 SITC (General industrial machines, nes), 76 SITC (Telecom. Sound equip., etc), 77 SITC (Electric machinery, apparatus and appliances, nes, and parts, nes), 78 SITC (Road vehicles), 79 SITC (Other transport equipment), 89 SITC (Misc. manufactured goods, nes).

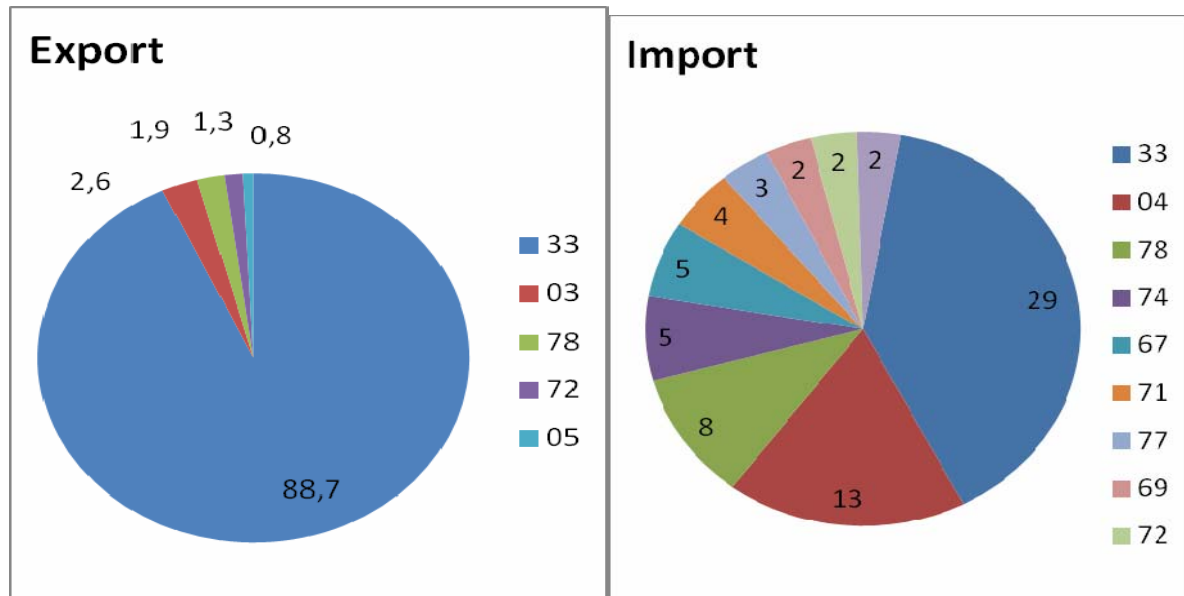
Source: Author's based on online UN COMTRADE Database, 2012.

It is in the Chart 5 shown that the structure of Yemeni export in 2004 has changed very little. Two from the five most exported commodities in 2004 with relative to 2000 have changed (new two commodities are 78 SITC and 79 SITC). In addition, the share of oil export (33 SITC) in 2004 in total export has dropped relative with its share in 2000 by about 6 percentage points to 90.9 per cent. This drop was due to the rise of share of 03 SITC (Fish,

crustacean and molluscs, and preparations thereof) which accounted in 2004 about 2.4 per cent relative with 0.6 per cent in 2000.

Chart 4

The five export and (the ten import) major commodities and their share in total export and (in total import) in 2008 by 2 digits SITC in %



- *Note:* 33 SITC (Petroleum, petroleum products and related materials), 02 SITC (Dairy products and birds' eggs), 03 SITC (Fish, crustacean and molluscs, and preparations thereof), 04 SITC (Cereals and cereal preparations), 06 SITC (Sugar, sugar preparations and honey), 07 (Coffee, tea, cocoa, spices, and manufactures thereof), 34 (Gas, natural and manufactured), 05 (Vegetables and fruit), 42 SITC (Fixed vegetable oils and fats), 54 SITC (Medicinal and pharmaceutical products), 67 SITC (Iron and steel), 69 SITC (Manufactures, nes), 71 SITC (Elec mach. Appar., parts, nes), 72 SITC (Special industrial machinery), 74 SITC (General industrial machines, nes), 77 SITC Electric machinery, apparatus and appliances, nes, and parts, nes), 78 SITC (Road vehicles).

Source: Author's based on online UN COMTRADE Database, 2012.

The structure of Yemeni import in 2004 also has changed very little (only 3 of the most ten imported commodities – 71 SITC, 74 SITC and 89 SITC). In addition to that, the position of the first most two imported commodities (33 SITC and 04 SITC) has exchanged where the first has become 33 SITC (Petroleum, petroleum products and related materials) due to the insufficient capacity of refineries in the country to refine own oil production.

The structure of Yemeni export in 2008 in comparison with the year 2004 did not change, except one of the major five commodities (72 SITC). The noted change was in the share of these commodities in total Yemeni export, where the share of the first important exported commodity (33 SITC) has registered further declining by about 3 percentage points to 88.7 per cent of total export. This decline was due to the rise of share of other exported commodities (see Chart 6).

3. THE YEMENI ECONOMIC AND TRADE RELATIONS WITH THE EUROPEAN UNION

In this research project we are not interested in examining the economic relations between Yemen and individual countries of the EU, which has a long history, but rather with the EU as a group. Of course the number of member countries of EU has enlarged and then the possibilities of mutual trade between Yemen and EU has enlarged also and the opportunities of increasing Yemeni export to the mentioned integration group has raised.

3.1. A short overview of the Yemen's economic relations with the EU

The European Commission's co-operation with Yemen started in 1978 when the EC funded an agricultural research project in the Yemen Arab Republic (Northern Yemen).¹ In 1984, relations between the EC and the Yemen Arab Republic were formalised in a Development Co-operation Agreement. Assistance to the People's Democratic Republic of Yemen (Southern Yemen) was limited to one project in 1982. Following the unification of the two Yemen republics, the Co-operation Agreement of 1984 was extended on March 6, 1995 by exchange of letters, to cover the entire territory of Yemen. In the framework of co-operation with developing countries, up to the year 2000, EC-supported activities in Yemen were financed from the budget lines that provided funds for Asian countries.

Following successful negotiations during 1997, an advanced and expanded framework of co-operation agreement on commercial, developmental, and economic co-operation was concluded and signed on November 25, 1997,² replacing the 1984 Agreement. The agreement came into force on July 1, 1998.³ The Agreement is a further step forward in the EU's overall strategy towards its southern neighbours around the Gulf and the Mediterranean. It provides the basis of long-term contractual commitments between the EU and Yemen and is an important step to strengthening and expanding relations through⁴:

- Trade and commercial co-operation.
- Development cooperation, through which Yemen is assisted in establishing a framework for sustainable socio-economic development.
- Economic cooperation, where, in light of recent achievements, both parties recognize the potential for wide-ranging cooperation and agree to establish a regular dialogue on macroeconomic issues.

¹ <http://europa.eu.int/comm/external_relations/yemen/intro>.

² Cooperation Agreement between the European Community and the Republic of Yemen (1998). Official Journal of the European Communities L 72/18, 11. 3. 98.

³ <http://europa.eu.int/comm/external_relations/yemen/intro>.

⁴ Obadi, S. M. (2005). The external trade between Yemen and EU and USA. A Journal of Yemen Studies Center and Research, 10-12/2005, Sanaa, Yemen, 311-395.

- Cooperation in environmental, cultural and scientific issues, as well as social and human resources development areas.

According to the article 2 of the mentioned Agreement, the principal objective of the Agreement is to enhance and develop, under a concept of dialogue, the various aspects of cooperation between the Parties in the areas which fall within the bounds of their respective competence including development, trade, economic and cultural cooperation, environmental protection and sustainable management of natural resources, and human resources development. Consequently, the Parties will have the following aims:

- (a) to promote and intensify trade between the Parties, and to encourage the steady expansion of sustainable economic cooperation, in accordance with the principles of equality and mutual advantage;
- (b) to strengthen cooperation in fields closely related to economic progress and benefiting both Parties;
- (c) to contribute to Yemen's efforts to improve the quality of life and standards of living of the most disadvantaged and poorest groups of the population, together with measures using rural development to combat poverty in the countryside and assistance with developing human resources in a number of sectors of the economy;
- (d) to take the requisite measures to protect the world, regional and national environments and manage natural resources sustainably, taking account of the link between the environment and development;
- (e) to extend their cooperation to the field of culture, communication and information to improve mutual understanding and strengthen existing links between them.

In January 2004 a Regionalised Delegation of the European Commission was opened in Sana'a, replacing the EC Technical Advisory Office which had been set up in the Yemeni capital in 1995 and whose contract expired in December 2003. The office is headed by a Chargé d'Affaires, who took office in May 2004, and is connected to the Delegation in Amman.⁵ In December 2009, the EU established a full diplomatic representation to the Republic of Yemen, which reflects a strong interest by the European Union to take its partnership with Yemen to a new level. The EU Delegation is also expanding to 30 European and local staff reflecting these growing relations and has moved to new premises in February 2010. With the entry into force of the Lisbon Treaty on 1 December 2009, the EU Delegation to Yemen will be in a position to further enhance dialogue with Yemeni partners and represent the European Union in Yemen.

⁵ <http://europa.eu.int/comm/external_relations/yemen/intro>.

3.2.1. Trade flows

According to the fact that the EU is both the world's most open market for the world's poorest countries and their largest trading partner,⁶ the EU is one of the most important trade partners for Yemen.

In its trade relation with the EU, Yemen uses the benefits from the EU "Generalised Scheme of Preferences" (GSP) from its inclusion in the UN list of "least developed countries" (LDCs). The GSP provides basic trade preferences following the traditional objectives of economic development, and special incentives related to the respect of social rights and the protection of the environment. Under the GSP scheme, Yemen enjoys duty-free access for all industrial and agricultural products listed in Annexes I and VII of the Regulation. The Commission has adopted a new revision of GSP scheme in the context of a new Regulation that covered the further periods.

The EU demonstrated its support for the 49 'least developed countries' LDCs (Yemen being one of them) by launching the 'Everything but arms' (EBA) initiative in March 2001. Notwithstanding three commodities (rice, sugar and bananas) which will be gradually liberalised during a transition period, the EBA initiative provides for the liberalisation of imports of all products from LDCs except, arms and munitions.

Therefore, in this section we will look at the behavior of Yemen trade flows with the EU, examining to what the extent Yemen exploited the EBA initiative and what does that mean for Yemen, and what is its potential to expanding export to EU.

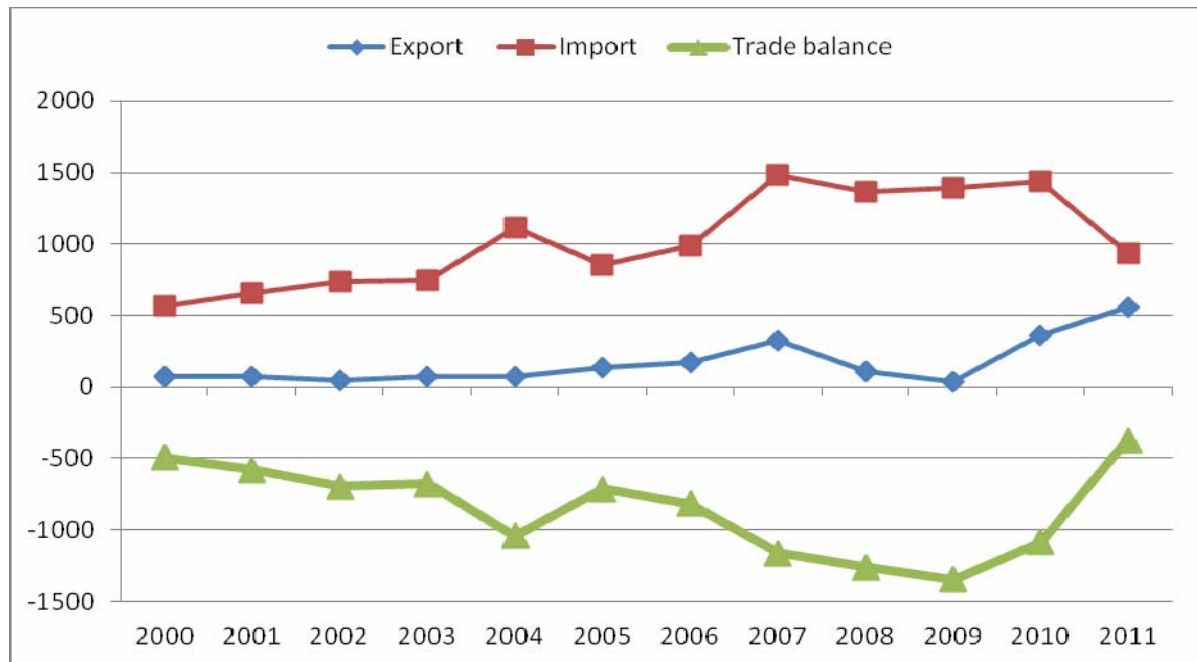
Regarding the trade flows between Yemen and the EU, we will focus in our analyses on the period from 2000 to 2011. Trade between the mentioned partners has almost increasing trend. Of course, the trade balance between Yemen and the EU was during the selected period in favor of EU, in which Yemen registered trade deficit.

Regarding the trade flows between Yemen and the EU, we will focus in our analysis on the period from 2000 to 2011. Trade between the mentioned partners has an almost increasing trend. Of course, the trade balance between Yemen and the EU has during the selected period been in favor of the EU, as Yemen registered a trade deficit.

It important to say that the trade balance between Yemen and the EU in the 90s was also in favor of the EU. "The state of the trade balance changed significantly over the period 1993-95. This change was due to drastically diminishing EU imports from Yemen, while EU exports to Yemen in the same period saw a far lesser deterioration. This downward trend was reversed in the period 1996-97, which showed an increase in both imports and exports, but volumes fell again the following year. Since 2000, the volume of trade between Yemen and the EU has increased" (see Obadi, 2005).

⁶ European Commission (2005), *Opening the Door to development*, Directorate-General for Trade.

Chart 5
Yemen trade balance with EU (in Million USD)



Source: Own based on the UN COMTRADE Database, 2012.

As it is clear in Chart 7, trade (exports + imports) between Yemen and the EU registered in the period 2000-2011 an increasing trend amounting to 14338.2 million USD. Yemen exports to EU during the selected period accounted only 14.3 per cent of total mutual trade. Of course when we considering that Yemeni export to EU amounted in 2000 only 77 million USD, this has a dynamic trend up to 2007 reaching in this period on average a 32 per cent growth annually. In 2008 and 2009 Yemeni export to the EU has declined to 64 per cent annually (from 322 million USD in 2007 to 41 million USD in 2009). It is important to remember that these two years marked the break out of the international financial and economic crisis, which has negatively influenced the international trade outflows in all regions. In these two years a deficit of Yemeni trade balance has increased and amounted to 2607 million USD. This deficit (in the two years) accounted 25.5 per cent of total deficit in the selected period (2000-2011).

In 2010 and 2011 the Yemeni export to the EU has returned back to the main increasing line as before the mentioned crisis. In these two years it registered a 760 per cent and 57.5 per cent growth. This high growth was supported by the export of natural gas manufactured and amounted to 164,6 million USD and 446,4 million USD, respectively. Indeed, this high growth of Yemeni export and slowdown of import from the EU has led to a decline of the deficit of Yemeni trade balance with EU about 72.5 per cent, from -1347 million USD in 2009 to -370.6 million USD in 2011.

While the EU was Yemen's most important import partner in 2000 and 2003, accounting for 24,5 and 19,0 per cent of Yemen's total imports respectively, followed by the United Arab Emirates (9,9 and 12,8 per cent respectively), Saudi Arabia (13,8 and 10,2 per cent respectively) in 2008 and 2009 accounted 14 and 15,1 per cent of total Yemeni import respectively, followed by the United Arab Emirates and China. As regards Yemen's exports, the EU occupies in 2000 the 5th place, absorbing about 8 per cent of the Yemen's total export and in 2008 accounted only about 1,5 per cent of Yemeni total export. After a rapidly decline in 2009, the Yemeni export to the EU has recovered in 2010 and 2011 and accounted about 4.2 and 4.8 per cent of total Yemeni exports (predominantly oil and liquefied natural gas) respectively.(own calculation based on COMTRADE database).

In terms of the structure of Yemen exports to EU, it was differentiated during the selected years (see table 1). It is unambiguous that in the Yemeni export to EU in all selected years it has not included the group of commodities (SITC-4). It is not surprising that the biggest three exported commodities to the EU in terms of value were 33 SITC (Petroleum, petroleum products and related materials), 03 SITC (Fish, crustacean and molluscs, and preparations thereof), and 34 (Gas, natural and manufactured) (see table 1). It is important to say that Yemen has launched the export of liquefied natural gas in 2009.

Table 1

The ten Yemeni most exported commodities to the EU by 2 digit SITC

Rank Year	2 digit SITC code (codes are arranged by value of export)									
	first	second	third	fourth	fifth	sixth	seventh	eighth	ninth	tenth
2000	33	03	28	71	21	93	34	87	79	96
2002	03	33	21	87	71	26	05	96	68	77
2004	03	33	21	76	71	28	93	77	87	26
2006	33	03	28	21	71	26	93	76	78	68
2008	03	33	28	21	93	68	78	76	72	74
2010	34	03	33	28	96	21	72	68	93	71
2011	34	33	03	28	68	21	26	61	93	29

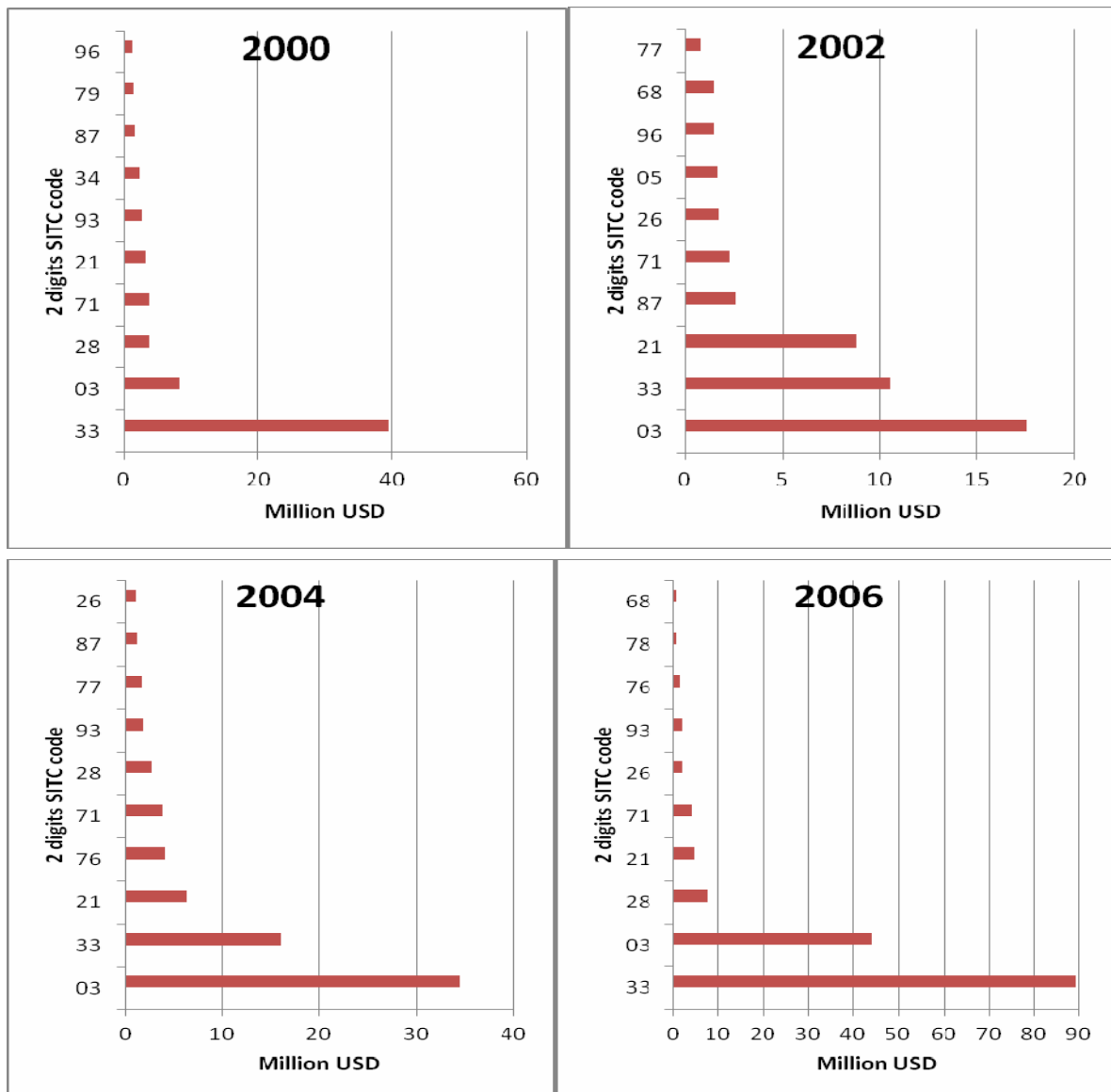
Source: Own based on the UN COMTRADE Database, 2012.

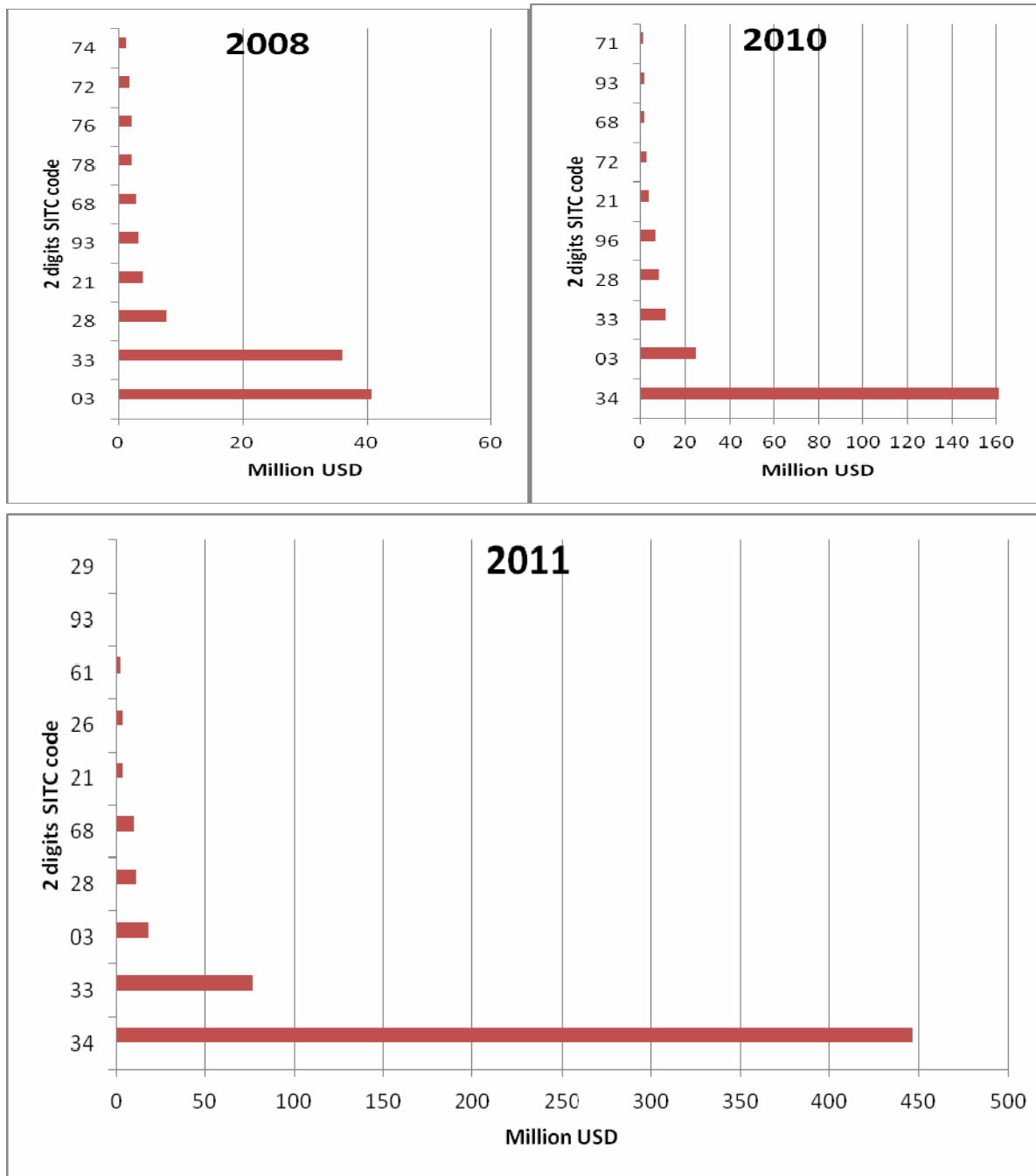
In fact, while in 2000, the export of Petroleum, petroleum products and related materials (SITC-33) and Fish, crustacean and molluscs, and preparations thereof (SITC-03) accounted for more than 53 per cent and nearly 11 per cent of total Yemen export to EU respectively. In 2004 the aforementioned two groups of commodities accounted for approximately 11.2 per cent and 32 per cent respectively. Except for the three years the two energy primary commodities – Petroleum, petroleum products and related materials (SITC-33) and Gas, natural and manufactured (SITC-34) were the most exported commodities to the EU and accounted between 53 to 90 per cent of total Yemeni export to the EU.

Yemen is a beneficiary of the “Everything but Arms” (EBA) initiative under the General System of Preference (GSP) which allows the duty-free access of all products, except arms to EU, coming from the group of 49 Least Developed Countries. From July 1, 1998, the EU introduced stricter sanitary requirements for import of fishery products into the EU. This put a stop to exports of Yemeni fishery products into the EU, until temporary import permission was granted to selected companies in July 1999.

The temporary import permission will eventually be replaced by a general fishery product export agreement, when a Yemeni quality control mechanism is in place that ensures Yemeni fishery product exports to the Union meet EU sanitary requirements.

Chart 6
The Yemeni ten most exported commodities to the EU by 2 digits SITC in selected years and values (in Million US dollars)





Source: Author's based on UN COMTRADE Database, 2012.

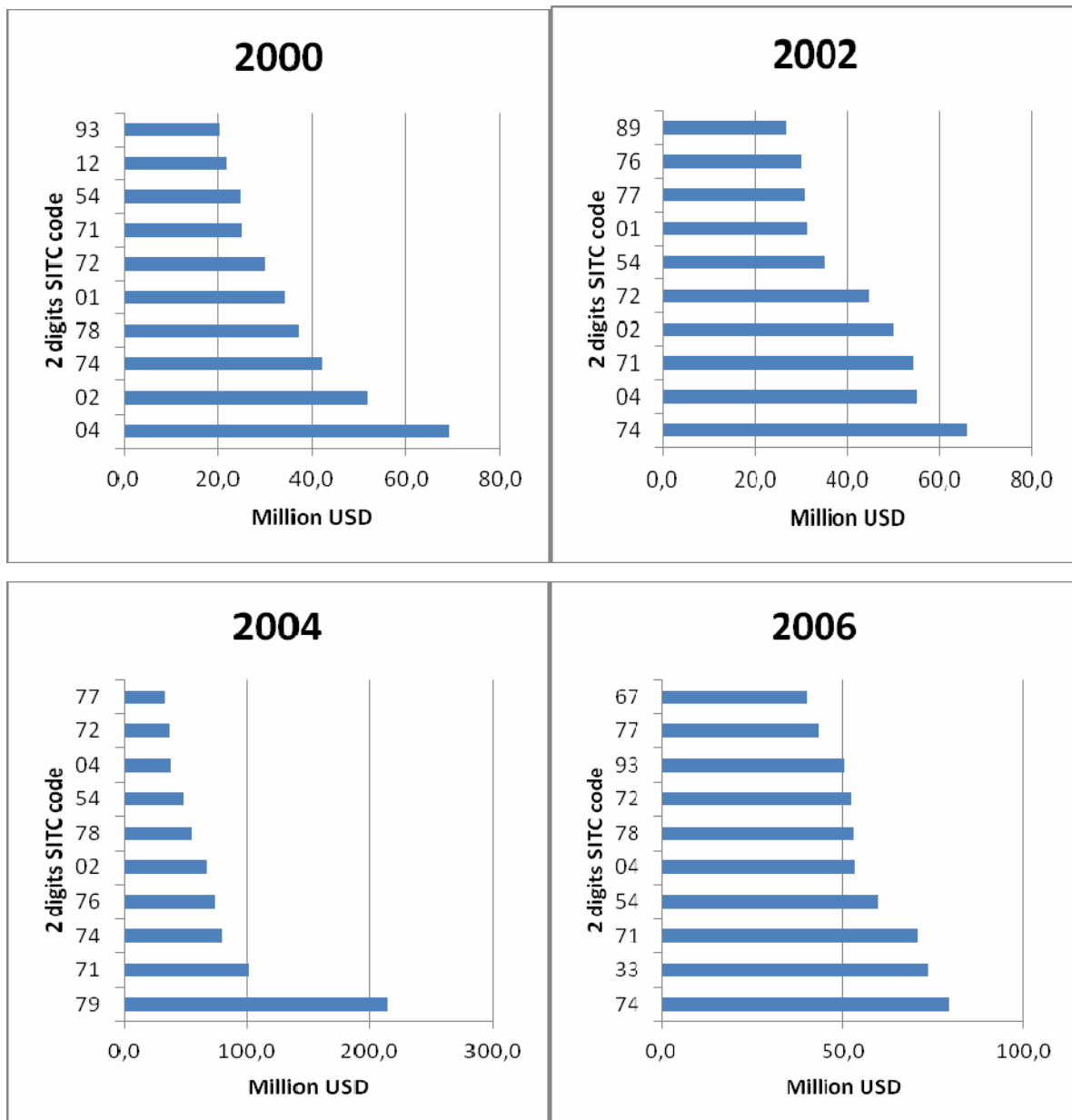
Looking at the charts above, and to the major commodities of Yemeni exports to the EU, we could say that increases of exports in some commodities occurred particularly in the fish, crustacean and mollusks, and preparations thereof (03), in spite of the high sanitary requirements for import of fishery products into the EU, which EU introduced in 1998. That seems to suggest that Yemen somewhat exploited the free-duty access to EU under the EBA initiative as it also increased the export of hides, skins and furskins, raw (21 SITC).

According to the European Commission, Yemen ranks number 2 among the Least Developed Countries in terms of GSP utilization rate.⁷

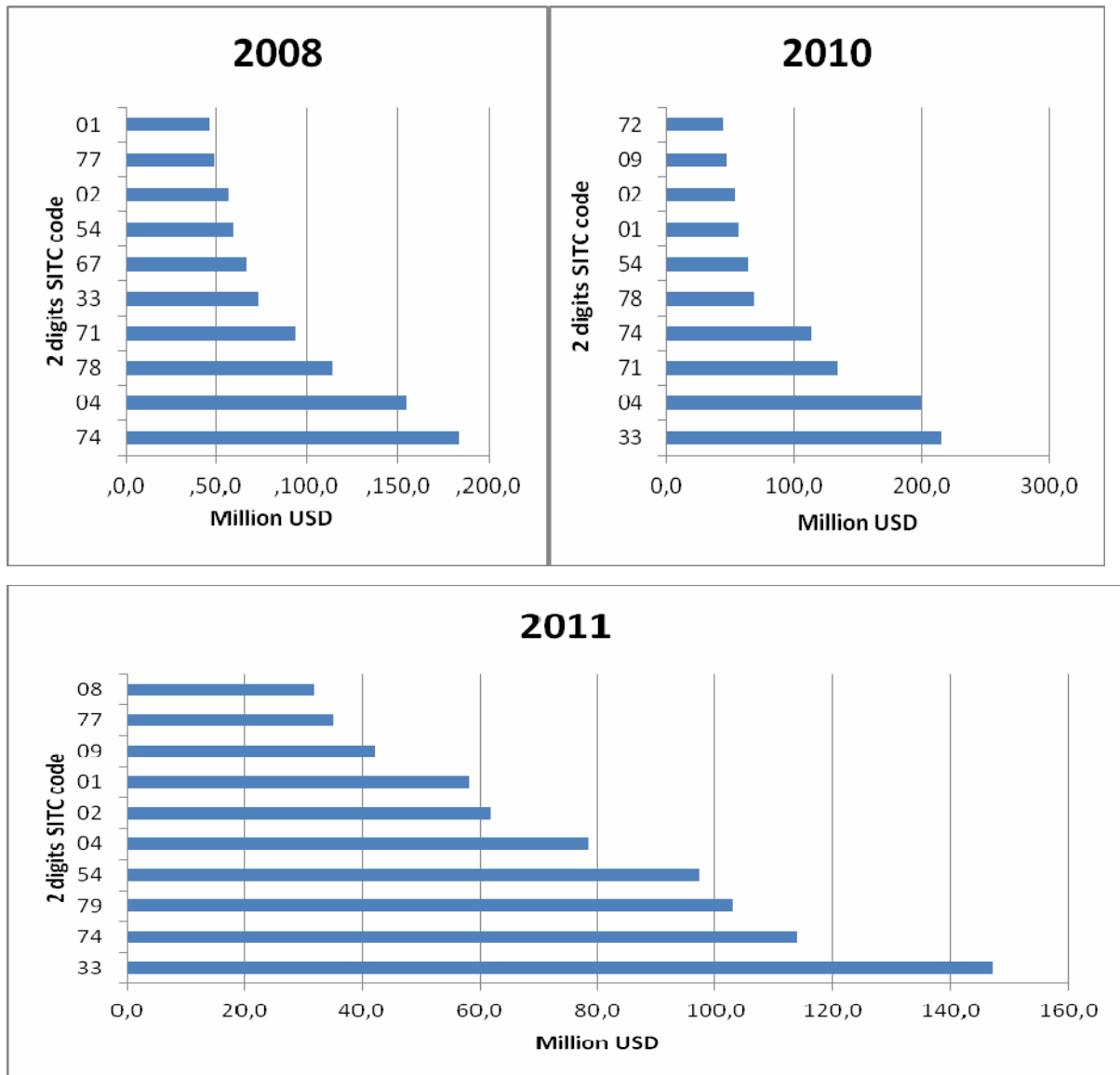
Regarding the import structure from the EU, among Yemen's ten most imported commodities are primarily industrial machines and transport equipment and cereals. In the last years the first most imported commodities were petroleum products and cereals.

Chart 7

The Yemeni ten most imported commodities from EU by 2 digits SITC in selected years and values (in Million US dollars)



⁷ Joint communiqué (2005), The 12th meeting of the joint EU-Yemen cooperation Committee.



Source: Author's calculation base on UN COMTRADE Database, 2012.

According to the group of graphs shown above the tenmost imported commodities in 2000 represented about 63 per cent of total Yemeni import from the EU. The agricultural products 04 SITC – Cereals and cereal preparations and 02 SITC – Dairy products and birds' eggs accounted about 21.5 per cent (121 Million USD). In the subsequent years, the structure of the imported commodities have changed a little in favor of industrial machines and products, for instance 71 SITC (Power generating machinery and equipment), 72 SITC – Machinery specialized for particular industries, 74 SITC – General industrial machinery and equipment, nes, and parts of, nes, 78 SITC – Road vehicles, 79 SITC – Other transport equipment and 33 SITC Petroleum, petroleum products and related materials, but the value and volume of the tenmost imported commodities have increased to 64.5 per cent in 2008 and to about 72 per cent in 2011 (see appendix, table 5 and).

4. THE YEMENI TRADE AND ECONOMIC RELATIONS WITH THE USA

The Yemen-U.S. relations started with trade relations in late of the 18th century when America was one of the main importers of Yemeni coffee⁸. However, we will focus on more or less the present economic as well as trade relations between two countries.

Before looking at the trade relations between the two countries, it is necessary to analyze the economic cooperation between the two nations along three important institutional axes, which are classified as follows⁹:

1. Bilateral: Or government to government cooperation.
2. Multilateral: i.e. Cooperation through trans-national financial agencies and organizations of world scope such as IBRD, IDA, IFC, IMF.
3. Private investment: The task here is accomplished by private multinational companies, private Banks and financial groups. Most of the heavy duty role under this listing is being endured and carried out by oil companies.

1. Bilateral Cooperation: Whenever we talk about economic cooperation the issue of loans is the one that comes directly to mind. What have different countries provided in terms of developmental finance, under what conditions, and in what sectors of Yemeni national economy? How conducive and stimulating are these finances in terms of economic growth, and what are the employment opportunities being created as a result?

The total amount of Yemen's outstanding foreign loans as on December 31st 2002 stands at 5.477 Billions US Dollars. Of which 4.045 Billion US Dollars is disbursed and outstanding 532 Million is undisbursed. Government to government loans stand at 1.766 Billion US Dollars, which represent 32% of the total foreign debt. The United States of America is the second largest creditor country to Yemen after Japan; it provided Yemen with a total of 101 Million US Dollars. The United States agreed to reschedule the amount of 71 Million Dollars that was due to be paid in 2002. Japan also agreed to reschedule the amount of 156 Million Dollars.

2. Multilateral Lending Activities: Whenever we study economic cooperation with USA, we have to touch on international financing banks and agencies. The most important ones include:

- 1- The World Bank- International Development Agency "IDA"- International finance corporation "IFC".
- 2- International Monetary Fund "IMF". The discussion about the role of the World Bank and International Monetary Fund in the context of Yemen-USA development cooperation is not without reason. The USA is the biggest shareholder of both the Bank and the Fund; it owns about (36%) of their capital hence the decisive voting power in the boards of both

⁸ Yementimes, Thursday June 03, 2004, Issue: (696), Volume 13.

⁹ The same source as antecedent.

institutions, it can lead and direct lending policies, loan allocation to countries and regions of the world, including ranking priorities of different countries and projects. USA was very helpful in introducing Yemen to both the Bank and the Fund when Yemen was trying to join the group as a full member country in the early seventies of the last century (1973). The effect of IDA was felt in every sector of Yemeni economy, education, Health, agriculture, water, infrastructure and institutional building; it provides Yemen with a quite substantial amount of loans at concession rates with long grace periods and soft conditions. The total amount of committed loans of IDA stands at 1.78 Billions US Dollars. Most of this money has been used (except about 392 Million Dollars still unutilized). IDA's role was to strengthen the physical production capacities of the Yemeni economy and to improve education provision and the quality of labor force through education and training. Yemen adopted and implemented the first and second Economic Development plans under the close support of the World Bank and IDA in particular. They financed so many projects in that plan, such as: Tehama Valley Authority, Zabied dam and irrigation system, Sorded Valley, Wadi-Mor dam and irrigation, Electricity Generation, transmission and distribution system. A large number of education projects including a lot of schools, Buildings, Technical Teams, Collages and Training centers were also established under this program.

IFC: International Finance Corporation is the private business affiliate of the World Bank. It deals with private businesses and companies in member countries. Their role is to provide finance and know how; they engaged in three important private companies in Yemen through shareholdings and money lending. These are: milk and dairy products in Hodiedah, Ghee & Soap Company in Taiz.¹⁰

IMF: International Monetary Fund played an important role in improving the institutional quality of the ministry of finance by providing guidance in implementing a general financial reform of the monetary system. IMF provided technical assistance and on-the-job training to Yemeni personal at the ministry of finance and its subsidiaries such as, Tax authority, customs authority, helped training the Central Bank staff, drafting rules and monetary policies and exchange regulations. They helped with supervising Commercial Bank operations in Yemen and bringing the whole monetary and banking system in line with international rules and regulations as set by the fund and major international trading nations. The fund also provides Yemen with short term loans to help finance foreign trade and imports. The fund loans stands at (384 million Dollars).

There are other components in the balance of payments (current account) reflecting economic cooperation between the two countries. Those Charts reflect income of Yemeni capital invested in the USA stock exchange and money market. The total declared income from Yemeni assets reached 110 Million US Dollars in 2001. About 70-80 Million Dollars

¹⁰ Yementimes, Thursday June 03, 2004, Issue: (696), Volume 13.

came from Yemen Central Bank investment which amounts to 4.29 Billion US Dollars. Our own estimation of Yemen private capital “including Yemen Commercial Banks & private capital” invested in the American capital market range between 4-5 Billion US Dollars. There are also incomes from tourism and Yemenis working in USA. The number of American tourists who visited Yemen in the year 2000 reach 12,000 out of 65,000 tourists visited the country that year, this numbers gave USA 20% of the tourism industry of Yemen.

Private investment: This is probably the most effective, enduring and the fastest in bearing its fruits. The Oil & Gas cooperation started by signing production sharing agreement between Yemen and Hunt Oil Company in March 1982. Oil & Gas was produced in commercial quantities in July, 1984. The first well “Alef One” was tested and able to produce 10,000 barrel of oil per day, sealing Yemen’s prosperous economic future. Oil discovery was a real breakthrough and cutting edge victory for Yemen in its relentless quest for viable and better way of life, based on higher income, better education, better health and better job opportunities. It was a great achievement for Hunt Oil Company and a corner stone in Yemen American cooperation. There is also the Canadian Oxidental Oil Company working and producing Oil & Gas from more than one concession area. Canadian Oxie is the Canadian sister Company of the USA based Oil Company “Oxedenatal”. Oil & Gas production and export changed the economic structure of Yemen beyond recognition. It changed Yemen’s traditional agricultural economy into a new structure where Oil & Gas production contributes more than 50% of Yemeni gross domestic product. It provides the country with more than 80% of foreign exchange to finance imports and 80% of government budget.¹¹

4.1. Trade relations between Yemen and the U.S.A.

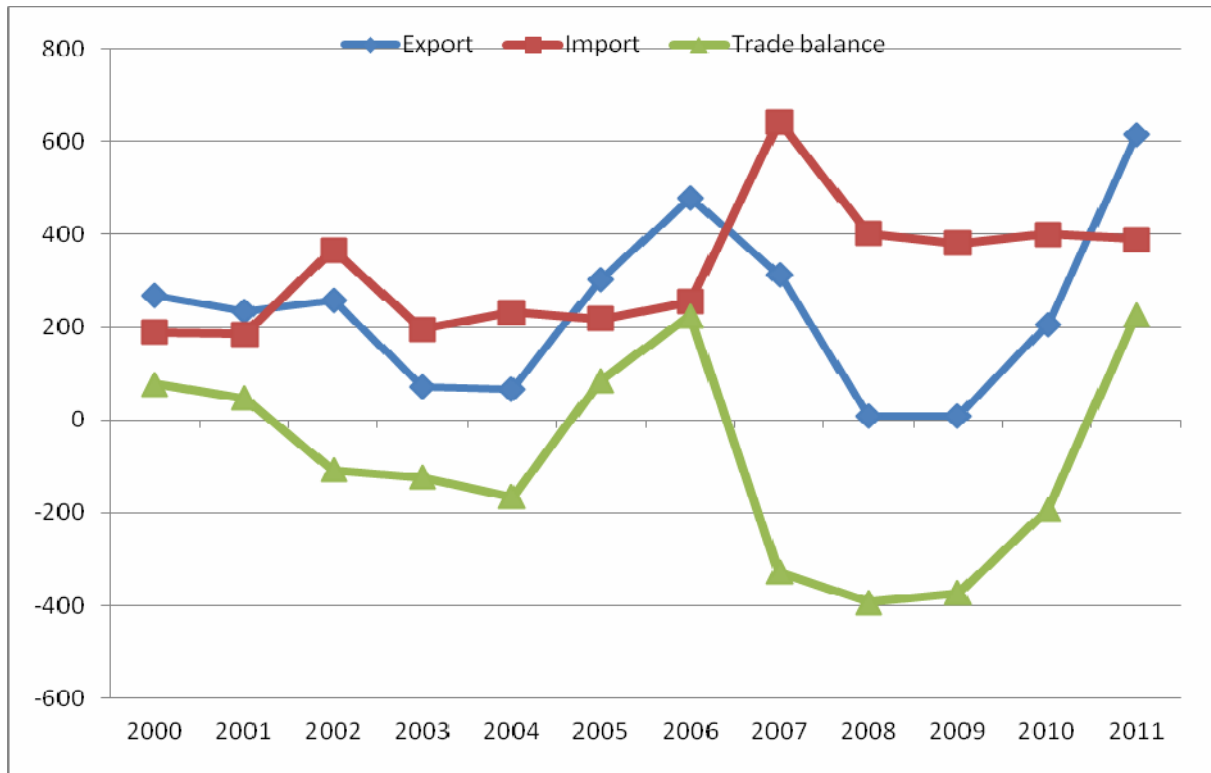
In spite of the long distance between the two countries, USA is one of the most important trade partners of Yemen. Looking to trade flows between Yemen and USA, it seems to be almost in favor of the USA (see chart 10). When we analyze the trade flows between the mentioned partners in the period 2000-2011, we can find that the trade value in the aforementioned period amounted to 6685.2 Million USD –it accedes the trade flows in the previous decade by 3612 Million USD (see more about the Yemen-US trade in the 90s, Obadi, 2005).

Yemen export to the USA during the selected period represented 73.5 per cent of total mutual trade and the export ratio was about 42 per cent in relation with 44.4 per cent in the period 1991-2000. It is important to say that Yemeni export to the USA was negatively influenced by the events of September 11. 2001- in that year, in spite of the slowdown of export about 13 per cent Yemen still registered a positive trade balance amounted 47.7 Million USD. After that the Yemeni export has declined up until 2004 and registered negative growth about 80 per cent in the preceding two years. After the noted recovery in 2005 and

¹¹ Yementimes, Thursday June 03, 2004, Issue: (696), Volume 13.

2006, the Yemeni export returned to the declining trend, registering in three years (2007-2009) a negative growth of about 143.3 per cent. This negative growth of Yemeni export was clearly an expression of the impact of the international and economic crisis.

Chart 8
Yemen trade balance with USA



Source: Own based on UN COMTRADE Database, 2012.

Taking into consideration the time period since 2000 to 2011, the Yemen - USA trade flows, have been fluctuating, without exhibiting any clear trend. Yemen has registered in five years from the selected period a trade surplus and a deficit of trade balance in the other seven years. After the recovery, but before the international financial crisis, the Yemeni export has registered the highest value in 2006 when it reached 479.4 Million USD. This export value was acceded in 2011 after the international financial and economic crisis, when it reached about 616 Million USD.

The Yemeni import from the USA amounted in the period under analysis to about 3855.5 Million USD. The highest import value was registered in 2007 when it reached 642 Million USD (see chart 10).

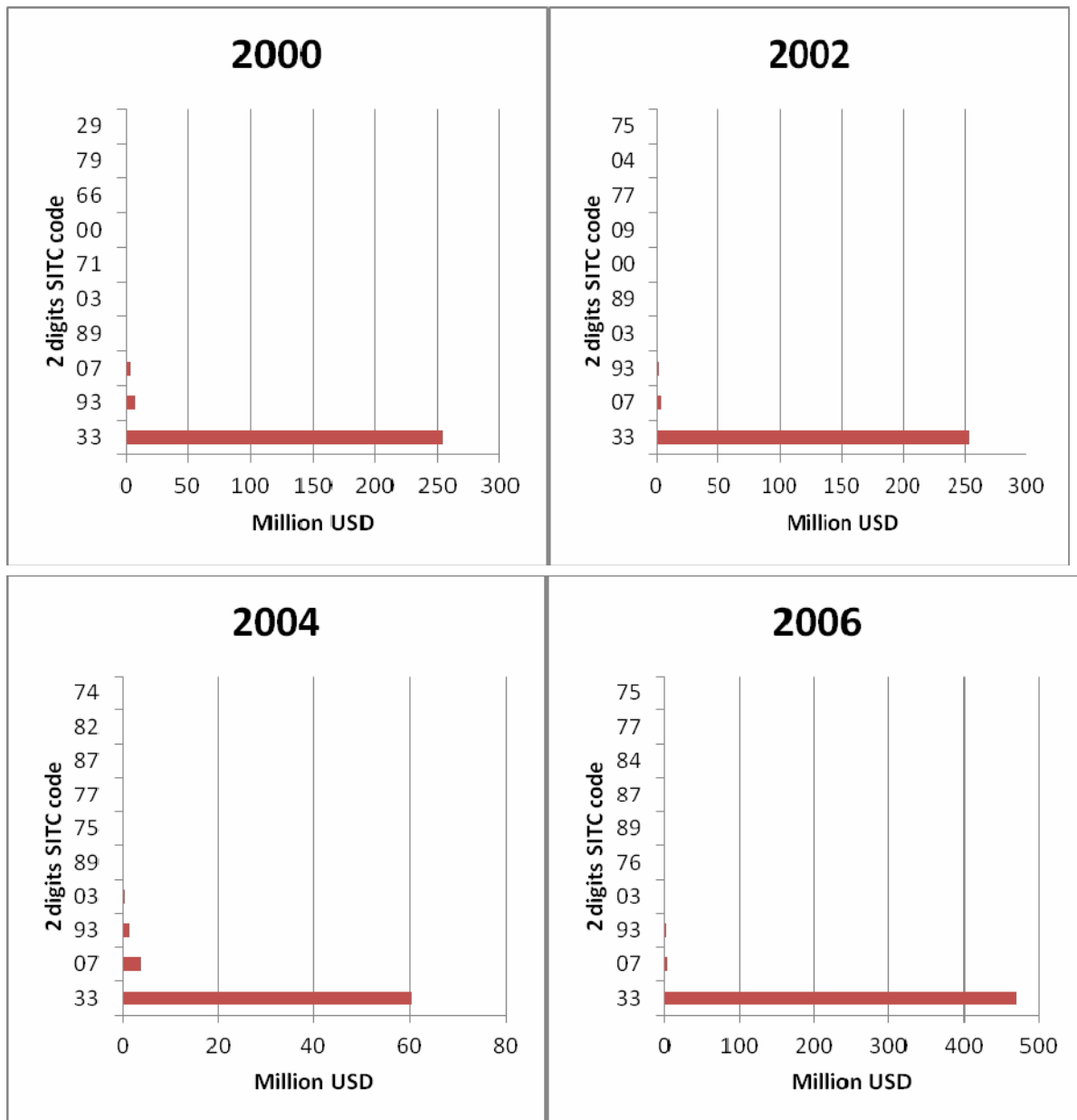
For Yemen, the USA is one of the most important trade partners. While in the beginning of the third century the mutual trade was damaged after the attacks in September 11. 2001, in 2004 the mutual trade has recovered and the USA ranked the first most important import partner and the 9th most important export partner. This good trade relationship has

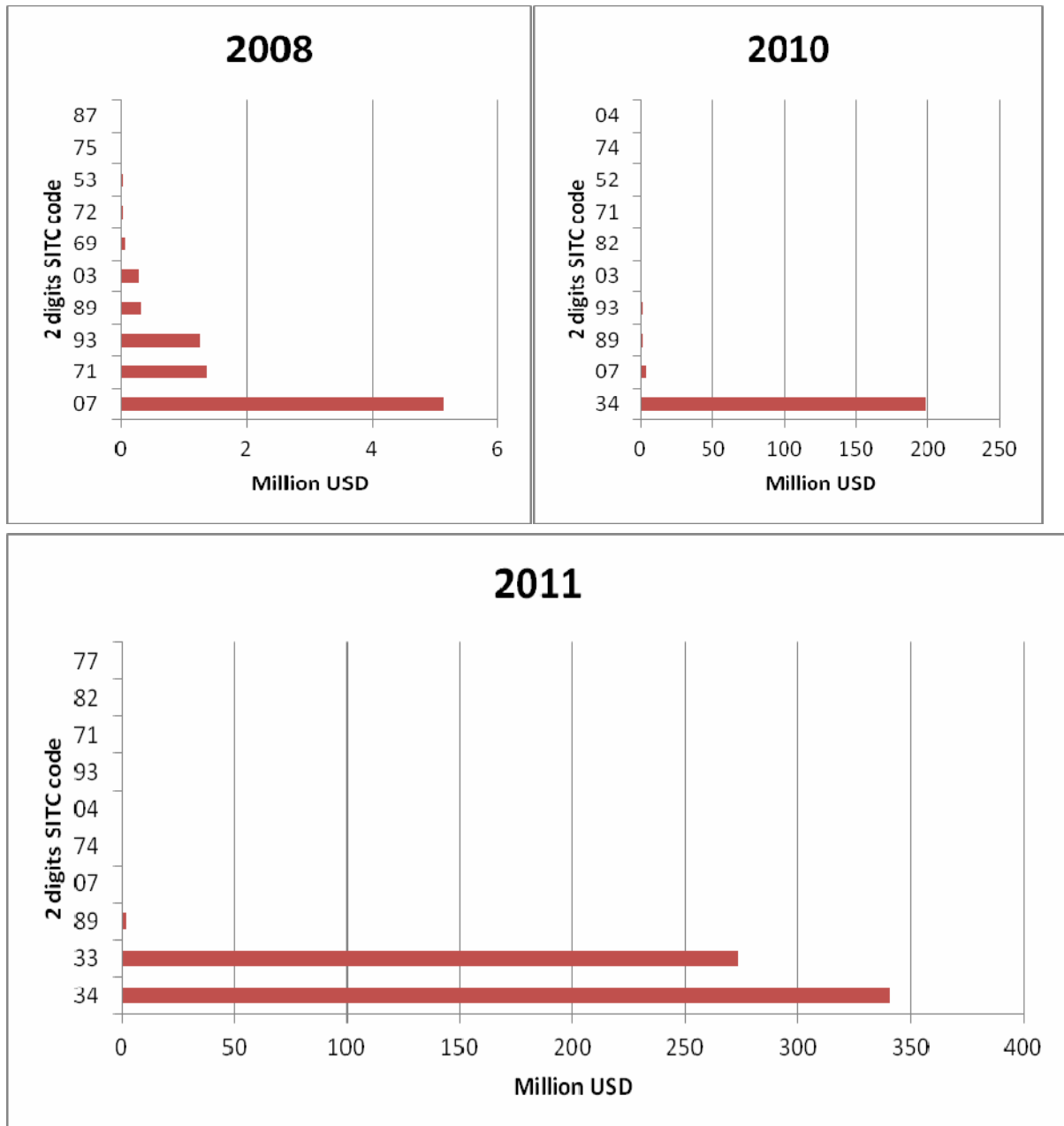
continued in the other further years except the years (2008-2009), the years of international financial and economic crisis. In 2010 and 2011 the mutual trade has recovered- the USA absorbed about 2.5 and 5.3 per cent of Yemeni total export, respectively.

For details view on the structure of Yemen export to the USA, we tried to compare the Yemen export in selected seven years through the most ten exported commodities by 2 digits SITC starting 2000 to 2011 (see, chart 6). It is very clear from the Charts below that during the selected years the group of commodities mineral fuels, lubricants and related materials (SITC-3) were the predominant Yemen export to USA.

Chart 9

The Yemeni ten most exported commodities to the USA by 2 digits SITC in selected years and values (in Million US dollars)





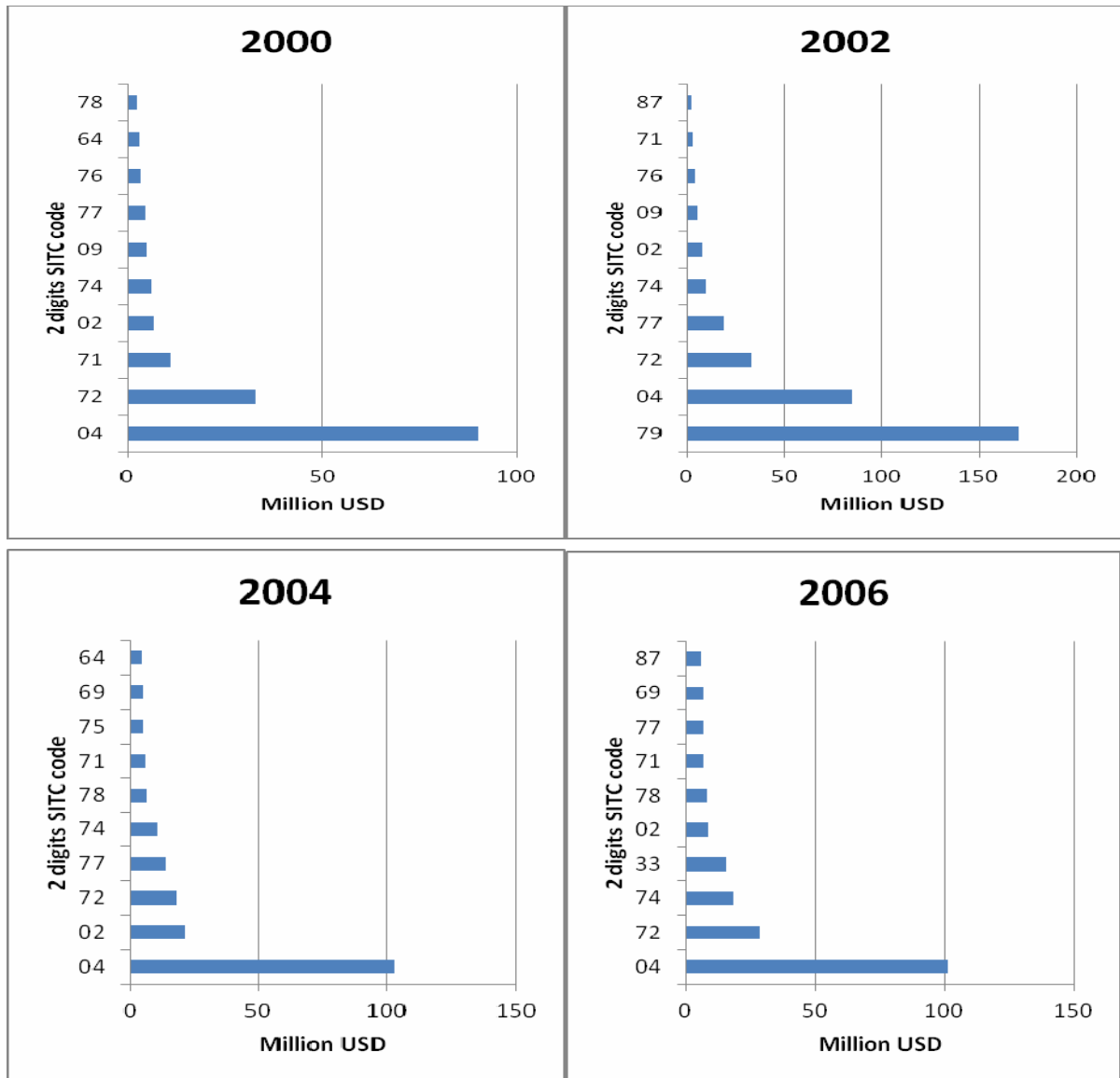
Source: Author's calculation based on UN COMTRADE database, 2012.

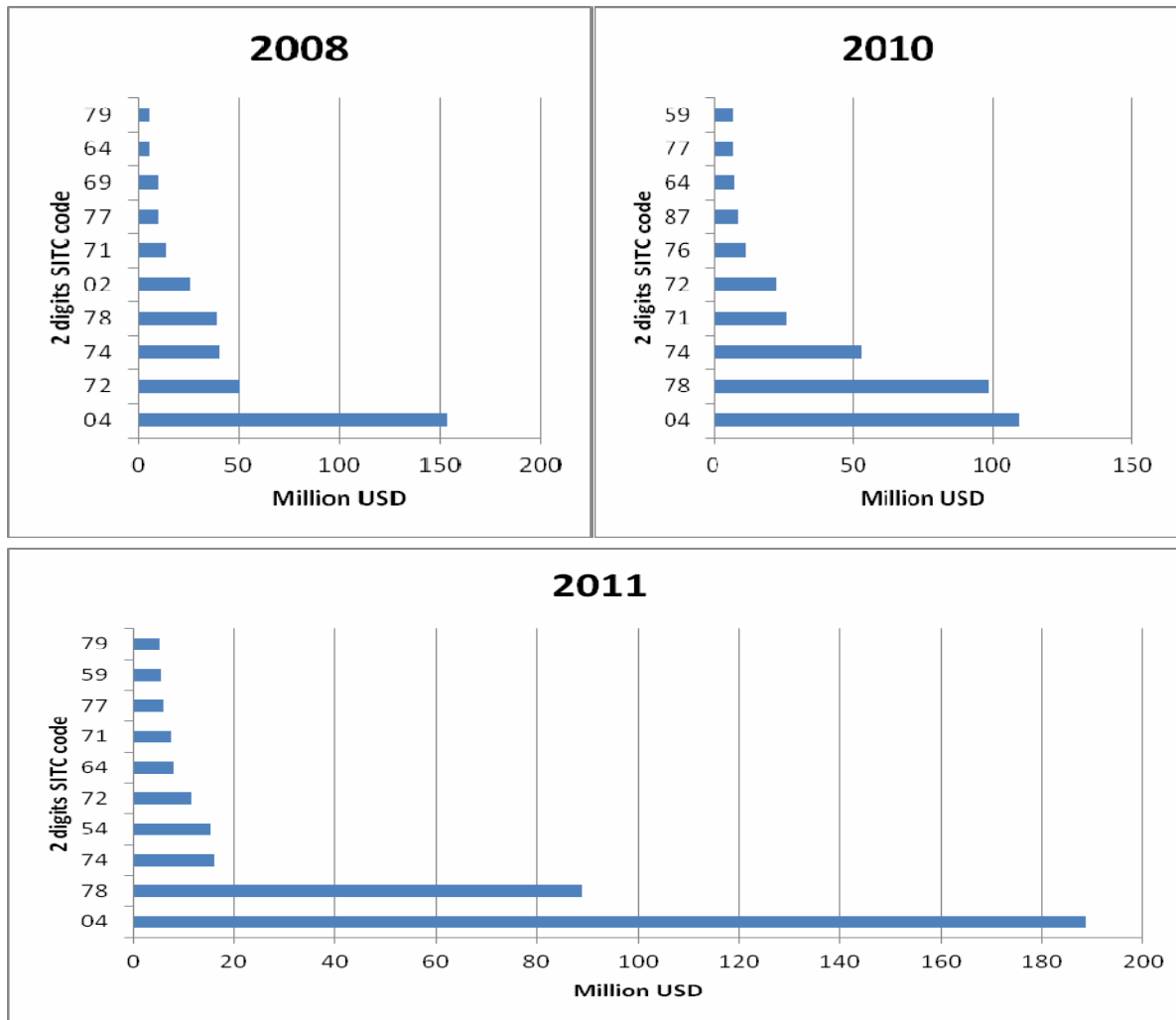
The most important commodity of Yemeni export to the USA from 2000 to 2007 was 33 SITC – Petroleum, petroleum products and related materials, which accounted during the mentioned period about 90 to 98 per cent of total export to the USA. From 2008 to 2011 the structure of Yemeni export to the USA has changed at least in the first three important exported commodities-in 2008 and 2009 the commodity 33 SITC – Petroleum, petroleum products and related materials-was not exported and has been replaced by 07 SITC – Coffee, tea, cocoa, spices, and manufactures thereof in 2008 and 34 SITC – Gas, natural and manufactured in 2010. This last mentioned commodity was also exported in 2011 in large and amounted about 340.2 Million USD and accounted with 33 SITC – Petroleum, petroleum products and related materials for about 99.6 per cent of total Yemeni export to the USA.

In terms of Yemeni imports from the USA, we selected also seven years as for the Yemen export to the USA in order to compare the structure of the two ways trade flows. In this regard, the Charts below show that Yemen’s main imported commodities from the USA are mainly agricultural commodities, at least in the first half of the first decade of the third millenium.

Chart 10

The Yemeni ten most imported commodities from USA by 2 digits SITC code and values (in Million US dollars)





Source: Author's calculation based on UN COMTRADE database, 2012.

The principal Yemen imports from USA include predominantly two to three commodities. The most imported commodity during the selected period (2000-2011) was 04 SITC – Cereals and cereal preparations and accounted between 40 to 48 per cent of total Yemeni import from the USA. Other most imported commodities like 72 SITC – Machinery specialized for particular industries, 74 SITC – General industrial machinery and equipment, nes, and parts of, nes, 78 SITC – Road vehicles, all three commodities accounted between 25 to 35 per cent of total Yemeni import from the USA. The ten most imported commodities accounted between 80 to 90 per cent of total Yemeni import from the USA.

It is important to stress here that Yemen has a trade deficit with the USA in all main groups of commodities with the exception of 33 SITC – Petroleum, petroleum products and related materials and 34 SITC – Gas, natural and manufactured. Therefore, it is necessary for Yemen to diversify its structure of exports and exploit all opportunities in order to increase the export and then to be able to reduce the trade deficit with USA, at least in some groups of commodities. It is important to stress also that the Yemeni utilization rate of GSP provided by the USA is weak. It reached 38.7 per cent and ranked the 22th among 50 LDCs.

5. YEMEN'S COMPARATIVE ADVANTAGE AND THE POSSIBILITIES OF EXPORTS TO THE EUROPEAN UNION AND USA

5.1. Methodology and Data

Data and SITC

From the United Nations COMTRADE Database, it is possible to get a detailed breakdown of Yemeni merchandise exports and imports by SITC (United Nations' Standard International Trade Classification), which is the means by which exports are classified according to commodity type. There are nine headline SITC categories as shown in the box below.

Box 1

Standard International Trade Classification

SITC Description

- 0 – Food and live animals
- 1 – Beverages and tobacco
- 2 – Crude materials, inedible, except fuels
- 3 – Mineral fuels, lubricants and related materials
- 4 – Animal and vegetable oils, fats and waxes
- 5 – Chemicals and related products n.e.s.
- 6 – Manufactured goods classified chiefly by material
- 7 – Machinery and transport equipment
- 8 – Miscellaneous manufactured articles
- 9 – Commodities and transactions not classified elsewhere

It is possible to further subdivide these categories into their subcomponents.

For example, the various sub-sectors within the

Food and live animals

- 00 – Live animals
- 01 – Meat and meat preparations
- 02 – Dairy products and birds' eggs
- 03 – Fish crustaceans, mollusks
- 04 – Cereals and cereals preparations
- 05 – Vegetables and fruit
- 06 – Sugar, sugar preparations, honey
- 07 – Coffee, tea, cocoa, spices
- 08 – Feeding stuff for animals
- 09 – Miscellaneous edible products and preparations

These more detailed breakdowns are important, as there are a number of quite diverse categories within each broad SITC heading. In our analyses we will just use the 2 digits SITC for selected seven years from the period 2000-2011. The full list of sub-sectors is included in the Appendix, table 7. Using this classification, it is possible to examine Yemeni trade patterns across a range of commodity types. For trade data for the rest of the world, the UN COMTRADE database was used, with detailed data available up to 2011.

5.2. Theoretical investigation

Revealed Comparative Advantage (RCA)

Comparative advantage is very much a dynamic concept in the sense that a country's ability to produce certain goods changes through time, in response to a variety of endogenous and exogenous factors such as changes in factor endowments, including technology and human capital.

There are a number of ways to examine whether or not a country has a comparative advantage. One common method is to determine how specialized a country is in the production of a good through constructing 'Balassa index' (1965). This examines the proportion of a good produced or exported, or the numbers employed in each industry, relative to other countries¹². Although this is a widely accepted approach to analyzing trade data and comparative advantage, the definition and empirical adaptation of RCA are subject to controversies and thus some alternative measures now exist. Since we are interested in the revealed comparative advantage of Yemen with respect to the EU and USA, we measure RCA of Yemen on the global level as the comparator.

In the light of an increasingly competitive international environment, it is useful to examine where Yemen's comparative advantage lies. Comparative advantage is the term used to describe the tendency for countries to export those commodities that they are relatively adept at producing, *vis-a-vis* the rest of the world. In other words, if a country can produce a good at a lower relative cost than other countries, then with international trade, that country should devote more of its scarce resources to the production of the good (Addison-Smyth 2005). Through trade, that country can obtain other goods at a lower price (opportunity cost), in exchange for the good in which it has a comparative advantage.

In simple terms, a country that has a comparative advantage in the production of a good should be found to export a higher proportion of that good relative to other countries. Therefore, this study seeks to determine Yemen's comparative advantage by using international trade data to compare exports in particular industries with the rest of the world and particularly with the EU and the USA.

¹² Addison-Smyth, D. (2005).

The formula to measure a country's revealed comparative advantage (RCA) is given by:

$$RCA_i = (X_{i,c} / \sum X_{i,c}) / (X_{i,w} / \sum X_w) \quad (1)$$

Where:

RCA_i = revealed comparative advantage for good i .

$X_{i,c}$ = exports of good i by country c

$\sum X_{i,c}$ = total exports by country c

$X_{i,w}$ = world exports of good i

$\sum X_w$ = total world exports

If $RCA_i > 1$, then country has a comparative advantage in good i .

If $RCA_i < 1$, then country has a comparative disadvantage in good i .

Through applying the formula above to Yemen, EU, USA and world trade data, it is possible to identify the sectors and industries in which Yemen has a comparative advantage and competitive and has a potential to increase its export to the markets of EU and USA.

Trade Intensity Index

The trade intensity index (TRI) is used to determine whether the value of trade between two countries is greater or smaller than would be expected on the basis of their importance in world trade.¹³ It is defined as the share of one country's exports going to a partner divided by the share of world exports going to the partner. It is calculated as:

$$TRI_{ij} = (x_{ij}/X_{it}) / (x_{wj}/X_{wt}) \quad (2)$$

Where:

x_{ij} denotes the values of country i 's exports to country j

x_{wj} denotes world exports to country j

X_{it} denotes country i 's total exports and

X_{wt} denotes total world exports.

An index of more (less) than one indicates a bilateral trade flow that is larger (smaller) than expected, given the partner country's importance in world trade.

This index is called by some economists the export intensity index (Caroline Freund, 2002).¹⁴ She used data on bilateral trade among members of 79 regional agreements negotiated between 1980 and 1999 to estimate changes in market share.

The following section describes the approach and data used, with the empirical findings.

5.3. Empirical Findings

Following the contributions by Balassa, the present empirical analysis is based on the measurement of RCA. Since we are interested in the competitiveness of Yemen in the markets

¹³ <<http://Inweb18.worldbank.org/eap.nsf/sectors/PREM/>>.

¹⁴ Freund, C. (2002), The World Bank.

of EU and USA, we calculated an index of RCA presented in the earlier section with respect to the EU and USA as the comparator both on global and bilateral levels. On the global level, the global competitiveness of Yemen and the EU and USA are compared assuming that Yemen, the EU and USA are exporting to and importing from the world.¹⁵ On the bilateral level, however, trade between Yemen and the EU and USA are taken into account only.

In order to calculate RCA in the sense of global competitiveness of Yemen with respect to the EU and USA, we used annual two-digit SITC Rev.3 data (61 product groups) covering Yemen's exports on the world level for the years 2000 and 2011 from the United Nations COMTRADE Database, and also annual two-digit SITC Rev.3 data (66 product groups) covering Extra-EU-27 exports and US exports on the world level for the same period of 2000-2011 from the United Nations COMTRADE Database also.

The following two tables illustrate RCA of Yemen with respect to the EU and USA on the global level and for selected years among the period 2000-2011. While in the first table, we compared the RCA of Yemen with EU 27 countries and the second table the RCA coefficients of Yemen with respect to the USA.

Table 2

RCA of Yemen with respect to the EU on the bilateral level in selected years

SITC code	Description	2000	2002	2004	2006	2008	2010	2011
03	Fish, crustacean and molluscs, and preparations thereof	52.1	134.0	196.5	132.7	177.1	47.5	14.7
12	Tobacco and tobacco manufactures	0.0	1.6	0.0	0.0	0.0	0.0	0.0
21	Hides, skins and furskins, raw	38.7	136.1	68.2	22.8	37.7	10.8	4.1
26	Textile fibres (not wool tops) and their wastes (not in yarn)	4.3	18.8	8.7	8.3	2.1	0.0	4.2
27	Crude fertilizer and crude minerals	0.0	1.4	0.0	0.0	0.0	0.0	0.0
28	Metalliferous ores and metal scrap	14.0	1.8	6.8	6.3	8.7	3.5	1.8
29	Crude animal and vegetable materials, nes	0.0	2.2	0.0	0.0	0.0	0.0	0.0
33	Petroleum, petroleum products and related materials	17.5	7.6	6.7	12.1	6.0	0.0	0.0
34	Gas, natural and manufactured	31.3	0.0	0.0	0.0	0.0	742.5	0.0
61	Leather, leather manufactures, nes, and dressed furskins	2.6	2.7	3.1	0.0	2.3	2.1	1.9
68	Non-ferrous metals	0.0	2.5	0.0	0.0	1.7	0.0	1.1
71	Power generating machinery and equipment	1.2	1.0	1.3	0.0	0.0	0.0	0.0
76	Telecommunications, sound recording and reproducing equipment	0.0	0.0	1.5	0.0	0.0	0.0	0.0
87	Professional, scientific, controlling instruments, apparatus, nes	0.0	1.7	0.0	0.0	0.0	0.0	0.0
96	Coin nongold noncurrent	381.5	552.0	0.0	0.0	0.0	345.6	0.0

Source: Author's calculation base on UN COMTRADE Database, 2012.

¹⁵ Revealed Comparative Advantage and Competitiveness: Evidence for Turkey *vis-à-vis* the EU/15, see Utku Utkulu and Dilek Seymen (2004) and for a similar empirical study of Hungary *vis-à-vis* the EU, see Fertö and Hubbard (2003).

Looking at the above table and according to the empirical analysis, Yemen has in the selected years a comparative advantage with respect to EU in fifteen commodities. In five of them (12 SITC, 27 SITC, 29 SITC, 76 SITC and 87 SITC), Yemen has a comparative advantage only in one of the selected years. The highest level of RCA coefficient Yemen has on bilateral level is petroleum and petroleum products (33 SITC), Hides, skins and furskins, raw (21 SITC), Gas, natural and manufactured (34 SITC), Fish, crustacean and molluscs, and preparations thereof (03 SITC) and Coin nongold noncurrent (96 SITC).

This result is not surprising, as the commodities 33 SITC and 34 SITC account for more than 98% of total Yemeni exports.

Table 3

RCA coefficients of Yemen with respect to the USA on the bilateral level in selected years

SITC code	Description	2000	2002	2004	2006	2008	2010	2011
03	Fish, crustacean and molluscs, and preparations thereof	0.0	0.0	0.0	0.0	10.0	0.0	0.0
07	Coffee, tea, cocoa, spices, and manufactures thereof	9.2	7.2	7.2	5.6	351.7	7.8	0.0
33	Petroleum, petroleum products and related materials	78.6	84.8	84.8	38.0		169.1	6.4
34	Gas, natural and manufactured	0.0	0.0	0.0	0.0	0.0	0.0	80.9
71	Power generating machinery and equipment	0.0	0.0	0.0	0.0	3.6	0.0	0.0
93	Special transactions, commodity not classified according to class	0.0	0.0	0.0	0.0	5.1	0.0	0.0
96	Coin nongold noncurrent	5.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Author's calculation base on UN COMTRADE Database, 2012.

It is clear from the results of the empirical analysis that in the selected years, Yemen has a revealed comparative advantage with respect to the USA in seven commodities from about fifteen commodities Yemen exports to the USA. However, in five commodities Yemen has comparative advantage only in one year from seven selected years. Some of these commodities were not exported in the other years and others (for example Gas, natural and manufactured (SITC 34) were exported for the first time. The highest levels of RCA of Yemen in the selected years were in the petroleum and petroleum products (SITC 33), Gas, natural and manufactured (SITC 34) and Coffee, tea, cocoa, spices, and manufactures thereof (SITC 07).

In view of the different and few commodities in the selected years which Yemen has revealed comparative advantages with respect to USA on bilateral level, the table above shows only percentage changes only for two commodities. Nevertheless, the change was in 2004 in the product of edible vegetables and certain roots and tubers (SITC 07). (See, table 2.).

Trade intensity index (TRI)

For calculating the trade intensity index between Yemen and both EU and USA, we used the values of Yemen exports both to EU and USA divided by the total Yemen exports and the values of world exports to the EU and USA divided by the total world exports for select years from the United Nations COMTRADE Database.

T a b l e 4

TRI for Yemen both with EU 27 and with the USA

	TRI with USA	TRI with EU
2000	0.38	0.05
2001	0.41	0.06
2002	0.46	0.04
2003	0.13	0.05
2004	0.11	0.05
2005	0.37	0.07
2006	0.51	0.07
2007	0.39	0.14
2008	0.01	0.04
2009	0.01	0.02
2010	0.22	0.13
2011	0.54	0.19

Source: Author's calculation based on UN COMTRADE database, 2012 and WTO online database.

It is clear from the table 3 that the index of trade intensity between Yemen and both EU and USA in the selected period (2000-2011) is very low.

However, due to the high significance of the EU and the USA in world trade and world economy, in spite of low level, some indices indicate a bilateral trade flow that is larger than expected. Indeed, according to the results of the index in the selected years, the trade intensity between Yemen and the EU as well as Yemen and USA is lower than it would be expected. Therefore, Yemen has to do much more to increase the quality of its products in order to compete on international markets like the EU market as well as USA market and meet the requirements of the mentioned markets and diversify its exports to. On the other hand, Yemen should have to do everything to exploit the preferential system provided by USA and especially by the EU, including the EBA initiative for the Least developing countries.

6. CONCLUSION AND STATEMENT

One of the characteristics of the last international economic crisis is its negative impact on all economies in all world regions. The impact was either directly or indirectly. The impact on Yemeni economy as on almost economies of developing economies was indirect-through the trade flows. The impact on Yemeni export during the deep crisis (2008-2009) was huge in relative to Yemeni small economy. Thank to the launch of exporting the Yemeni natural gas (LNG), the Yemeni total export has recovered in 2010 and 2011.

Indeed, the global trading system, whilst offering opportunities, is by no means perfect. It gives inadequate attention to the specific needs and vulnerability of poor states (Yemen being one of them), which face special disadvantages associated with poor industrial infrastructure, remoteness, which has led to inappropriate implementation time frames. In spite of it is otherwise declared, problems for Yemeni export also arise due to the non-tariff barriers that are applied by many countries under the guise of quality standards and quarantine procedures. Lack of capacity and facilities in testing and accreditation has led to legitimate Yemen's exports being sidelined, and has allowed the entry of sub-standard imports "dumped" on the Yemen market.

Yemen needs to employ a dual strategy that takes advantage of the opportunities of globalisation and free trade, but which also responds to the disruptive and potentially negative effects. This will require a proactive approach from both Government and the private sector, both national and international forums.

As a less developed country, Yemen does not have the necessary resources, or the economies of scale needed to produce a complete range of products at prices and quality comparable to world prices. Thus, the change in policy has greatly benefited the consumer by improving choice and reducing costs. Whilst potential does exist for developing Yemen's natural resources and eventually displacing some products currently imported, a return to large-scale targeted efforts at import substitution, is likely to be advantageous to Yemen in the long run, for either the producer or the consumer, particularly when Yemen became not a small market and the growth of its population is very fast.

Yemen has not a problem of market accession restriction. As a United Nations designated LDCs, developed markets provide preferential access to Yemen exports on many products, subject to rule of origin being met. The most favorable for Yemen is the EU initiative (Everything but Arms) under the GSP, which means that all products with Yemen origin (except arms and munitions) have a duty free access to the EU market.

Nevertheless, Yemeni suppliers do have difficulties meeting western sanitary standards on food exports, such as fish, fruits and vegetables, to the EU, United States and Japan. However, like most obstacles to Yemen's exports this is a supply side issue which is being tackled through the development of better inspection facilities in Yemen.

So, how Yemen exploited the preferential access, particularly to the EU markets? And what are the possibilities to better exploiting these preferences and increase the Yemen exports? The answer to the first question could be found in the sections 3.2 and 4.1 of this analysis. The answer for the second question may be summarized as follows:

For increasing the competitiveness of the Yemeni products and then exports, there are a number of things should be done; starting from the political reforms, solving the political questions and democratization the society, stabilization the security situation in the country, then reduction of administrative bureaucracy and corruption from all economic life. Then drawing an effective economic and trade policy which emphasized on the export promotion and generating a competitive and fairly business environment. On the other hand, building the effective institutions for inspections, not only for products of export, but also for imported products.

One of the important projects that could improve the economic situation in Yemen is the completisation of the project of the Free zone in Aden and its effective operation and then building others that could be a very important condition for increasing the Yemeni exports and economic prosperous as a whole.

So, from this study it implies that, presently the export possibilities to the EU and to the USA are occurred, in addition to the known export commodities, as follows:

The export to the EU:

In addition to the known commodities where Yemen has a comparative advantage with respect to the EU (see the table 5 and 6), there are possibilities to increase the Yemeni exports in the following commodities:

- Vegetables and fruit (SITC-05)
- Coffee, tea, cocoa, spices, and manufactures thereof (SITC-07)
- Crude fertilizer and crude minerals (SITC-27)
- Rubber manufactures, nes (SITC-62)
- Special transactions, commodity not classified according to class (SITC-93)

The export to the USA:

In addition to the known commodities where Yemen has a comparative advantage with respect to the USA (see the table 5 and 6), there are possibilities to increase the Yemen export in the following commodities:

- Animal and vegetable oils and fats, waxes (SITC-43)
- Textile fiber. and their wastes (SITC-26)
- Leather manufactures, dressed furskins (SITC-61) and
- Dyeing, tanning and colouring materials (SITC-53)
- Special transactions, commodity not classified according to class (SITC-93)

APPENDIX

Table 5

RCA of Yemen with respect to the EU on the bilateral level in select years, by product group and % changes in index

	2000	2002	2004	2006	2008	2010	2011
01	0.000	0.000	0.000	0.549	0.000	0.000	0.000
03	52.094	133.965	196.544	132.744	177.074	47.472	14.707
04	0.000	0.023	0.000	0.447	0.000	0.000	0.000
05	0.009	4.975	0.197	0.041	0.144	0.045	0.001
06	0.000	0.005	0.000	0.000	0.007	0.000	0.000
07	0.307	0.503	0.470	0.177	0.967	0.457	0.226
09	0.000	0.000	0.000	0.046	0.000	0.000	0.013
11	0.000	0.003	0.032	0.011	0.018	0.014	0.012
12	0.173	1.570	0.000	0.033	0.000	0.000	0.000
21	38.674	136.148	68.152	22.805	37.651	10.764	4.059
22	0.189	0.000	0.000	0.000	0.000	0.000	0.000
26	4.274	18.798	8.670	8.272	2.091	0.274	4.201
27	0.011	1.389	0.577	0.168	0.465	0.050	0.538
28	13.995	1.785	6.770	6.267	8.701	3.454	1.811
29	0.879	2.217	0.859	0.303	0.999	0.464	0.377
33	17.539	7.601	6.730	12.078	5.977	0.981	2.291
34	31.307	0.000	0.000	0.000	0.000	742.492	709.002
42	0.000	0.393	0.000	0.000	0.000	0.003	0.003
53	0.011	0.093	0.000	0.000	0.000	0.002	0.000
54	0.028	0.003	0.000	0.001	0.001	0.002	0.000
55	0.121	0.002	0.006	0.000	0.055	0.008	0.000
56	0.152	0.000	0.000	0.000	0.000	0.108	0.000
58	0.079	0.000	0.029	0.001	0.003	0.000	0.000
59	0.074	0.013	0.026	0.000	0.000	0.106	0.024
61	2.551	2.697	3.138	0.347	2.309	2.062	1.890
62	0.301	0.091	0.130	0.250	0.593	0.056	0.018
63	0.013	0.010	0.008	0.000	0.003	0.000	0.000
64	0.011	0.008	0.008	0.003	0.000	0.000	0.000
65	0.132	0.039	0.004	0.011	0.000	0.001	0.001
66	0.007	0.004	0.041	0.006	0.076	0.034	0.011
67	0.001	0.107	0.034	0.000	0.037	0.000	0.000
68	0.000	2.477	0.000	0.259	1.749	0.549	1.055
69	0.254	0.095	0.169	0.067	0.056	0.032	0.015
71	1.211	1.029	1.265	0.651	0.110	0.157	0.009

72	0.287	0.089	0.039	0.005	0.280	0.248	0.011
73	0.009	0.506	0.005	0.000	0.266	0.000	0.001
74	0.140	0.163	0.213	0.040	0.157	0.033	0.009
75	0.020	0.176	0.058	0.078	0.067	0.059	0.000
76	0.181	0.346	1.479	0.261	0.662	0.185	0.011
77	0.087	0.216	0.302	0.017	0.161	0.032	0.013
78	0.060	0.052	0.007	0.048	0.209	0.030	0.001
79	0.366	0.268	0.313	0.097	0.215	0.016	0.023
81	0.027	0.045	0.016	0.001	0.000	0.000	0.000
82	0.022	0.056	0.015	0.011	0.039	0.007	0.013
83	0.025	0.023	0.000	0.000	0.005	0.001	0.000
84	0.008	0.009	0.238	0.078	0.009	0.011	0.002
85	0.000	0.000	0.028	0.000	0.000	0.021	0.000
87	0.848	1.659	0.509	0.105	0.246	0.031	0.020
88	0.008	0.018	0.039	0.003	0.009	0.043	0.008
89	0.040	0.102	0.034	0.009	0.128	0.017	0.004
93	0.675	0.234	0.467	0.279	0.617	0.184	0.042
96	381.513	551.962	0.000	0.000	0.164	345.608	0.000

Source: Author's calculation base on UN COMTRADE Database, 2005.

Table 6

RCA of Yemen with respect to the USA on the bilateral level in selected years, by product group and % changes in index

	2000	2002	2004	2006	2008	2010	2011
00	0.133	0.125	0.000	0.000	0.000	0.000	0.000
03	0.183	0.136	1.674	0.194	10.019	0.308	0.000
04	0.000	0.003	0.000	0.000	0.000	0.003	0.004
07	9.177	7.153	33.652	5.598	351.676	7.817	0.330
33	78.594	84.831	59.185	38.039	0.000	0.000	6.397
34	0.000	0.000	0.000	0.000	0.000	169.063	80.855
53	0.000	0.000	0.000	0.000	0.590	0.007	0.000
65	0.000	0.000	0.001	0.000	0.000	0.000	0.000
66	0.007	0.000	0.000	0.000	0.000	0.002	0.000
71	0.007	0.000	0.000	0.000	0.440	0.000	0.000
72	0.000	0.000	0.000	0.000	3.569	0.006	0.002
73	0.000	0.000	0.000	0.000	0.082	0.000	0.000
74	0.000	0.000	0.003	0.000	0.168	0.000	0.000
75	0.000	0.000	0.034	0.000	0.021	0.002	0.006
76	0.000	0.000	0.001	0.020	0.052	0.000	0.000
77	0.000	0.000	0.007	0.000	0.000	0.000	0.000
78	0.000	0.000	0.000	0.000	0.009	0.000	0.000
83	0.000	0.000	0.008	0.000	0.055	0.084	0.012
84	0.000	0.000	0.001	0.006	0.000	0.000	0.000
85	0.000	0.000	0.000	0.000	0.241	0.011	0.001
87	0.000	0.000	0.005	0.002	0.110	0.003	0.000
89	0.097	0.012	0.095	0.010	0.000	0.000	0.000
93	0.843	0.152	0.624	0.240	0.832	0.174	0.071
96	5.000	0.000	0.000	0.000	5.148	0.088	0.001

Source: Author's calculation based on UN COMTRADE Database, 2012.

Table 7
List of 2 digit SITC commodities of Yemen export in 2000

SITC Code	Commodity Description
00	Live animals chiefly for food
01	Meat and preparations
02	Dairy products and birds' eggs
03	Fish, crustacean and molluscs, and preparations thereof
04	Cereals and cereal preparations
05	Vegetables and fruit
06	Sugar, sugar preparations and honey
07	Coffee, tea, cocoa, spices, and manufactures thereof
08	Feeding stuff for animals (not including unmilled cereals)
09	Miscellaneous edible products and preparations
11	Beverages
12	Tobacco and tobacco manufactures
21	Hides, skins and furskins, raw
22	Oil seeds and oleaginous fruit
23	Crude rubber (including synthetic and reclaimed)
24	Cork and wood
25	Pulp and waste paper
26	Textile fibres (not wool tops) and their wastes (not in yarn)
27	Crude fertilizer and crude minerals
28	Metalliferous ores and metal scrap
29	Crude animal and vegetable materials, nes
32	Coal, coke and briquettes
33	Petroleum, petroleum products and related materials
34	Gas, natural and manufactured
41	Animal oils and fats
42	Fixed vegetable oils and fats
43	Animal and vegetable oils and fats, processed, and waxes
51	Organic chemicals
52	Inorganic chemicals
53	Dyeing, tanning and colouring materials
54	Medicinal and pharmaceutical products
55	Oils and perfume materials; toilet and cleansing preparations
56	Fertilizers, manufactured
57	Explosives and pyrotechnic products
58	Artificial resins and plastic materials, and cellulose esters etc
59	Chemical materials and products, nes
61	Leather, leather manufactures, nes, and dressed furskins

62	Rubber manufactures, nes
63	Cork and wood, cork manufactures
64	Paper, paperboard, and articles of pulp, of paper or of paperboard
65	Textile yarn, fabrics, made-up articles, nes, and related products
66	Non-metallic mineral manufactures, nes
67	Iron and steel
68	Non-ferrous metals
69	Manufactures of metals, nes
71	Power generating machinery and equipment
72	Machinery specialized for particular industries
73	Metalworking machinery
74	General industrial machinery and equipment, nes, and parts of, nes
75	Office machines and automatic data processing equipment
76	Telecommunications, sound recording and reproducing equipment
77	Electric machinery, apparatus and appliances, nes, and parts, nes
78	Road vehicles
79	Other transport equipment
81	Sanitary, plumbing, heating, lighting fixtures and fittings, nes
82	Furniture and parts thereof
83	Travel goods, handbags and similar containers
84	Articles of apparel and clothing accessories
85	Footwear
87	Professional, scientific, controlling instruments, apparatus, nes
88	Photographic equipment and supplies, optical goods; watches, etc
89	Miscellaneous manufactured articles, nes
93	Special transactions, commodity not classified according to class
94	Animals, live, nes, (including zoo animals, pets, insects, etc)
95	Armoured fighting vehicles, war firearms, ammunition, parts, nes
97	Gold, non-monetary (excluding gold ores and concentrates)

Source: UN COMTRADE Database, 2012.

Table 8

The Yemen most twenty important trade partners in 2000, the value in Million USD and the share in per cent

Partner Description	Export	Share %	Partner Description	Import	Share %
World	4077.7	100	World	2326.5	100
China	774.1	19.0	Saudi Arabia	320.3	13.8
Rep. of Korea	735.2	18.0	United Arab Emirates	231.4	9.9
Thailand	700.0	17.2	United Kingdom	177.4	7.6
India	612.5	15.0	Kuwait	108.7	4.7
United Kingdom	252.3	6.2	Switzerland	108.2	4.7
Singapore	222.9	5.5	France	106.0	4.6
Areas, nes	114.0	2.8	China	81.6	3.5
Japan	84.3	2.1	Malaysia	78.4	3.4
Malaysia	72.7	1.8	Thailand	76.1	3.3
Kuwait	71.0	1.7	Japan	73.9	3.2
Australia	69.5	1.7	Singapore	73.2	3.1
Brazil	63.5	1.6	Oman	72.9	3.1
Saudi Arabia	47.9	1.2	Germany	71.0	3.1
Switzerland	45.4	1.1	Italy	61.9	2.7
Croatia	44.6	1.1	India	59.3	2.5
United Arab Emirates	37.1	0.9	Australia	58.6	2.5
Italy	32.3	0.8	Brazil	57.4	2.5
Sudan	25.4	0.6	Turkey	51.6	2.2
Other Asia, nes	15.2	0.4	Areas, nes	44.9	1.9
France	10.4	0.3	Egypt	38.3	1.6

Source: Author's calculation based on UN COMTRADE Database, 2012.

Table 9

The Yemen most twenty important trade partners in 2008, the value in Million USD and the share in per cent

Partner Description	Export	Share %	Partner Description	Import	Share %
World	7583.8	100	World	10546.2	100
China	2369.8	31.2	United Arab Emirates	1881.8	17.8
Thailand	1819.9	24.0	China	790.7	7.5
India	608.7	8.0	USA	769.1	7.3
United Arab Emirates	574.1	7.6	Kuwait	660.8	6.3
Rep. of Korea	478.2	6.3	Japan	507.0	4.8
South Africa	208.0	2.7	India	461.8	4.4
Kuwait	188.4	2.5	Saudi Arabia	448.5	4.3
Switzerland	185.2	2.4	Netherlands	397.8	3.8
Areas, nes	163.3	2.2	Areas, nes	334.8	3.2
Singapore	151.9	2.0	Australia	304.0	2.9
Saudi Arabia	139.0	1.8	Switzerland	295.3	2.8
Japan	113.4	1.5	Malaysia	259.5	2.5
Malaysia	108.6	1.4	Germany	252.5	2.4
USA	70.3	0.9	Turkey	236.1	2.2
Somalia	42.6	0.6	Thailand	226.6	2.1
Netherlands	38.5	0.5	France	209.2	2.0
Bunkers	37.5	0.5	Italy	202.8	1.9
Germany	33.7	0.4	Rep. of Korea	202.4	1.9
France	29.8	0.4	Brazil	197.3	1.9
Egypt	24.5	0.3	Other Europe, nes	184.2	1.7

Source: Author's calculation based on UN COMTRADE Database, 2012.

Table 10

The Yemen most twenty important trade partners in 2009, the value in Million USD and the share in per cent

Partner Description	Export	Share %	Partner Description	Import	Share %
World	6259.0	100	World	9184.8	100
China	1577.8	25.2	United Arab Emirates	912.2	9.9
India	1259.8	20.1	China	855.1	9.3
Thailand	1148.9	18.4	USA	588.2	6.4
Singapore	432.4	6.9	Japan	518.7	5.6
South Africa	393.7	6.3	Saudi Arabia	461.6	5.0
United Arab Emirates	361.8	5.8	Switzerland	430.2	4.7
Japan	341.9	5.5	Kuwait	398.1	4.3
Saudi Arabia	162.6	2.6	Turkey	364.3	4.0
Kuwait	96.7	1.5	Brazil	341.6	3.7
Somalia	41.8	0.7	India	340.3	3.7
Rep. of Korea	36.3	0.6	Australia	329.0	3.6
Netherlands	31.2	0.5	Netherlands	299.8	3.3
Areas, nes	28.6	0.5	Germany	276.2	3.0
United Kingdom	27.2	0.4	Areas, nes	266.1	2.9
USA	26.5	0.4	Thailand	265.1	2.9
Viet Nam	26.5	0.4	France	263.5	2.9
France	23.1	0.4	Malaysia	208.0	2.3
Egypt	23.1	0.4	Rep. of Korea	192.6	2.1
Bunkers	19.0	0.3	Argentina	149.5	1.6
Switzerland	17.9	0.3	Egypt	147.7	1.6

Source: Author's calculation based on UN COMTRADE Database, 2012.

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