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International trade under the impact of the global economic crisis

(summary)

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The financial crisis bursted in 2007 has had a critical impact on the international trade – economic growth link. What has drawn attention simultaneously with this shock were the quasi generalized nature and scale magnitude comparable only to the Great Depression of the 1930s. These defining aspects of the crisis are attributed by trade literature on account of globalization, at whose process contributed trade in goods and services and capital flows. The epicenter of the "economic earthquake" was the sub-prime mortgage market in the United States, which once been affected, the "gripped" international banking system intensified investors' aversion to risk, severely restricting global economic activity and, therefore, trade between countries towards the end of 2008 and the first part 2009.

The volume of international trade has fallen dramatically due to the economic crisis between 2007 and 2009. The contraction of output and, in many instances, market exit of some companies, poor funding of the real sector, consumer and investor distrust regarding the future of trade, and government pronounced discriminatory policy actions are just a few explanatory factors for the slump of global trade. Economic shock not only decreased trade but had a visible impact on its orientation. Pre-crisis geography of trade was subsequently modified in some regions shallowly, but within others deeply. The predominance of trade between developed countries (North-North) and between them and the emerging and developing countries (North-South) tends to be replaced on the long-term by dynamics along the South-South axis (significant trade between emerging and developing economies) or even a new direction (South-East axis). These mutations on the trade network have a significant impact on output structures, patterns of specialization, and not least on the many preferential trade arrangements currently available at regional and global levels. The phenomenon of overlapping agreements has intensified becoming extremely difficult to track the liberalization of trade (involving all related layers: unilateral, regional or multilateral) in a global framework of hierarchical, segmented, and biased trade-offs.

The diversion effects as a consequence of the escalating protectionism during crisis and propensity to various forms of regional integration let out of the international trade network a considerable number of vulnerable countries and areas, turning chronic their lack of competitiveness and threatening any potential sustainable economic development. The ultimate effect of trade - the increase in the level of world welfare - tends to become more selective in the aftermath of the realignments causes of the crisis.

As main issues of debate within the thesis we consider to be:

1. Option on the subject of the work.
2. How the thesis was structured.
3. What was done properly.
4. In what ways research might go further.

1.1. Motivation behind

The analysis of international trade in the context of the global economic crisis is justified for reasons of relevance and interest that trade across national borders cause to the general public. The impact of the collapse of the financial sector on international trade tends to transfer towards issues as unemployment, migration, industrial structure (output), foreign and domestic investments in the economy, public policy (such as the set up of the exchange rate, interest rate, controlling on deflation, supporting local manufacturers at the expense of foreigners through direct or indirect aid, equilibrium maintenance of the balance of trade, capital account, current account and so on) which ultimately affects the wellbeing of the inhabitants of different regions. The liberalization of trade as the main instrument of perfecting globalization, visioned as the unanimous solution for the global distribution of benefits from trade in goods and services, is therefore a useful topics of research, enlightening and practical for both direct participants in international transactions and policy makers, as well as indirect stakeholders and the general public. Moreover, framing in the context of global economic crisis this phenomenon provides a considerable additional attractiveness, being known the global negative influences shock has had on economic, social, political, and cultural activity. Finally, a comprehensive analysis of trade in times of crisis can serve as a tool for romanian economic and trade policy

reconfiguration to the extent that we believe that our country has not optimally exploited the potential it has to develop its comparative advantages (or create new strengths) before the burst of the crisis.

Therefore, to analyze the development of international trade in the context of the global economic crisis should be a multidirectional approach. Understanding how the crisis broke is essential for the initiation of the research. The dimensions of the phenomenon may give clear indications about the transmission channels of the shock towards international trade. Similarly, uncovering the interactions between past major declines and trade dynamics is useful to search for similarities or differences that explain why trajectories were larger or narrow across different stages of economic contraction. The presentation of stylized figures on the 2007 economic collapse in the United States of America that spread worldwide since the second half of 2008 represents a forerunner approach towards analysis of the causes, effects, and trends outlined by the crisis. Consistent study of the determinants of international trade in the context of economic downturn in recent years aims to bring to the fore its interactions with adjacent areas (politics, financial sector) so that some lessons can be learned for the future. Also, rating the negative impact of the crisis (by groups of countries, products, regions) is a good way to rethink the various instruments for promoting trade and try to improve them through the customization either through standardization, as appropriate. "Redrawing" global trade network map after the crisis complements the effort to discover something other than heterogeneous or mixed dynamics.

Tracking international trade patterns of orientation is relevant because it can create the look of future output clusters, corporate relocations and why not, new trading blocs that would "raised" on the same level as those of nowadays or possibly higher. Finally but not least, the study focused on the international trade of countries from Central and Eastern Europe (including Romania) under the shock pressure propagated from the "big countries" to the "small" and "medium" ones. Answering questions regarding national economy (and especially foreign trade practiced by our country) can help economic policy makers (and therefore trade policy makers) to find solutions to the crisis, to catch up European partners, and develop in a sustainable manner so that the next generation could benefit from.

2.1 Purpose and objectives

The aim of the thesis is to assess the scale of the impact of the last global economic crisis on the concentration and structure of international trade links involving the main actors on the world stage.

Arranged in accordance with the chapters of the thesis, the specific objectives of this paper are:

- to identify similarities between contemporary crises and highlight those common factors of impact on the world economy and international trade.
- to highlight incidence on trade of the decline in global economic activity.
- to study the intensity of the global economic downturn effects on major trading blocs international trade based on determinants.
- to clarify the scenario regarding the occurrence of large changes in geographical network of international trade in the aftermath of the crisis.
- to make an assessment over the orientation of trade within the Europe - North America - East Asia and South East triad under the impact of recent global financial shock.
- to elaborate a case study on the effects of the crisis on the reorientation of trade in the CEECs;
- to present Romania's trade performance compared with most representative CEECs in times of economic crisis.

Stated as a general goal the above mentioned objectives would capture the intent to make a sketch of the global trading system by focusing on two levels - a surface one (the network topology) and a depth one (bilateral flows) – during global economic crisis unfavorable circumstances.

Key assumptions working with in order to achieve objectives:

- there are similarities between contemporary economic crises and the last global financial shock in terms of the determinants and impact on international trade.
- global aggregate demand was the main determinant of international trade in times of crisis, and it was more intense compared to normal period.
- there is a trend of international trade regionalization during crisis.
- trade flows were diverted from the traditional axis (North-North, North-South).

- Trade diversion induced by the membership to the European Union became more significant in during the financial crisis for the CEECs.

2.2 Methodology

The research methodology used a broad set of tools in order to gain consistency and validity. Starting with observation as a first device of study and as data handling techniques the systematization by comparison and grouping, exposure in tabular form and graphical representation, we used a more complex instruments - the econometric model - to capture the dynamics of both phenomena (crisis and international trade) among larger samples of countries, groups of countries or sectors. Statistical regression and gravity (which takes at the end the form of a regression) are the two econometric modeling tools used to quantitatively treat the subject matter hereof. Statistical regression in the form of the multiple linear equation has been employed to seize the fluctuation tendency of exports and imports of goods when impact factors vary in the context of the last financial crisis. The advantage of such an approach lies in the ability to identify common lines in a sample of entities or subsamples characterized by different features. Estimates carries a high quatifiable arithmetic accuracy. The disadvantage lies within the limits of the interrelations outlined. Linearity is a prerequisite for the determination to gain significance. Regression tool is used predominantly for highlighting general effects covering all trade in goods (expressed as values) of selected states and groups of countries (trade blocs, developed and developing economies, different forms of economic integration). The gravity equation, on the other hand, focuses on bilateral trade between pairs of partners. The emphasis falls on the structure and direction of exports and imports according to the flows destination or origin. It has essentially two basic pillars: the economic size as a factor of attraction and distance as an obstacle amidst trade transactions. The elasticity of trade suggested by these two markers provides information on how much the last global economic crisis influenced the sensitivity of outputs and inputs flows of goods and the geography of trade links as a whole.

Network analysis seeks to shape the topology of the global trading system. This approach neglects the characteristics of bilateral relations in detriment of observing the nodes and links that draw international trade system. The tool is mainly used to indicate the central, peripheral and intermediate positioning (semi-periphery) in the global network. It also highlights the propensity of performing transactions by category of nodes (countries, regions). The study facilitated by this device completes in an appropriate manner the analysis facilitated by regression and gravity equation.

The main bibliographic references consulted were the similar works of literature on the topic, studies by Romanian and foreign authors, studies of various international institutions whose activities is linked to trade and financial sector (WTO, World Bank, IMF, Organisation for Economic Co-operation and Development - OECD, United Nations and others), and not least databases made available by those organizations. The combination between empirical and theoretical aimed to provide unity and coherence to the research directions and at the same time to provide evidence of congruence of these lines.

3.1 Structure of the thesis

The thesis proposes a comprehensive analysis in five chapters complemented by a section dedicated to conclusions, although not exhaustive, on the dynamics of international trade under the impact of the global economic crisis that bursted in mid-2007 in the United States. Aware of the coverage of the issue the analysis is meant to be an interweaving of an overall summary of the implications of the topics with an emphasis placed on the issues detailed above. Performing a complete study of the relationship between the two phenomena is impossible due to lack of space and the 'dynamic' considerations thereof.

The first chapter entitled '**Effects of contemporary economic crisis on international trade - literature review**' presents a sketch of the major determinants of economic crises in the past and how they have influenced the course of international trade at that moments. The approach to analyse the factors that triggered the earlier shocks and their interaction with trade without ignoring the contexts in which they occurred is appropriate for a thorough analysis of recent global economic crisis. Past episodes of crisis have shifted focus towards empirical research on spillovers and the nature of inter-regional or inter-continental shocks.

In the second part of the first chapter we examine how the recent global economic crisis outbreak and its impact on international trade. In the third part of the first chapter we present the effects of the crisis on economic activity and trade. The last chapter is fixed on tools used for the analysis of the impact of the economic crisis on international trade. The review of the literature is relevant in order to assess the validity of different tools and methodologies that address the relationship between the two terms.

The second chapter called '**Factor analysis of international trade during the last economic crisis**' represents a quantitative description of the econometric model used to capture the *crisis-international trade* interrelations. The hypothesis that global demand was posed in the main determinant of trade in goods and subsequently preceded the outbreak of the financial crisis as a focus, we built a multiple linear equation that should explain a certain degree of causality implying the two terms mentioned above. The role of credit as a distributor of resources from those who have and those who postponed their use to those who ask for to meet immediate needs in stimulating economic activity and trade along with foreign direct investment and portfolio investments are placed under the assessment of statistical inference. Further on, within the quantitative model we separated the identified key variables influence in the literature from predictors that own control functions, such as: trade openness, inflation, government debt, currency reserves or physical and services trade infrastructure.

The investigation of the economic crisis by country categories and geographical areas is conducted in part four of the second chapter. Finally, the form of the multiple linear regression model and results for the whole sample considered are presented.

The third chapter of the thesis, entitled '**Impact of the global economic crisis on international trade flows - a comparative study on geographical areas**' is an in-depth analysis of the factors that have influenced international trade during the economic crisis. The layout of this third part was achieved by focusing on the three major global trading blocks (EU, NAFTA, East and South East Asia) and emerging economies. In all these areas a number of transmission channels of the crisis may explain the decline of trade including as first the steep drop in global demand and significant lending contraction that limited the ability of companies to obtain working capital and to meet requests for their output. To these somewhat exogenous factors we added endogenous specificities (export and import structures, the tariff regime and implicitly economic and trade openness, output degree of fragmentation, general economic prospects and economic policy as a whole). The escalation of murky protectionist measures hidden within public policy actions (banking sector bailout, the injection of liquidity in certain sectors, massive subsidization of certain industries during the crisis) tends to distort the way international trade is carried out and the world economy away from the goal of a multilateral liberalization of trade and from the beneficial integration of markets. The last mentioned idea appeared as a central point for the global welfare growth in the run outbreak of the crisis.

The fourth chapter of the thesis, suggestively called '**Changes in the geographic network of international trade in the context of the global economic crisis**' deals in detail on how the economic crisis that bursted in 2007-2009 and spreaded globally affected the orientation and value of international trade flows. The organization of this chapter was conducted similarly to the approach described in the previous section. We show that commodity markets in Europe were more integrated during crisis as a result of an intraregional orientation of trade flows. On the other hand, Canada and Mexico export dependence on the US market has stood still, although later on the outbreak of the financial crisis trend diminished. Regarding the East and Southeast Asian market, the large share of intra-regional trade in intermediate goods at the time of the crisis remained up and the final consumption demand also came from outside the region. At the end of the fourth part, attention is directed towards emerging economies. Before the outbreak of the economic crisis the key contributors to the growth of international trade were represented by emerging economies (particularly Asian countries). The crisis led to the proliferation of their role. Emerging countries proved to be an engine for global redistribution of market shares. At the heart of these dynamics was China.

Finally, the fifth chapter, '**Trade flows of CEE countries during crisis**', addresses the impact of the global downturn over CEECs international trade. Issues related to trade market share of this region within 2008-2009 are treated along with the orientation to the main destinations of exports and imports in Europe. We also focus on the trade determinants in times of crisis. On the same lane we

sought for common lines regarding the CEECs international trade during global downturn. Finally, attention focuses on Romania.

Finally, we conclude by summarizing the results obtained throughout the thesis and the usefulness of the approach employed along with directions of future research. The analysis lack of exhaustiveness allows for deepening and improving the methodology involved. Similarly, there were underlined the innovations brought for the literature and general public.

4.1 Directions of ongoing research

It is impossible to fully cover a topic with limited tools and insufficient data at disposal, and most importantly, the ability to interpret scientific results only through own perceptions. Therefore, there are a number of questions whose answers will be found within future research:

- uncertainty was one of the elements that led to the contraction of economic activity during the last financial crisis. Information asymmetry fueled this situation. Could one create tools to limit this unequal information disclosure? What would be the role of international institutions and in this matter?
- how important non-tariff protectionist measures have been to national industries and how negative their influence has been on trade?
- which was the impact of the crisis on the distribution of benefits deriving from the engagement in international trade?
- did the last global crisis reveal the excessive degree of financial and economic liberalization? Will long-term trend return to a form or other of protectionism?
- will industrialized countries of the world find new ways of specialization in order not to lose trade supremacy? What are the signs that this might happen?
- how can Romania dodge Western countries trade dominant force in the aftermath of the crisis? Does our country learn from the international trade competition or it became a simple location where you rich countries could 'pack technology' cheaper?