UNIVERSITY OF LJUBLJANA
FACULTY OF ECONOMICS

MASTER'S THESIS

ECONOMIC CRISIS OF EMERGING ECONOMIES IN VIEW OF THEIR FINANCIAL AND TRADE OPENNESS: THE CASE OF MACEDONIA

Ljubljana, October, 2011 **Nikola Goshev**

STATEMENT

I, Nikola Goshev, hereby certify to be the author of this Master's/ Specialist thesis that was written under the mentorship of Professor Mojmir Mrak, Ph.D. and in compliance with Article 21 paragraph 1 of the Copyright and Related Rights Act. I herewith agree this thesis to be published on the website of the Faculty of Economics.

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INTRODUCTION

Economic globalization refers to increasing economic interdependence of national economies across the world through a rapid increase in cross-border movement of goods, services, technology and capital. It is the process of increasing economic integration among countries, leading to the emergence of a global market place or a single world market. Economic globalization has many positive consequences but is also associated with various possible risks (Economy Watch, Globalization Economy).

Economic globalization comprises the globalization of production, markets, competition, technology, and corporations and industries. Whilst economic globalization has been occurring for the last several hundred years (since the emergence of trans-national trade), it has intensified over the last 20–30 years. This recent boom has been largely accounted by developed economies integrating with less developed economies, by means of foreign direct investment and other forms of financial flows, with the reduction of trade barriers, and in many cases with cross border migration. There are different opinions regarding the power (im)balance between the developed and developing countries (Frederic Mishkin: "Understanding financial crisis", 1996).

As Josef C. Brada would say: "If you like capitalism, you must learn to like crises" ("The Challenges to Economic Theory and Policy in the Aftermath of the Global Economic Crisis", international conference in Skopje, 12.11.2010). After numerous regional crises during the last 20-30 years (Mexico, Asia, Brazil, Argentina), the year 2007 marks the beginning of the most severe global economic crises since the Great Depression in 1930s. Some would say it is a part of a cycle; some would say that the time of the current economic system is over, but one thing is clear: Crises are part of our reality and we should accommodate to them and find a way to mitigate their consequences most successfully.

During the recent crisis, countries have been affected to a different degree. Some countries were hit hard, experiencing double-digit fall of their GDP (the Baltics), while some others stayed in the positive zone hardly even feeling the recession (China, Qatar). The reasons for these differences in countries' performance vary, with the most distinguished being the level of their financial and trade openness.

The recent financial crisis that started as a mortgage crisis in the United States has quickly turned into a global economic crisis. Emerging countries, among them Macedonia, were a collateral damage of the crisis that has this time begun in the developed part of the world. An important challenge of this thesis is to determine how the recession has affected various emerging economies and to explain the differences in the severity of crisis among individual countries.

A purpose of this master's thesis is to analyse how different degrees of financial and trade openness of individual emerging economies affect their economic performance during the

global economic crisis. The hypothesis being tested is the following: "*Financial and trade openness has intensified the negative effects of global economic crisis on emerging economies*". The main research issue this master's thesis attempts to address is whether GDP of emerging economies that were more open in both financial and trade terms has declined more compared to GDP of less open economies? If the answer is yes, what should the countries do to mitigate the consequences of such crises in the future? Of course, this thesis focuses on Macedonia, and tends to assess economic performance of the country in the recent years from the perspective of its financial and trade openness. We will address, in more details, the financial system structure, the foreign trade features and the crisis transmission channels to this country.

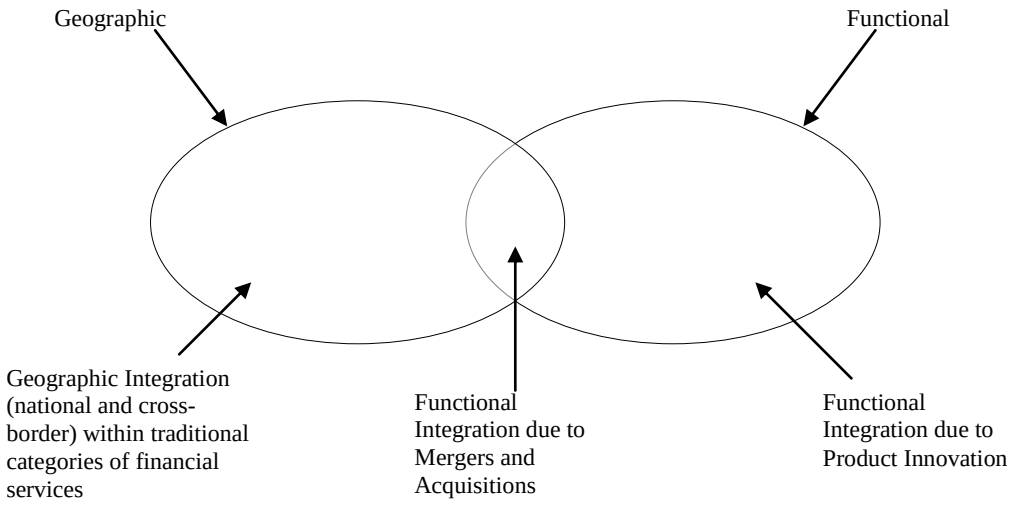
The methodology for measuring financial and trade openness applied herein, has been designed on the basis of an extensive review of academic literature on this subject and has been tested on a group of countries covering 36 emerging economies. The official list of the Dow Jones brokerage house (of 35 countries) will be used as a data source, with Macedonia being added to this list.

The text below discusses the structure of thesis, by chapter. The first two chapters are conceptual in their nature (they provide the concept, as well as the pros and cons of financial and trade openness). The third chapter provides an understanding of what has been done in the academic world in terms of measuring the financial and trade openness. Chapter four tackles the trends and risks brought along by economic globalization. Chapters five and six are the core of this thesis. Chapter five makes an initial selection of the openness tools used in this thesis. This methodology is then applied to 36 emerging economies, including Macedonia. Finally, an analysis is made of the results of financial and trade openness in the context of GDP growth performance of individual economies. Here we will determine the position of Macedonia in this global emerging country comparison. Chapter six aims to present the Macedonia case study in more details.

1 THE CONCEPT OF FINANCIAL INTEGRATION

Solomon Tadesse defines financial integration as: "Any event that joins two or more financial services, organizations or combines two or more dimensions of the production or distribution of financial services, within or between traditional services sectors." Traditional financial service sectors include: Banking, Insurance and Securities. How do we classify financial integration? There are two main categories of integration: Geographic and Functional. The Geographic integration includes national integration of institutions within a single traditional product category (i.e. intra-sector) and international (cross-border) integration. Functional integration could be integration across multiple financial product categories (e.g. bancassurance, universal banking), or combination of organizations or product innovation. *Graph 1* below illustrates the types of financial integration:

Graph 1: Financial Integration



Source: Solomon Tadesse, Perspectives on Financial Integration and Financial System Architecture in Emerging Markets (2005)

Examples of functionally integrated institutions/products include: Bancassurance, Universal Bank, Asset backed securities, Mutual fund offerings of banks, Unit links etc. The organizational forms of functionally integrated institutions reflect various degrees of integration. For example, Universal bank enjoys high level of integration, rather than low level of integration which is typical for Bancassurance. The focus of our analysis is geographic financial integration.

Which are the current trends of financial integration as a whole?

a) National integration is more significant than cross-border integration in the developed world.

b) Within-product category integration is more frequent and important than cross-product (i.e. functional integration).

c) Overall, financial services integration is the rule and will continue to fundamentally change the landscape of the industry. The distinctions among the traditional banking, securities and insurance products are getting increasingly blurred as a result of deregulation, globalization and product innovation.

Now let us see the future trends and major factors driving financial integration:

a) Deregulation and Liberalization

More and more countries, particularly emerging economies, are removing regulatory barriers. Deregulation is a major driver behind national integration and functional integration within countries.

b) Globalization and increased capital flows

The driving factor for cross-border integration.

c) Product innovation and technological change

The key factor behind functional integration. The proliferation of new products that cross traditional product lines are blurring the distinctions of traditional categories.

1.1 Advantages of financial integration

There are three widely accepted interrelated benefits of financial integration: more opportunities for risk sharing and risk diversification, better allocation of capital among investment opportunities, and potential for higher growth (ECB, Measuring financial integration in the euro area (2004)).

a) Economic growth - Another implication of greater financial integration, which is partially linked to the issue of capital allocation described above, is additional economic growth. One channel through which financial integration acts upon economic growth is greater financial development.

Financial integration should increase flows of funds for investment opportunities in some regions. This should be the case whenever financial integration facilitates the access to investment opportunities in these regions, provided they are more productive relative to foreign ones. With additional funds flowing in, further financial development of these regions appears plausible, as discussed in Gianetti et al. (2002). In that report, the authors argue that the integration process will increase competition within less developed regions and thereby improve the efficiency of their financial systems by, for instance, reducing intermediation costs. Moreover, the authors argue that this should render these regions' financial systems more attractive, thus enhancing participation from local and foreign agents and contributing to further development of these financial systems.

In an alternative scenario, the financial system in the more financially developed regions overtakes all or parts of the intermediation process in the least financially developed regions. This is notably the case in the new EU member states. A recent ECB study (Financial sectors in the EU accession countries, 2002b) observed a high degree of foreign involvement in almost all financial market segments in these countries. With respect to the degree of financial integration, what counts is increased availability of intermediated investment opportunities, not the location of the intermediation. As a matter of fact, if the financial system of a financially well-developed region takes all or parts of the financial activities of another region, then one may regard this process as a development in the financial system of the latter region. However, there is concern that financial integration could result in a wave of consolidation that might hamper the efficient process of intermediation. For instance, bank sector take-overs could create a monopoly. Since it is crucial for the overall financial system to remain efficient after financial integration has taken place, it may be desirable to monitor the process of integration closely as it unfolds.

The link between financial development and financial integration is of the utmost importance, as there is strong evidence that financial development is linked with economic growth. As described in Levine (1997), financial systems serve some basic purposes. Among others, they 1) lower uncertainty by facilitating the trading, hedging, diversifying and pooling of risk; 2) allocate resources; and 3) mobilize savings. These functions may affect economic growth through capital and technological accumulation in an intuitive way. Risk-sharing opportunities make it possible to finance projects with potentially very high return but great risk, as risk-averse investors can hedge their position to some extent. As intermediaries specialize in the collection and dissemination of information, the allocation of resources can be performed more efficiently and at a lower cost. Also, project owners with low initial capital can turn to an intermediary that can mobilize savings so as to cover the initial costs. These channels are quantitatively important, as Levine (1997) stresses, "While many gaps remain, broad cross-country comparisons, individual country studies, industry-level analyses, and firm-level investigations point in the same direction: the functioning of financial systems is vitally linked to economic growth" (p.689-690). However, while Levine (1997) recognizes the positive relationship between economic growth and financial development, he is careful not to infer any causality. Indeed, economic growth and financial development are so intertwined that it is difficult to draw any firm conclusion with respect to causality.

Nevertheless, recent research has found evidence that financial development affects growth positively. Rousseau (2002) finds empirical evidence that financial development promotes investment and business by reallocating capital. Also, industry-level studies like that of Jayaratne and Strahan (1996) show that financial development causes economic growth. Moreover, Bekaert et al. (2002) find that equity market liberalization – defined as the right given to foreign investors to trade in domestic securities and to domestic investors to trade in foreign securities – increases subsequent average annual real economic growth. This highlights the importance of financial integration as an additional step towards financial development, which in turn seems to be conductive to greater economic growth (Ben Bernanke: "On the outlook for the economy and policy", 2009).

b) Risk sharing - Financial integration should offer additional opportunities to share risk and to smooth consumption inter-temporally. This is an important element of financial integration. Kalemli-Ozcan et al. (2001) provide empirical evidence that sharing risk across regions enhances specialization in production, thereby resulting in well-known benefits. The increase in the set of financial instruments and in the cross-ownership of assets resulting from financial integration should offer additional possibilities to diversify portfolios and share idiosyncratic risk across regions. From theoretical models of risk-sharing, we know that when agents in an area fully share risk, the consumption of agents in one region co-moves with that of agents located in other regions of that area, while consumption does not co-move with region-specific shocks. There is a lot of evidence that this level of risk sharing is not yet achieved in the euro area. Adjaoute and Danthine (2003) find that consumption growth rates in the euro area are less correlated than are GDP growth rates, suggesting that risk sharing opportunities are far from fully exploited. This complements the study of Adam et al. (2002), which rejects

the hypothesis that consumption growth rates are unaffected by idiosyncratic changes in GDP growth rates. Hence, further financial integration should bring additional gains that have yet to be fully exploited.

c) Improved capital allocation - It is generally accepted view that greater financial integration should allow a better allocation of capital. The complete elimination of barriers to trading, clearing and settlement platforms will allow firms to choose the most efficient trading, clearing and/or settlement platforms. In addition, investors will be permitted to invest their funds wherever they believe these funds will be allocated to the most productive uses. More productive investment opportunities will therefore become available to some or all investors and a reallocation of funds to the most productive investment opportunities will take place (BIS – 79th annual report, 2009).

1.2 Disadvantages of financial integration

What may account for the apparently negative effects of financial integration?

a) Uneven pace of financial integration - Following a steep rise during the first half of 1990s, gross capital flows to emerging market countries fell after 1996 and have only recently shown signs of recovery. The decline was particularly pronounced in Asia (outside China) and in Latin America. Other regions (central and eastern Europe (CEE), the Middle East and South Africa) experienced rising or stable inflows. Consequently, the empirical evidence cited above refers to a period when financial integration appears to have declined over a period in some important regions.

b) Net capital has flowed from poor to rich countries - Theory predicts that capital should flow from high-saving developed countries (where the marginal return to capital might be relatively low) to low-saving developing countries (where a high return to capital is expected) and thereby increase the global increase to capital. Yet the reality has been totally different. Since 1997, the developed countries have been running a widening current account deficit, almost entirely due to developments in the United States. This deficit has been financed by current account surpluses in and capital outflows from emerging economies, notably Asia. In other words, there has been a net transfer of resources from developing to developed countries. One reason for this apparent paradox might be that returns in emerging market countries are still highly uncertain, notably where debt levels exceed even relatively low thresholds (see Reinhart et al (2003) and Reinhart and Rogoff (2004)).

c) The relationship between savings and investment - The experience from the Asian crisis in 1997-98 meant that many countries had an incentive to increase reserves to reduce their vulnerability to external shocks. Yet, as discussed in the papers by the People's Bank of China, Mohan and Sidaoui, the continued rise in reserves raises a number of issues, including monetary control, growth and volatility.

d) External shocks may dominate consumption smoothing effects - It is true that access to global markets can help reduce the fluctuations of consumption relative to income emanating from internal shocks. However, if external shocks (nominal as well as real) dominate internal shocks, this benefit may be outweighed by the costs of the new external exposure. This will be particularly true if the external shocks are related to procyclical swings in capital flows and financial integration increases countries' vulnerability to such shocks.

There is strong empirical evidence that external shocks (for instance, terms-of-trade changes) are far more important in developing economies than in developed countries. Similarly, capital flows to emerging economies are volatile, including episodes of so-called "sudden stops" and closure of access to international bond markets. There is also some evidence that a certain threshold of domestic market developments and institutions has to be reached before the vulnerability to external shocks can be decisively reduced. Most emerging economies are well below that level. This raises an important policy issue: should emerging economies pursue financial integration in the hope that exposure to and competition from global markets and institutions will strengthen domestic financial markets and institutions? Or should they rather develop their own markets and institutions before they open up?

e) The monetary/exchange rate regime may play a role - Many countries have removed capital controls while attempting to maintain monetary policy independence by adopting a more flexible exchange rate regime. Bevilaqua and Loyo provide an instructive discussion of how an inflation targeting regime has allowed Brazil to cope with recent episodes of "sudden stops" in capital flows by combining a credible policy commitment to low inflation with sufficient exchange rate flexibility. In spite of significant financial dollarisation Peru has also sought to secure the benefits of a more flexible exchange rate while limiting the potential costs. Its inflation targeting regime reduces the risk of a currency crisis by allowing more exchange rate flexibility, and an "escape" clause allows monetary policy to respond to excessive exchange rate volatility (see Velarde's paper). Cifuentes and Desormeaux point out that the institutional cornerstones of Chile's current macroeconomic stability include a monetary regime based on inflation targeting, a floating exchange rate, as well as a fiscal policy based on a structural budget surplus rule. In contrast to other emerging market economies facing external financing constraints, there is scope for countercyclical macroeconomic policy in Chile.

Nonetheless, the broader question of how the exchange rate regime influences average growth and inflation in a financially integrated world remains too be settled. Central banks still tend to intervene or adjust domestic interest rates in response to exchange rate movements rather than use their independence to pursue domestic policy targets. The move to more flexible rates might thus have induced more volatility than central banks had anticipated or domestic exchange markets might not have been sufficiently deep to cope with the new regime. Moreover, the risk of currency mismatches and their potential danger to financial stability was probably seriously underestimated. At the same time, episodes of large capital inflows under a pegged regime also pose significant challenges, including persistent expectations of currency

appreciation, the need for sterilized intervention, and overheating in some sectors. Such experiences are reported in this volume by the People's Bank of China, Latifah (Malaysia), Tetangco (Philippines, for an earlier period) and Al-Jasser (Saudi Arabia). See also Mohanty and Scatigna.

To sum up, independently of their exchange rate regime, financial integration can make countries vulnerable to external shocks that reduce growth and consumption smoothing benefits. Partly as a result, the process of financial integration has been uneven and experienced partial reversals (Andersen and Moreno: "Financial integration: an overview", 2005).

2 THE CONCEPT OF TRADE INTEGRATION

When speaking about trade, the things are much more straightforward. Pritchet (1996) defines trade policy liberality as "that set of policies such that the level and pattern of trade (and prices) are near what they would be under free trade." And so, *Trade openness,* in this paper will represent the degree to which unfettered markets are used to coordinate trade across national boundaries and, hence, indicates the extent to which such markets can efficiently allocate scarce resources where they are valued the most (Chuck Skipton – University of Tampa: "Trade openness, the Market for Governance and Long-Run Economic Growth", 2007).

2.1 Advantages of trade integration

The text above discusses the advantages of financial integration. Now let us tackle the ways that help countries benefit from trade openness.

a) Increased efficiency and reduced costs for industry - Exposure to foreign competition forces domestic industry to become more efficient and competitive. It also aids this process by reducing the cost of key foreign inputs and enabling access to cost-saving and quality enhancing new technologies.

b) Reduced costs for consumers - In the end it is almost always the consumers who pay the price of protectionism trough lower quality goods and higher prices. Reducing trade barriers brings greater variety of products and quality, but also lower prices. This welfare effect for consumers is often the strongest element in the impact of liberalization, particularly for highly protected industries, like agriculture and clothing.

c) Dealing with restructuring and political costs - Within the context of trade round, the restructuring costs of greater openness should be partly offset by the gains afforded by new market access opportunities. As a country's industry restructures and inefficient firms exit, efficient firms will grow and provide new jobs. Their growth would be facilitated by improved access to foreign markets. In addition, the negative impacts of restructuring are

easier to sell politically if they are part of a multilateral effort where all actors are seen to face costs as well as opportunities. This is why there needs to be liberalization by all actors to achieve a balanced solution in a trade round. Otherwise the costs of liberalization are more difficult to offset, in developing and in developed economies (UNCTAD: Trade and Development report, 2005).

2.2 Disadvantages of trade integration

Trade openness can also be harmful. The reasons are as follows:

a) Fluidity - All products do not have the same fluidity, meaning that some may be easily relocated while some others are "stickier" and cannot be as easily moved. This is well acknowledged in gravity models which show that there are several factors that actually prevent trade and exchanges from being as efficient as they could. Distance and transportation costs are important hindrances, but linguistic, legal, cultural, historical and political links also play an important role as well as the home country bias (the fact that larger countries tend to be exporters of product, *ceteris paribus,* since the larger market attracts firms to locate there). All these factors potentially reduce bilateral trade and can even make liberalization a failure (if the exporting firm is not prepared enough, or faces unexpected "social" resistance to its products…).

b) Multiple comparative advantages - As many countries with similar resources are opening up to trade, they bring at the same time their same comparative advantage on the market. This will create an excess supply of that product and its world price will decrease, thus harming all the providers. This decreasing trend in the countries terms of trade occurred for developing countries exporting raw materials. They had to increase their production if they wanted to keep the same level of export revenue, thus accentuating the phenomenon. Similarly, the Asian countries, which comparative advantage was cheap and abundant labor are now facing greater competition from each other and from China, pushing them to find out new differentiation possibilities. Both examples show that as openness becomes more and more widespread, countries cannot rely on a single comparative advantage to support their economic development: diversification should be promoted as well in order to face the issue of multiple comparative advantages, rising competition and lower prices (i.e. lower revenues from trade, *ceteris paribus*) (Apoteker, Crozet: "A survey on key issues behind international trade and financial integration and liberalization", 2003).

3 LITERATURE OVERVIEW OF FINANCIAL AND TRADE OPENNESS MEASURES

The traditional approach to measuring financial openness is to use measures of legal restrictions on cross-border capital flows. Such capital controls come in many varieties (controls on inflows versus controls on outflows, quantity controls versus price controls, restrictions on foreign equity holdings, etc.). Indeed, the IMF's widely used Annual Report on

Exchange Arrangements and Exchange Restrictions (AREAER) measures over 60 different types of controls.

One issue in the literature is whether to stick with using one of these types of de jure measures (as most of the literature does) or look for alternatives. It is worth noting that the range of available de jure measures is not as broad as it may seem since most of them, in one way or another, essentially just summarize the information in the IMF's AREAER reports.

An alternative approach (advocated, for example, in Prasad, Rogoff, Wei, and Kose, 2003) is to use a de facto measure that tries to take into account how much a country is integrated into international capital markets in practice. We will argue in this section that there is important information in both the de jure and de facto measures, but that for many applications the de facto measure is more suitable. The availability of a de facto integration measure that is consistently defined across countries owes a great deal to the pioneering work of Lane and Milesi-Ferretti.

a) De jure measures based on IMF indicators

Measuring capital account openness has long been a challenge (see Edison and others, 2004). Some researchers utilize the summary information provided by the AREAER to construct a "share" measure, reflecting the fraction of years in the sample in which a country's capital account was open (see Grilli and Milesi-Ferretti, 1995; Rodrik, 1998; and Klein and Olivei, 2006). Quinn (1997, 2003) uses the narrative descriptions in the AREAER to develop a quantitative measure of capital account openness. Raising the level of technical sophistication a notch, Chinn and Ito (2005) developed an index of financial openness based on principal components extracted from disaggregated capital and current account restriction measures in the AREAER. Mody and Murshid (2005) also utilize the measures involving restrictions on capital and current account transactions and constructed a different measure. Edwards (2005) combines the measures in Mody and Murshid (2005) and Chinn and Ito (2005) with information from country-specific data sources and proposes a new index. After the expansion of the set of categories reflecting the existence of capital controls in the 1997 issue of the AREAER, there have been some refinements of the earlier measures (see Johnston and Tamirisa, 1998, and Miniane, 2004).

All of these measures, despite their increasing sophistication and fineness, suffer from a variety of similar shortcomings. First, they do not accurately reflect the degree of openness of the capital account because they are partially based on various restrictions associated with foreign exchange transactions that may not necessarily impede capital flows. Second, they do not capture the degree of enforcement of capital controls (or the effectiveness of that enforcement), which can change over time even if the legal restrictions themselves remain unchanged. Third, and most importantly, these measures do not always reflect the actual degree of integration of an economy into international capital markets. As an example, China,

despite its extensive regime of capital controls, has not been able to stop inflows of speculative capital in recent years (see Prasad and Wei, 2007).

A further complication is that, despite the extensive coverage of the IMF's annual AREAER publication, there could be other regulations that effectively act as capital controls but are not counted as controls. For instance, prudential regulations that limit the foreign exchange exposure of domestic banks could, under certain circumstances, have the same effect as capital controls.

This discussion suggests that the distinction between de jure and de facto financial integration is a crucial one. After all, what matters in analyzing the effects of financial globalization, is not how integrated economies seem on paper but how integrated they are in practice. But how does one go about measuring de facto integration?

b) De facto measures based on price differentials

One approach has been to look at price-based measures of asset market integration. The logic is that, irrespective of the volume and direction of flows, true integration of capital markets should be reflected in common prices of similar financial instruments across national borders. While the logic is sound, there are serious practical problems in using such measures for emerging markets and even more so for low-income developing economies. Returns on financial instruments in these economies may incorporate a multitude of risk and liquidity premium that are difficult to quantify. For example, stocks of firms in many emerging market economies trade at low price earnings ratios due to investor concerns about corporate governance and contract problems. Yet, it is not easy to separate this form of segmentation from differential pricing due to high project risk. In general, domestic financial markets may simply not be deep or liquid enough to allow for efficient arbitrage of price differentials.

Other measures of capital market integration include saving-investment correlations and, related to the price-based approach discussed above; various interest parity conditions (see Frankel, 1992; and Edison, Klein, Ricci, and Slok, 2002). However, these measures are also difficult to interpret and to operationalize for an extended period of time and for a large group of countries.

c) De facto measures based on Quantities

This leaves quantity-based measures of integration based on actual flows which, in our view, provide the best available measure of a country's integration with international financial markets. One issue is whether to measure integration using net or gross capital flows. Gross flows provide a relatively less volatile and more sensible picture of integration. Indeed, this measure has the advantage of capturing two-way flows which one would expect to see if economies were in fact sharing risk efficiently in a world with multiple financial instruments and agents with different risk profiles. Using the sum of gross inflows and outflows as a ratio

to national GDP also yields a nice symmetry with the widely-used measure of trade openness, which is the sum of imports and exports as a ratio to GDP.

However, such annual flows tend to be quite volatile and are prone to measurement error. To mitigate these problems, it may be preferable to use a measure of the sum of gross stocks of foreign assets and liabilities as a ratio to GDP. These stocks are essentially just a refined cumulated version of the underlying flows corrected for valuation effects. This preserves the spirit of measuring de facto integration and obviates many of the problems associated with flow data. Moreover, for some purposes—particularly risk sharing—the stock measures are clearly more appropriate. For instance, if countries have large gross stocks of assets and liabilities, small exchange rate changes can have large valuation effects and serve as a mechanism for risk-sharing even if net asset positions are small (Kose, Prasad and others: "Financial Globalization: A reappraisal", 2006).

4 ECONOMIC GLOBALIZATION: TRENDS, RISKS AND RISK PREVENTION

We live in a changing world. We are witnessing globalization in every sense. It is interesting to see the both sides of these changes. The next sections highlight the recent trends, risks and how to prevent these risks from the globalized economy.

4.1 Economic globalization as an irreversible trend

Economic globalization refers to the increasing interdependence of world economies as a result of the growing scale of cross-border trade of commodities and services, flow of international capital and wide and rapid spread of technologies. It reflects the continuing expansion and mutual integration of market frontiers, and is an irreversible trend for the economic development in the whole world at the turn of the millennium. The rapid growing significance of information of all types of productive activities and marketization are the two major driving forces for economic globalization. In other words, the fast globalization of the world's economies in recent years is largely based on the rapid development of science and technologies, has resulted from the environment in which market economic system has been fast spreading throughout the world, and has developed on the basis of increasing cross-border division of labor that has been penetrating down to the level of production chains within enterprises of different countries (WEO 2001: "International financial integration and developing countries").

The advancement of science and technologies has greatly reduced the cost of transportation and communication, making economic globalization possible. Today's ocean shipping cost is only a half of that in the year 1930, the current airfreight 1/6, and telecommunication cost 1%. The price level of computers in 1990 was only about 1/125 of that in 1960, and this price level in 1998 reduced again by about 80%. This kind of "time and space compression effect" of technological advancement greatly reduced the cost of international trade and investment, thus making it possible to organize and coordinate global production. For example, Ford's

Lyman car is designed in Germany, its gearing system produced in Korea, pump in USA, and engine in Australia. It is exactly the technological advancement that has made this type of global production possible. Moreover the development of the networking-based economy has given birth to a large group of shadow enterprises, making the concept of national boundaries and distance for certain economic activities meaningless.

If technological advancement and IT development were assumed as the technological driving force for economic globalization, then the market-oriented reform carried out throughout the world should be regarded as the institutional driving force for this trend. Under the framework of GATT and WTO, many countries have gradually cut down their tariff and non-tariff barriers, more and more countries open up their current accounts and capital accounts. All of these have greatly stimulated the development of trade and investment. Moreover the transition of the former centralized planned economies to market economies has made it truly possible for the world's economies to integrate into a whole.

Multinational corporations (MNCs) have become the main carriers of economic globalization. They are globally organizing production and allocating resources according to the principle of profit maximization. And their global expansions are reshaping macroeconomic mechanisms of the operation of the world economies. In 1996, there were altogether only more than 44,000 MNCs in the world, which had 280,000 overseas subsidiaries and branch offices. In 1997, the volume of the trade of only the top 100 MNCs already came up to 1/3 of the world's total and that between their parent companies and their subsidiaries took up another 1/3. In the US$ 3,000 billion balance of foreign direct investment at the end of 1996, MNCs owned over 80%. Furthermore, about 70% of international technological transfers were conducted among MNCs. This type of cross-border economic activities within same enterprises has posed a challenge for the traditional international trade and investment theories.

Globalization of the financial sector has become the most rapidly developing and most influential aspect of economic globalization. International finance came into being to serve the needs of international trade and investment activities. However, along with the development of economic globalization, it has become more and more independent. Compared with commodity and labor markets, the financial market is the only one that has realized globalization in the true sense of "globalization". Since 1970's, cross-border flow of capital has been rapidly expanding. In 1980, the total volume of cross-border transactions of stocks and bonds of major developed countries was still less than 10% of their GDP. However, this figure had far surpassed 100% in 1995. The value of the average daily transactions of foreign exchanges has grown from US$ 200 billion in the middle of 1980's to the present US$ 1,200 billion, which is 85% of the foreign reserves of all the countries in the world and 70 times as large as the value of the daily export of commodities and services.

The process of economy globalization is also the process of global industrial restructuring and readjustment. With the development of science and technology and increase of income level, industrial structures of all the countries have been also undergoing readjustment and upgrading. In recent years, developed countries in the west are gradually entering the era of

knowledge economy and have started to shift to developing countries many labor-intensive industries of weak international competitiveness. This process of cross-country shift is pushing forward an in-debt development of economic globalization. On the other hand, there has existed a surplus of productivity since the end of the cold war. Due to this fact, economic globalization has intensified the competition at the international market among enterprises from different countries. In order to raise their positions and improve their competitiveness at the international market, both domestic enterprises and those from other countries have been resorting to mergers and acquisitions one after another, which has resulted in tides of industrial restructuring. Take a few cases just as a demonstration: the recent acquisition of Mannesmann by Vodafone, acquisition of MCI by British Telecom, and the amalgamation of Citibank with Travelers and that of Daimler-benz. All of these restructuring activities will exert far-reaching influence on the world's industrial competition pattern.

Developed countries have been playing a dominant role in the process of economic globalization. In 1996, the total volume of exports of developed countries was US$ 4,057 billion, accounting for 81.7% of the world's total value of international trade. In 1995, the foreign direct investment by 10 major developed countries including the G7, Switzerland, Sweden and the Netherlands took up 85.1% of the total value of foreign direct investment in the whole world. The dominant role of the developed countries in the process of economic globalization is also reflected in the fact that it is they that determine the rules for international economic exchanges. Although current rules of game for international economic activities have the good aspect of being in keeping with socialized mass production, they are generally laid down under dominance of developed countries. International economic and financial organizations are under the control of the United States and other western countries. They have been using these advantages to promote and dominate the development of globalization. At the same time, they are the largest beneficiaries of economic globalization (Gao Shangquan: "Economic globalization", 2000).

4.2 Risks brought along by economic globalization to developing countries and the prevention against related risks

The participation of developing countries in the globalization process can enable them to better utilize their comparative advantages, introduce advanced technologies, foreign capital and management experience. It is also favorable for eliminating monopolistic behaviors and strengthening market competition. Nevertheless, while providing more development opportunities for developing countries, the globalization process is also posing enormous risks (BIS – Recent economic and financial market developments, 2009).

First of all, economic globalization has in fact expanded rather than reduced the gap between the North and South. According to some report published by UN in 1999, the number of developing countries that have benefited from the globalization is smaller than 20. The difference of income per capita between the richest country and poorest country has enlarged

from 30 times in 1960 to the current 70 times. In 1960, the value of foreign trade of the poorest 46 countries accounted for 1.4% of the world total. Towards the latter half of 1990, this proportion had already reduced to 0.6% and further down to an almost negligible 0.4% in 1995. The average trade deficit of developing countries in 1990's increased by 3% as compared with that in 1970s. And over 80% of the capital is flowing among US, Western European and East Asian countries. Except for donations and bilateral financial aids, most developing countries could not attract any capital.

Secondly, economic globalization has also developing countries' risks of being concussed by unfavorable external factors. Under open economic conditions, the conflict between the realization of external economic equilibrium and that of internal economic equilibrium is a great constraint on the macroeconomic policies of developing countries, weakening their capacity of macroeconomic control and regulation. With continuous innovation of financial instruments, rapid expansion of financial assets and the trend of privatization of international capital, a large volume of international floating capital has brought along enormous impacts on the economic safety and financial stability of developing countries. According to some data provided by IMF, the value of short-term bank loans flowing at and through international financial markets and other financial and capital markets in 1997 at least amounted to US$ 7,200 billion, which was about equal to ¼ of the total output of the whole world. According to the estimation by the US Federal Reserve Board, the daily total value of transactions of foreign exchanges in New York, Tokyo and London alone in 1997 was about equal to US$ 620, 18% of which was used for foreign trade and investment, and the rest 82% were used for speculation at international financial markets. This huge amount of floating international capitals may lead up to bubble economies and disorderly fluctuation of foreign exchange rates. They may also weaken the monetary sovereignty of a country and bring along a dysfunction of its monetary policy. The "sheep-flocking effect" and the "self-fulfilling mechanism" of monetary crisis existing in international financial markets will further strengthen the concussion suffered by developing countries. Although the financial crises erupted in Mexico and East Asia in 1990s were rooted in the defects of the economic systems and economic structures, the impact from the floating international capital was the direct fuse, which also greatly reinforced their destructiveness. In order to prevent and dissolve the risks brought along by economic globalization to developing countries, the following measures should be taken:

In the first place, international economic organizations should play a bigger role in the process of economic globalization. What is in striking contrast with the rapid development of economic globalization is the vacancy of an organization for global economic regulation and control as well as lagging behind of the establishment of a regulatory system. Factually, the increasingly globalized world economy is in a free and drifting state. This is, to a great extent, very similar to the domestic economic situations of developed countries in the west in 1930s when the economic crises spreading all over the capitalist world gave rise to Keynesian economics and governmental intervention of economic operations. The Mexican and East Asian financial crises in 1990s and the collapse of long-term capital management companies

call for a globalized Keynesian economics and the establishment of a corresponding institution to exercise effective interventions in the world economy and particularly in the functioning of international financial markets. The current international economic organizations have many limitations in managing the world economy. To change this, the following should be undertaken: (1) The coordination of the macroeconomic policies of different countries should be strengthened, and IMF and World Bank should establish perfect early warning system against financial crises and build up their post-crisis supporting capacities. (2) The cross-border financial supervision should be strengthened. The Basle Committee and the Basle Credit Facility Agreement have done lot in increasing transparency of financial institutions and raising their capital sufficiency rate. However, this is far from enough. An organization that can play role of "final lender" all over the world, providing floating financial relief and support to crisis institutions so as to restore the confidence of international investors, strengthening the monitoring and supervision over financial institutions and stamping out ethic crisis. (3) Appropriate control over the flow of international capital, particularly over the flow of short-term capital that has serious negative effects, should be exercised. In recent years, there has been heated discussion in the international circle of economic on the "Tobin tax". We hold that, though there are some problems with Tobin tax needing to be addressed concerning specific operations and after-tax distribution; it is feasible and practical as an orientation. Thus it is worthwhile to create conditions for its further implementation.

Secondly, interests of developing countries should be guaranteed and their say enlarged in the process of developing a new international economic order. The trend of economic globalization that came into being has developed under conditions where the old international economic order has not yet been fundamentally changed. Globalization itself can not bring a fair and reasonable new international economic order, and some developing countries that are unable to enjoy the benefits and evade the harms are confronted with the danger of becoming outsiders. Therefore in the face of economic globalization, developing countries are bogged in a dilemma: On one hand, if they keep themselves away from this process, they will surely be left far behind the development of other economies. On the other hand, if they participant actively in the process, it is most probable that they will be reduced to annexes of developed countries due to latter's dominance in the process. In view of this anticipation, the interests of developing countries must be guaranteed and their say enlarged in the process of developing a new international economic order. The precondition for the development of economic globalization to gain a sustainable driving force for its development is that growth sharing must be guaranteed. That is to say, the progress of globalization not only should bring huge benefits for the world economy, but also should make these benefits available to every country and to different departments and interest groups. To be more exact, a few countries or a handful of nations and interest groups should not exclusively enjoy the benefits of globalization. And the progress of globalization should bring Parrato improvement. If for a long run developing countries can not benefit from the globalization process, the economic interests of developed countries will surely be affected. Take the labor standard problem for an example. Developed countries and particularly the United States have long insisted linking

this with trade issues, i.e. to set a uniform labor standard including wage standard. If the wage standard in any country does not meet the uniform standard, this country would be punished. This insistence in fact means to eliminate the comparative advantages of developing countries weaken their international competitiveness. Therefore, it is requested that developed countries should take enough consideration of the realities of developing countries and give up their unreasonable requirement of linking labor standard to trade issues.

Thirdly, the step of reforming economic system and readjusting economic structures should be quickened. International competition in the era of economic globalization is competition on economic systems and enterprise mechanisms. In terms of both economic system and economic structure, the gap between developed and developing countries is quite large. Macroscopically speaking, the problems of the government being offside, vacant and dislocated must be solved. To this end, direct administrative interventions in the affairs of macroeconomic players should be gradually weakened and finally eliminated. At the same time, the government should strengthen its functions of protecting intellectual property rights, ensuring legal fulfillment of contracts, providing infrastructure and stabilizing macroeconomic situation, etc. At the microeconomic level, the government should play the major role in establishing incentive and constraining mechanisms in line with enterprise system and corporate governance so as to improve enterprises' efficiency and competitiveness. As for industrial structures, the government should focus their efforts on stimulating rapid scientific, technological and education development and increasing investment in developing human capital for the purpose of pushing forward upgrading of industrial structures (Paul Krugman: "The return of depression economics and the crisis of 2008", 2009).

5 THE CURRENT CRISIS IN THE CONTEXT OF FINANCIAL AND TRADE OPENNESS INDICATORS

As mentioned in the introduction, 2007 marked the begging of the most severe economic crisis since the Great Depression. In the next sections we are going to see how the openness of a country influences its economic performance.

5.1 Methodology, data and empirical results

For the purpose of our analysis, we combine six openness indicators (de facto and de jure). Reasons justifying this selection are the frequency of their use in the academic world and the easiness of finding sufficient data. The methodology applied includes an analysis of 36 countries in the context of four financial openness indicators and two trade openness indicators using averages for 2005-2009. Rankings are made by indicator. Thus in order to produce final rankings for both trade openness and financial openness, averages have been calculated using the ranks (see table 1 below). Finally, these rankings are matched with the rankings of GDP fall in 2009 when the impact of the recession was the strongest. Appendix A presents rankings, by indicator. In *Table 1* are presented the final rankings separately for

financial and trade openness, while in *Table 2* countries are ranked by GDP growth in 2009 starting with the negative growth rates.

Table 1: Financial and trade openness rankings

		FBANKS	CAPFLOW	KAOPEN	INVFREE	average
		placements				
1	Estonia	1	1	2	1	1.25
2	Latvia	11	2	1	4	4.5
3	Hungary	8	5	3	2	4.5
4	Czech R.	7	8	4	7	6.5
5	Bulgaria	5	3	16	10	8.5
6	Lithuania	16	4	12	5	9.25
7	Mauritius	6	18	10	8	10.5
8	Chile	15	10	14	3	10.5
9	Peru	3	23	6	11	10.75
10	Romania	4	13	13	17	11.75
11	Jordan	21	9	7	14	12.75
12	Poland	2	17	26	13	14.5
13	Egypt	18	14	11	24	16.75
14	Colombia	23	15	23	12	18.25
15	Mexico	12	26	18	18	18.5
16	**Macedonia**	**10**	**20**	**24**	**21**	**18.75**
17	Turkey	14	16	30	19	19.75
18	Malaysia	22	7	22	28	19.75
19	Morocco	13	25	34	9	20.25
20	Brazil	19	29	21	22	22.75
21	Philipiness	27	12	25	30	23.5
22	Argentina	20	24	31	23	24.5
23	Indonesia	17	27	20	35	24.75
24	South Africa	26	22	32	20	25
25	Russia	30	11	28	33	25.5
26	Thailand	24	19	29	34	26.5
27	Pakistan	25	30	33	26	28.5
28	Sri Lanka	32	28	27	31	29.5
29	China	28	21	36	36	30.25
30	Kuwait		6	19	25	
31	Bahrain			15	15	
32	UAE			5	29	
33	Qatar			9	32	
34	Slovak R.	9		17	6	
35	Oman	31		8	16	
36	India	29		35	27	

		TRADEOPEN	TRADEFREE	average
		placements		
1	Estonia	5	1	3
2	Slovak R.	2	6	4
3	Czech R.	7	5	6
4	Lithuania	10	2	6
5	Hungary	6	8	7
6	Malaysia	1	15	8
7	Latvia	14	3	8.5
8	UAE	4	14	9
9	Bahrain	3	18	10.5
10	Poland	19	4	11.5
11	Bulgaria	12	13	12.5
12	Kuwait	15	12	13.5
13	Philipiness	18	10	14
14	Chile	20	9	14.5
15	Thailand	8	23	15.5
16	Oman	16	16	16
17	Romania	22	11	16.5
18	**Macedonia**	**13**	**21**	**17**
19	Qatar	17	17	17
20	Jordan	9	26	17.5
21	Mauritius	11	25	18
22	Turkey	30	7	18.5
23	South Africa	26	19	22.5
24	Sri Lanka	23	24	23.5
25	Indonesia	28	20	24
26	Mexico	27	22	24.5
27	China	25	30	27.5
28	Morocco	21	35	28
29	Egypt	24	33	28.5
30	Peru	31	27	29
31	Colombia	34	29	31.5
32	Russia	29	34	31.5
33	Brazil	36	28	32
34	Argentina	33	31	32
35	Pakistan	35	32	33.5
36	India	32	36	34

Table 2: GDP growth rankings

	2005	2006	2007	2008	2009
1 Latvia	**10.6**	**12.2**	**10**	**-4.2**	**-18**
2 Lithuania	**7.8**	**7.8**	**9.8**	**2.8**	**-14.8**
3 Estonia	**9.4**	**10.6**	**6.9**	**-5.1**	**-13.9**
4 Russia	**6.4**	**8.2**	**8.5**	**5.2**	**-7.9**
5 Romania	**4.2**	**7.9**	**6.3**	**7.3**	**-7.1**
6 Mexico	3.2	4.9	3.3	1.5	-6.5
7 Hungary	3.5	4	1	0.6	-6.3
8 Bulgaria	6.2	6.3	6.2	6	-5
9 Kuwait	10.4	5.3	4.5	5.5	-4.8
10 Turkey	8.4	6.9	4.7	0.7	-4.7
11 Slovak R.	6.7	8.5	10.6	6.2	-4.7
12 Czech R.	6.3	6.8	6.1	2.5	-4.1
13 UAE	8.2	8.7	6.1	5.1	-2.5
14 Thailand	4.6	5.1	4.9	2.5	-2.2
15 South Africa	5.3	5.6	5.5	3.7	-1.8
16 Malaysia	5.3	5.8	6.5	4.7	-1.7
17 Chile	5.5	4.6	4.6	3.7	-1.5
18 Macedonia	**4.1**	**3.9**	**6.1**	**5**	**-0.8**
19 Brazil	3.2	4	6.1	5.1	-0.2
20 Colombia	5	7.1	6.3	2.7	0.8
21 Argentina	9.2	8.5	8.7	6.8	0.9
22 Peru	6.8	7.7	8.9	9.8	0.9
23 Philippines	5	5.3	7.1	3.7	1.1
24 Poland	3.6	6.2	6.8	5	1.7
25 Jordan	8.1	7.9	8.5	7.6	2.3
26 Mauritius	1.5	3.9	5.4	5	2.5
27 Bahrain	7.9	6.7	8.4	6.3	3.1
28 Pakistan	7.7	6.1	5.6	1.6	3.4
29 Sri Lanka	6.2	7.7	6.8	6	3.5
30 Oman	4	5.5	6.8	12.8	3.6
31 Indonesia	5.7	5.5	6.3	6	4.5
32 Egypt	**4.5**	**6.8**	**7.1**	**7.2**	**4.7**
33 Morocco	**3**	**7.8**	**2.7**	**5.6**	**4.9**
34 India	**9.2**	**9.7**	**9.9**	**6.4**	**5.7**
35 Qatar	**7.6**	**18.6**	**26.8**	**25.4**	**8.6**
36 China	**11.3**	**12.7**	**14.2**	**9.6**	**9.1**

The results from the survey are very interesting. The three countries with the fastest GDP fall (Latvia, Lithuania and Estonia) are ranked among the top six countries by financial openness, and among the top seven countries, if observed by trade openness. This clearly indicates that the openness of a given country has a strong influence on its economic performance (EBRD – Financial integration worsened crisis, 2009). We could ascertain that Macedonia is in the middle of all above rankings. This country takes the 16th and 18th place by financial and trade openness respectively, and 18th by GDP growth. Openness indicators used in the analysis are given below:

a) FINANCIAL INDICATORS

Variable 1: FBANKS

Foreign banks participation. Percentage of foreign owned banks in the total number of banks in the country. Source: Bankscope.

Variable 2: CAPFLOW

Gross private capital flows (% of GDP). Gross private capital flows are the sum of the absolute values of direct, portfolio, and other investment flows and outflows recorded in the balance of payments financial account, excluding changes in the assets and liabilities of monetary authorities and general government. The indicator is calculated as a ratio to GDP in U.S. dollars. Source: World Development Bank Indicators (WDI).

Variable 3: KAOPEN

Index of financial openness that measures the extent of lack of capital controls based on the information from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions. The higher the coefficient is, the more the economy is open. Source: Chinn-Ito (2009).

Variable 4: INVFREE

Foreign Investment. Investment freedom is an assessment of the free flow of capital, especially foreign capital. Scale: 0 to 100, where 100 represents the maximum freedom. Source: Heritage Foundation.

b) TRADE INDICATORS

Variable 1: TRADEOPEN

Imports and Exports as a Percentage of GDP. Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product. Source: World Bank Development Indicators (WDI).

Variable 2: *TRADEFREE*

Trade Freedom. This is a composite measure of the absence of tariff and non-tariff barriers that affect imports and exports of goods and services. Scale: 0 to 100, where 100 represents the maximum freedom. Source: Heritage Foundation.

The next sections address countries that suffered most and countries that suffered least, including their financial and trade openness.

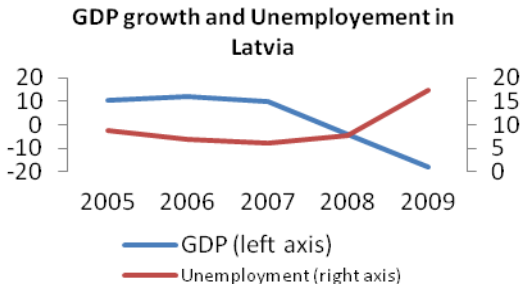
5.2 Economies that suffered most

1. Latvia

Observing by financial openness indicator, Latvia is ranked 2nd among 29 analyzed emerging economies on which there are sufficient available data. In the trade segment, it takes the seventh place among 36 analyzed countries. The highest ranking of this country is the 2nd place by gross capital flows (CAPFLOW) with 36% of GDP. Also, it is in the first group of countries by KAOPEN – lack of capital controls. Regarding the trade segment, Latvia is ranked 3rd by absence of tariff and non-tariff barriers (TRADEFREE) with coefficient of 80.

All these numbers explicitly confirm that Latvia is an open economy. *Graph 2* illustrates the GDP growth and unemployment rate in Latvia:

Graph 2: GDP and Unemployment in Latvia



In the first three quarters of 2009, the annual pace of contraction of real GDP accelerated, with GDP falling by 17.8%, 18.4%, and 19.0% respectively. On the other hand, in the fourth quarter, the downturn slowed somewhat (16.9%). Observing annually, GDP dropped 18.0% at constant prices and stood at 13 244.3 millions of lats at current prices (Central Bank of Latvia, Annual Report 2009). In *Table 3* below are presented selected macroeconomic indicators for Latvia:

Table 3: Selected economic indicators for Latvia

Selected indicators for Latvia	**2007**	**2008**	**2009**
Population (000)	2.280	2.270	2.260
GDP per capita (USD)	12.705	14.850	11.346
Real GDP growth (% yr/yr)	10.0	-4.2	-18.0
Inflation (HICP; %, eop)	14.0	10.4	-1.4
Fiscal balance (% of GDP)	-0.3	-4.2	-10.2
Public debt/GDP	9.0	19.7	36.7
Current account balance (% of GDP)	-22.2	-13.3	8.9
Gross external debt/GDP (%)	134.5	125.3	163
Debt-service ratio (%)	37.6	42.3	57.3
Foreign reserves (EUR mn)	3.824	3.541	4.483
Import coverage (months)	3.5	3.3	6.5

Sources: Euler Hermes Group, IMF and Central Bank of Latvia

Of all components comprising the domestic demand, it was the private investment that responded most promptly to the economic downturn, making the largest contribution to the decline of total demand. In 2009, the share of private investment in total investment dropped substantially, with government investment falling less buoyantly. Gross capital formation contracted by 37.7% in 2009 overall. Given an extremely sharp collapse of the construction of new buildings (compared to 2008, the number of issued building permits decreased more than twice), activities increased in the repair and renovation segment (including heat insulation of buildings). The activity in this segment spurred due to the labour availability and declining construction costs, primarily resulting from lower wages and salaries.

In 2009, disposable income of households strongly contracted mainly due to cuts in wages and salaries, while the share of social benefits expanded, and therefore, prevented the private consumption from decreasing even more critically. Consequently, on the backdrop of persisting uncertainty about the future financing of both the economy and the households, the latter continued with their pro-cyclical behaviour from the previous years, with constraints on spending in excess of reductions in income. Overall, in 2009, private consumption and public consumption shrank by 22.4% and 9.2% (on account of budget expenditure cuts), respectively.

Along with the weakening domestic demand, imports of goods and services fell steeply by 34.2%. As exports contracted at a more moderate pace (by 13.9%), the contribution of net exports to real GDP growth was positive in 2009. Not only the general sluggishness of domestic demand but also its structural changes were among the factors underpinning the downturn in imports: the demand primarily shrank for luxury goods, capital goods, and durables produced outside Latvia. Despite the weakening of domestic demand over the year, the pace of decline in real imports moderated in the second half of the year on account of the demand for imported intermediate goods needed to produce output for exports.

The overall contraction in gross value added (owing to the weak domestic demand) was primarily driven by trade (contribution of 6.1 percentage points, decline of 28.7%), construction (2.8 percentage points and 33.6% respectively), and manufacturing (2.1 percentage points and 19.2% respectively). Transportation services decreased, and the 14.8% drop in the transport, storage and communication sector accounted for 2.1 percentage points of the fall in gross value added.

Trade lost much of its momentum in 2009. Lower household incomes and growing precautionary sentiments were the drivers behind the narrowing sales volumes. Towards the end of 2009, both total retail trade turnover and sales of motor vehicles had gone down to the level of the third quarter of 2004. The dynamics of the respective indicators, on the other hand, had varied greatly: the demand for motor vehicles during the economic upswing had outpaced the increment in total retail trade turnover, with accordingly as steep a moderation during the economic downturn.

Over the year, manufacturing output posted a 17.7% narrowing (at constant prices; according to working-day adjusted data). The annual fall was the sharpest in the first quarter, with its pace easing gradually in the subsequent quarters. The abating domestic demand adversely affected the growth in manufacturing sector over the year, whereas the revival of external demand in the second half of the year fostered the development of several industries. Production optimisation measures undertaken by businesses that improved competitiveness substantially had a positive overall impact as well. Effective marketing policies led to better performance indicators of some industries. The manufacture of wood and of products of wood and cork increased by 3.1% in 2009, whereas that of chemicals and chemical products, as well as metals contracted somewhat (by 4.1% and 6.2% respectively). At the same time,

substantial output contractions were recorded by the engineering and metalworking sectors, where output of some industries shrank almost twofold, by manufacture of clothing and textile articles, and other non-metallic mineral products. The 13.1% deceleration in the pace of food production contributed the most to the fall in GDP.

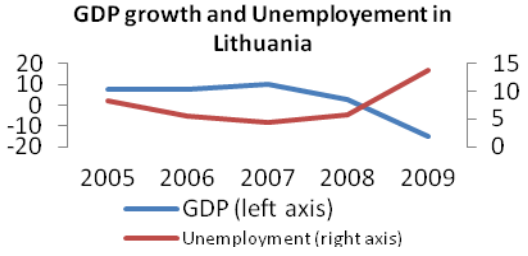
The domestic demand was also a driver behind the ever deteriorating situation in construction, where the annual rate of decline in construction output accelerated with every coming quarter (from 29.7% in the first quarter to 38.5% in the fourth quarter; a 35.3% decline in 2009). With the output narrowing more than twice, the fall was particularly severe for construction of residential buildings. Meanwhile, the sector of engineering structures recorded a lesser narrowing of construction output.

For the sector of transport, storage and communication, the year 2009 was less successful compared to the previous one. On the one hand, railway traffic through Latvian ports expanded by 2.8%; on the other hand, domestic road traffic and transit cargo contracted steeply (by 23.0% and 33.5% respectively), thus reducing by 4.2% the total railway freight traffic. The turnover at Latvian ports dropped 2.6%. It was primarily determined by the 6.8% smaller volume of freight handled at Ventspils port, with the volume of handled mineral fertilisers shrinking the most. Oil product transport by pipelines continued its downward trend, as well.

The dynamics of investment in the economy was undermined by the weak demand, low utilisation of production capacity, and financial constraints. Non-financial investment in the economy amounted to mere 1 702.0 millions of lats, which was 34.2% below the 2008 level (at constant prices). The sector-by–sector analysis indicates that most of the investment went to the government sector (403.2 millions of lats; an 8.5% reduction), manufacturing (506.3 millions of lats; a 30.6% reduction), transport and storage (187.8 millions of lats; a 27.9% reduction), and trade (135.6 millions of lats; a 53.1% reduction). Only information and communication services reported growth of investments (118.2 millions of lats; a 7.2% rise).

2. Lithuania

Graph 3: GDP and Unemployment in Lithuania



Lithuania takes the 6th place by financial openness and 4th in terms of trade openness indicators. *Graph 3* shows the GDP growth and unemployment rate of Lithuania. This country's highest rank is 2nd for absence of tariff and non-tariff barriers (TRADEFREE) with coefficient of almost 85. Lithuania's top export products include mineral products, chemicals and machinery and equipment. Compared to other Baltic countries, Russia is by far Lithuania's top trade partner, with the CIS being the destination for more than 29% of its exports. Regarding the financial openness indicators, Lithuania is ranked at the high 4th place by gross capital flows (CAPFLOW) which averaged 29% of GDP for the 2005-2009 period. In *Table 4* are presented selected macroeconomic indicators for the country:

Table 4: Selected economic indicators for Lithuania

Selected indicators for Lithuania	**2007**	**2008**	**2009**
Population (000)	3.380	3.360	3.340
GDP per capita (USD)	11.598	14.030	11.112
Real GDP growth (% yr/yr)	9.8	2.8	-14.8
Inflation (HICP; %, eop)	8.2	8.5	1.2
Fiscal balance (% of GDP)	-1.0	-3.3	-8.9
Public debt/GDP	16.9	15.6	29..3
Current account balance (% of GDP)	-14.5	-11.9	4.0
Gross external debt/GDP (%)	76.9	68.9	89.5
Debt-service ratio (%)	46.9	38.8	44.3
Foreign reserves (EUR mn)	5.165	4.458	4.345
Import coverage (months)	3.2	2.3	3.5

Sources: Euler Hermes Group, IMF and Central Bank of Latvia

Prior to the global financial crisis, Lithuania was regarded as one of the fastest growing economies in the EU with growth rates of 7.4% (2004), 7.8% (2005), 7.8% (2006) and 9.8% (2007). Yet, in 2009, the gross domestic product contracted by 14.8%. Value added at constant prices generated by construction companies fell 1.8 times compared to the previous year, the indicator of trade went down by more than 23%, railway transport by 22% and hotels and restaurants sector by over 18%. Air transport contracted by even larger margin (the bankruptcy of local airline Fly – LAL was one of the main factors) as its share of GDP more than halved, and value added generated by mining industry fell by almost a third (TDS, Economy of Lithuania).

The sharpest decline of production was reported by branches related to construction. Value added at constant prices generated by the entire manufacturing industry contracted similarly to the national GDP, with the manufacture of building materials dropping by half and the metal industry shrinking by 36%.

The GDP measured by the expenditure approach shows that the percentage of expenditure for gross capital formation plummeted from 27% to 11% in 2009. This was caused to a large extent by the negative growth of stocks and the reversal of eight-year capital formation. As economic sentiments deteriorated and banks tightened their lending policies, expenditure on gross capital formation plummeted 1.8 times in 2009 compared to the previous year and

accounted for just 17% of GDP. The sharp fall experienced in productive investments further compounds the possibilities of any quick economic recovery.

3. Estonia

Estonia is the most open economy among the analyzed countries. It tops the lists by both financial and trade openness indicators. This country also leads the ranking in terms of foreign banks as a percentage of total banks (84%), CAPFLOW (89.5% which is far ahead of other countries) and Investment freedom (INVFREE) (coefficient of 90). Regarding the trade openness, Estonia is ranked 1st by the absence of tariff and non-tariff barriers (TRADEFREE) with average coefficient of 85.12. In *Graph 4* are illustrated GDP growth and unemployment rate of Estonia, while in *Table 5* are shown selected macroeconomic indicators for the country:

Graph 4: GDP and Unemployment of Estonia

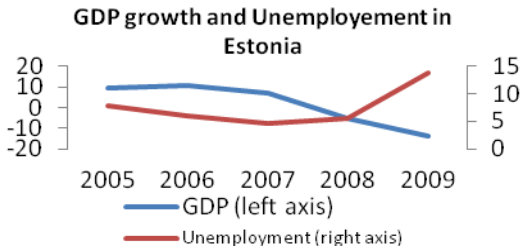


Table 5: Selected economic indicators for Estonia

Selected indicators for Estonia	**2007**	**2008**	**2009**
Population (000)	1.340	1.340	1.340
GDP per capita (USD)	16.145	17.554	14.374
Real GDP growth (% yr/yr)	6.9	-5.1	-13.9
Inflation (HICP; %, eop)	9.7	7.5	-1.9
Fiscal balance (% of GDP)	2.5	-2.8	-1.7
Public debt/GDP	3.7	4.6	7.2
Current account balance (% of GDP)	-17.6	-9.5	4.7
Gross external debt/GDP (%)	117.8	113.8	130.0
Debt-service ratio (%)	56.5	76.5	55.6
Foreign reserves (EUR mn)	2.234	2.819	2.691
Import coverage (months)	2.0	2.7	3.6

Sources: Euler Hermes Group, IMF and Central Bank of Estonia

The export-lead economy of Estonia contracted by 13.9% in 2009. The rapid decline in industrial production that had started in the last months of 2008 continued in 2009 – the decrease in industrial production remained around 30% from January to September, and at the end of the year the decline slightly slowed down. In October, November and December compared to the same months of 2008, industrial production reduced by 11%, 20% and 14%, respectively. The main reason underlying such improvement in the last months of the year was the low base effect of the previous months, rather than the expansion of production.

Manufacturing production fell 28% in 2009 compared to 2008. The main reason causing the decline was the constantly insufficient demand on both domestic and external markets. Despite the price cut, the domestic demand was also reduced by the growing unemployment and decrease in wages and salaries. The export of production was hindered by the decrease of demand in the external markets resulting from the global business depression. Food, wood and metal manufacturing branches held the largest share of production in 2009. In 2009 compared to the previous year, production decreased in all manufacturing branches. The production of building materials, which is directly connected with the decline in the domestic construction market, chemical products, machinery and equipment and metals fell by more than 40%. The least significant fall (less than 10%) was registered in the production of primary demand goods – food, beverages and pharmaceutical products and of electronic products, where the situation improved considerably during the last months.

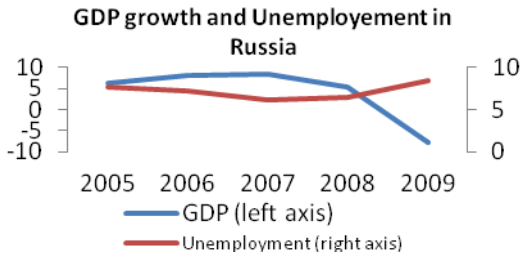
In December 2009, the manufacturing production decreased 11% compared to December of the previous year.

In 2009 compared to 2008, the production of electricity and heat decreased by 17% and 4%, respectively. The decrease in electricity production was caused by a partial replacement of own production with the import of electricity. In December 2009 compared to December 2008, the production of electricity fell 18%, the production of heat rose 13% (Central Bank of Estonia, Annual Report 2009).

4. Russia

Russia is the surprise on this list. It is a clearly closed economy ranked 25th and 32nd by the financial and trade openness indicators, respectively. Russia takes the 34th place by the absence of tariff and non-tariff barriers and is close to the bottom by most of the indicators. This implies that the reasons behind the sharp decline in 2009 should be searched beyond the global crisis. In *Graph 5* are presented GDP growth and unemployment rate in Russia:

Graph 5: GDP and Unemployment in Russia



Leaving aside the Baltics, Russia is, in our sample, the country that suffered the largest output decline during the crisis of 7.9% (32% in Q1). The question is why. To answer, one needs to start long before the crisis. When the crisis came, the Russian economy had been booming for

some time. Average growth was 7% from 2000 to 2007, 8% from 2005 to 2007. The boom was due in large part to the increase in price of oil and the associated increase in oil export revenues, and the economy showed all the trademarks of a commodity price-led boom. The boom was associated with large current account surpluses reflecting high oil revenues, and a steady decrease in public debt. In 2007, the primary fiscal balance showed a surplus of 7.4% of GDP (the primary non-oil balance showed, however, a deficit of 3.3%), and the ratio of public debt to GDP was down to less than 10%. Oil revenues were partly allocated to two stabilization funds, in order to smooth the effects of fluctuating oil prices on spending. Inflation was high but stable, around 10%. Bank credit growth was extremely high, running at an annual rate of 40% from 2000 to 2007 (Blanchard, Das, Faruqee: "The initial impact of the crisis on the emerging market countries", 2010). Selected macroeconomic indicators are presented in *Table 6*:

Table 6: Selected economic indicators for Russia

Selected indicators for Russia	**2007**	**2008**	**2009**
Population (000)	141.940	141.390	140.870
GDP per capita (USD)	9.190	11.859	9.679
Real GDP growth (% yr/yr)	8.5	5.2	-7.9
Inflation (HICP; %, eop)	11.9	13.3	8.8
Fiscal balance (% of GDP)	6.8	4.3	-6.5
Public debt/GDP	8.0	5.9	6.7
Current account balance (% of GDP)	5.9	6.1	3.6
Gross external debt/GDP (%)	36.4	28.6	34.6
Debt-service ratio (%)	13.9	12.7	22.8
Foreign reserves (EUR mn)	466.376	410.695	405.825
Import coverage (months)	19.8	13.4	19.2

Sources: Euler Hermes Group, IMF and Central Bank of Russia

Current account surpluses, combined with large capital inflows, led to the build up of large reserves. By December 2007, reserves (including the foreign asset positions of the two oil stabilization funds) had reached $480 billion (for reference, GDP was $1.3 trillion in 2007, so the ratio of reserves to GDP was 36%). Total foreign debt was $471 billion, of which $113 billion reflected loans to banks, $50 billion reflected foreign deposits in banks, and $261 billion reflected loans to households and firms. Of this debt, $368 billion was denominated in foreign currency, and $182b was short term debt.

With a large current account surplus, a large fiscal surplus, a smoothing mechanism against oil price fluctuations, nearly no public debt, and a ratio of reserves to short term debt nearly equal to 250%, one would have expected Russia to manage the crisis well. This was not the case.

The trade shock was severe, with the dominant channel being not so much the decrease in export volumes than the decrease in oil prices, down from 138 dollars per barrel in July 2008 to 44 dollars in early 2009. With commodity exports equal to a very large 22% of GDP, terms of trade for Russian commodity exports were down by 36% during the crisis semester, relative to the previous semester.

The increase in the fiscal deficit in 2008:4 far exceeded the decrease in oil revenues. But this increase was followed by a sharp decrease in the deficit in 2009:1, while oil revenues were decreasing further. This would suggest a positive effect on demand in 2008:4 but a strong adverse effect in 2009:1, and thus could help explain the large decline in output in 2009:1. What complicates the answer is that the pattern of high deficits in the last quarter is a regular seasonal effect. Thus, the relevant question is whether the deficit was higher than expected, and this is too hard for us to answer. A strong fiscal stimulus program was put in place in April 2009, too late to have an effect on the period we are looking at.

Despite the measures of the Russian central bank, outflows continued at a high pace, and central bank steadily lost reserves, $26 billion in September, $72 billion in October, $29 billion in November, $28 billion in December. Why were outflows so large? For the most part, because of the perception that the rate of loss in reserves was too high to be sustained, and thus the anticipation of a larger depreciation to come. Domestic firms paid back dollar loans. Domestic depositors shifted from ruble to dollar accounts; the share of foreign-currency denominated bank deposits increased from 14% in September to 27% in December. Domestic banks shifted from making domestic loans to buying dollar assets, beyond what was needed to hedge the change in the currency structure of their liabilities. By November, the Russian central bank decided to widen the exchange rate band, and allow for faster exchange rate depreciation. The ruble was devalued by 20% in January 2009, largely ending the net outflows and reserve losses. By then however, it was too late to avoid an output decline. Despite the provision of liquidity, doubts about solvency had increased the interbank rate from 4% in July 2008 to 16% in January 2009. Over the same period, the shift by banks from domestic loans to dollar assets was reflected in an increase in the rate charged to firms from 11% in July 2008 to 17%. Credit to households, which had grown by 3% monthly from January to September 2008, remained flat for the rest of the year, and then decreased by 1% monthly from January on. Credit to firms, which had grown by 2.6% monthly from January to September 2008, actually increased further to 3.5% from October to January – in some measure due to government pressure on state banks to increase credit, as well as a strong desire of firms to replace dollar debt with ruble debt – but then remained flat from January on, in part because firms began to repay debt assumed during the crisis, as the ruble began to appreciate.

In short, Russia was affected by two shocks, terms of trade and financial. One might have hoped that the existence of stabilization funds for oil would limit the adverse effects on demand of the decrease in oil prices. One might also have hoped that the initial reserves and low debt positions would limit the effects of the financial shocks. This was not the case, and the story has an interesting twist: The problems did not come so much from capital outflows by foreign investors than from a shift of domestic residents – households, firms and banks – out of ruble and into dollar assets. In this sense, Russia may be the country which most corresponds to the case considered by Obstfeld (2010), who argued that the right variable to which reserves should be compared is not short-term debt, but rather the liquid assets held by domestic residents.

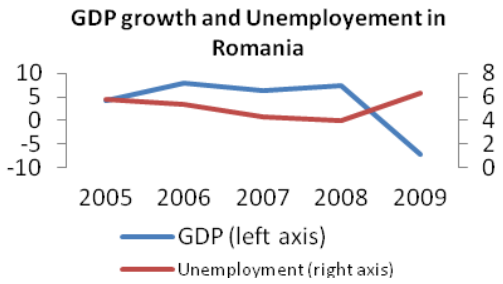
In Russia, while, at the start of the crisis, short term debt was equal to about $100 billion, M2 was equal to about $430 billion, so much closer to the number for reserves. And given the ease with which domestic residents could shift into dollar assets, this may be the reason why expecting a depreciation was rational, and the equilibrium self fulfilling.

5. Romania

Romania is more open in terms of the financial indicators. Here it takes the tenth place among the analyzed countries, and 17th in terms of trade openness. The highest rank of this country is 4th in terms of foreign banks participation (81% of banks in foreign ownership).

As the global economic and financial crisis intensified, real GDP saw a trend reversal, falling 7.1 percent in 2009 compared with the 7.3 percent rise in 2008. *Graph 6* illustrates the GDP growth and unemployment rate in Romania:

Graph 6: GDP and Unemployment in Romania



On the demand side, GDP decline was chiefly attributed to the plunge in domestic absorption, in line with the efforts undertaken mostly by the private sector to achieve fast adjustment of the external deficit and to offset part of the widening of the fiscal deficit. Substantial volume cuts saw private consumption and investment (-9.2 percent and -25.3 percent respectively), whereas final government consumption remained in positive territory (1.2 percent), but fell almost four times against a year earlier. The retrenchment in domestic demand financing owed to declines in both own sources and borrowed funds. In the first case, the decline was due to the negative dynamics of household disposable income (the funds intended for consumption were additionally depressed by sharper propensity to saving) and corporate losses. In the second case, the decline stemmed from the downward trend in consumer, equipment and real estate loans, as well as the severe contraction of the leasing market. The same held true for budgetary funds. Moreover, net capital inflows in the form of foreign direct investment almost halved year on year.

The slower economic activity in Romania's main trade partners caused exports of goods and services to decrease 5.5 percent by volume. However, net external demand had a positive contribution to GDP dynamics (7.3 percentage points), with imports of goods and services (-20.6 percent) falling significantly faster than exports against the backdrop of sharp

contractions in all demand components, to which added the adverse impact of a weaker leu. In *Table 7* are shown selected macroeconomic indicators for Romania:

Table 7: Selected economic indicators for Romania

Selected indicators for Romania	**2007**	**2008**	**2009**
Population (000)	21.450	21.360	21.270
GDP per capita (USD)	7.733	9.169	7.512
Real GDP growth (% yr/yr)	6.3	7.3	-7.1
Inflation (HICP; %, eop)	6.6	6.3	4.7
Fiscal balance (% of GDP)	-2.5	-5.5	-7.8
Public debt/GDP	12.6	13.4	23.9
Current account balance (% of GDP)	-13.9	-12.6	-4.5
Gross external debt/GDP (%)	51.9	52.4	74.8
Debt-service ratio (%)	21.7	25.9	30.6
Foreign reserves (EUR mn)	25.307	26.221	28.303
Import coverage (months)	5.6	5.3	7.8

Sources: Euler Hermes Group, IMF and Central Bank of Romania

On the supply side, all economic sectors fared worse. Services made the largest contribution to the GDP decline – gross value added in this sector dwindled by about 8 percent, widely as a result of lower turnover in trade, hotel services, transport and telecommunication. Nevertheless, the most pronounced reversal in dynamics saw the construction sector (from +26.1 percent in 2008 to -13.6 percent in 2009), following the declines in all the three segments, i.e. residential, non-residential and infrastructure works. A weaker year-on-year performance also witnessed the industrial sector, where gross value added stood 4.3 percent lower in 2009. However, the fourth quarter of 2009 saw a rebound driven not only by the stronger external demand, but also by the increase in domestic orders addressing chiefly the car-making and metallurgy sub-sectors. Gross value added in the agricultural sector was down 0.4 percent, due to a weaker performance of both the vegetal and livestock sub-sectors (Central Bank of Romania, Annual Report 2009).

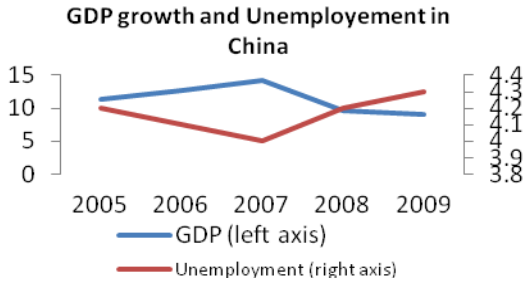
5.3 Economies that suffered least

Of 36 countries included in the analysis, 17 were in the positive zone by GDP growth in 2009. Here are the top five:

1. China

China is explicitly closed economy. It is ranked 29th by the financial openness indicator and 27th by the trade openness indicator. Only 10% of the Chinese banks are foreign owned. This country is also at the bottom by KAOPEN and INVFREE. Analyzing by trade, China ranks 30th in terms of absence of tariff and non-tariff barriers, with index of only 66.4. For comparison purposes, this index for the first nine countries is over 80. The GDP growth and unemployment rate of China are presented in *Graph 7*:

Graph 7: GDP and Unemployment in China



China's economic growth accelerated to 9.1 percent year-on-year in 2009, achieving the full-year growth target of 8 percent and totalling 33.54 trillion yuan ($4.91 trillion) according to the National Bureau of Statistics (NBS). The growth rate was 10.7 percent year-on-year in the fourth quarter.

According to the National Bureau of Statistics (NBS), in 2009, the value-added of the primary sector topped 3.55 trillion yuan, up 4.2 percent from a year earlier; that of the industrial sector stood at 15.70 trillion yuan, up 9.5 percent year-on-year; and the tertiary sector, the service sector, reported value-added totalling 14.29 trillion yuan, up 8.9 percent.

"Last year was the most difficult one for China's economy in the new century," said Ma Jiantang, director of the (NBS). "Thanks to government's efforts to deal with various difficulties, the country's economy ended accelerating slide and began to recover as a whole." Ma attributed the recovery mainly to the implementation of the proactive fiscal policy and moderately loose monetary policy, as well as the stimulus package adopted by the government to cope with the global financial crisis. He described the country's economic development last year as a "harvest", saying the newly released figures confirmed a V-shaped recovery of the economy from the world economic downturn. Selected macroeconomic indicators of the country are shown in *Table 8*:

Table 8: Selected economic indicators for China

Selected indicators for China	**2007**	**2008**	**2009**
Population (mn)	1.346	1.357	1.367
GDP per capita (USD)	2.069	2.730	3.220
Real GDP growth (% yr/yr)	14.2	9.6	9.1
Inflation (HICP; %, eop)	4.8	5.9	-0.8
Fiscal balance (% of GDP)	0.7	-0.4	-3.3
Public debt/GDP			
Current account balance (% of GDP)	13.4	11.5	6.7
Gross external debt/GDP (%)	13.0	9.0	8.0
Debt-service ratio (%)			
Foreign reserves (EUR mn)	1.530.282	1.950.000	2.300.000
Import coverage (months)	12.4	14.9	22.1

Sources: Euler Hermes Group, IMF and Central Bank of China

Since November 2008, the Chinese government has adopted a series of stimulus measures including a 4-trillion yuan investment package, tax cuts, and consumer subsidies to shore up growth and employment. As an important component of the stimulus package, the country also launched revitalization scheme for 10 major industries, including steel, car making, textile and machinery, to which the government devoted huge investments. The country also put forward preferential policies to encourage sales of home appliance, cars and motorbikes in rural areas. More government investment came to infrastructure, scientific research and public service. Meanwhile, the government shifted from a tight monetary policy in 2008 to the moderately easy monetary policy in 2009 to help the national economy counter adverse impacts of the financial crisis. Figures from the People's Bank of China, or the central bank, showed that China's new yuan-denominated lending last year hit a record 9.59 trillion yuan, nearly double that of the previous year.

As the stimulus package conducive for the recovery of the economy. China's valued-added of industry rose 11 percent in 2009 from a year earlier. Retail sales rose 16.9 percent year-on-year, while fixed-asset investment rose 30.1 percent. At the Central Economic Work Conference held in December, the government vowed to focus on expanding domestic consumption, supporting agriculture, and improving people's life in 2010. When asked whether the government would quit the stimulus package, or to introduce more stimulus plans, Ma said, "A key point of macro-regulation this year would be to balance the tasks of ensuring stable and relatively fast economic growth, adjusting economic structure and regulating inflation prospects" (China Daily).

2. Qatar

Table 9: Selected economic indicators for Qatar

Selected indicators for Qatar	**2007**	**2008**	**2009**
Population (000)	1.140	1.280	1.410
GDP per capita (USD)	70.834	86.494	69.726
Real GDP growth (% yr/yr)	26.8	25.4	8.6
Inflation (HICP; %, eop)	13.8	15.1	-4.8
Fiscal balance (% of GDP)	11.3	10.4	9.5
Public debt/GDP	23.6	11.0	4.8
Current account balance (% of GDP)	15.7	21.4	2.6
Gross external debt/GDP (%)	51.9	53.4	78.2
Debt-service ratio (%)	6.8	5.0	6.5
Foreign reserves (EUR mn)	9.345	9.553	17.869
Import coverage (months)	3.4	2.8	5.5

Sources: Euler Hermes Group, IMF and Central Bank of Qatar

The next country by the GDP growth in 2009 is the oil-led economy of Qatar. We do not have data sufficient to make a final ranking for financial openness, but what we do have is the following. Qatar is on the 32nd place by investment freedom with coefficient of only 32. From the viewpoint of trade openness, this country ranks 19th. In *Table 9* are selected macroeconomic indicators for Qatar.

A decline in GDP in the State of Qatar have been witnessed for the first time in years, where nominal GDP declined from QR 403 billion in 2008 to QR 357.9 billion in 2009. In percentage terms, the decline was around 11.2% as compared to a growth of 37.1% during the previous year. Despite the decline in nominal GDP during 2009, real GDP witnessed positive growth during the same year by 8.6 percent, increasing (at 2004 prices) from QR 234 billion during 2008 to QR 254.2 billion in 2009.

a) Oil and Gas Sector

For the first time since several years the oil and gas sector witnessed a decline in its output, during 2009. In particular, the output stood at QR 165.3 billion, lower by around QR 49.7 billion (23.1 percent), as compared to a growth of QR 48.4 billion (53.4%) during the previous year (2008). The decline is mainly attributed to the lower international oil prices. Real output of oil and gas sector increased by around 7.7 percent during 2009, compared to an expansion by around 23.1 percent during 2008.

Developments in the oil and gas sector during 2009 led its relative importance in GDP at current prices to decline by 7.2 percentage points. As a result, its relative share in 2009 was roughly 46.2% as compared to a share of 53.4% during the previous year (2008). The decline, which was witnessed in the oil sector during 2009, reached 110.2 percent of total decline in GDP at current prices, i.e. it absorbed the growth in the non-oil sectors and led GDP at current prices to decline by QR 45.1 billion (Central Bank of Qatar, Annual Report 2009).

b) Non-oil sectors

The growth rate in non-oil sector witnessed a sharp slowdown during 2009 with an increase by QR 4.6 billion (roughly 2.4%) as compared to an increase during the previous year by 47%. As a result, non-oil GDP stood at QR 192.5 billion during 2009 compared to around QR 187.9 billion during the previous year. Thereby, non-oil sectors contributed in reducing the decline in total GDP at current prices, contributing to the change in the GDP by around 10.2% during 2009. The real output of the non-oil sector has witnessed a 9.6% growth during 2009 as compared to a growth by 27.8% during 2008. The performance of the non-oil sectors has differed during 2009; some of which witnessed a growth in the nominal GDP, whereas others witnessed a decline in its output value. This was in contrast to the real GDP of these sectors, which all witnessed a real positive growth. The exceptions were manufacturing sector (that experienced a decline in its real output by 10.3 percent) and building and construction sector (that experienced a decline in its real output by 21.8 percent), reflecting the impact of the collapse of the real estate market in the United States on this critical sector.

In view of the nature of the non-oil sectors, the commodity production sectors witnessed a negative growth during 2009. The nominal output of the commodity production sectors recorded a decline of more than QR 16.7 billion (around 22.3%) in 2009 as compared to a growth rate by 47.1% during the previous year, where it stood at QR 58.4 billion, constituting

around 30.3 percent of the total non-oil nominal GDP, losing around ten points, compared to 40 percent in 2008. Real output of both agricultural sector and water and electricity sector witnessed a positive growth during 2009 by 1.9%, 2.3% respectively, while nominal GDP of the agricultural sector was the only one among other commodity production sectors that witnessed a positive growth by 3.3% in 2009.

Unlike the nominal output of Commodity Production Sectors, the nominal output of service sectors witnessed a positive growth albeit less than the previous year, reaching QR 21.3 billion with an increase of 18.9%, compared to an increase of 48% during the previous year, reaching around QR 134.2 billion. All Service sectors, without exception, have witnessed positive growth rates, both on the level of nominal output in 2009 (except for Household service sector) or real output of the same year.

3. India

It was hard to find comparative data for India since the financial year in this country ends in June. However, what we have is the following. Same as China, 10% of India's banks are foreign owned. Also, this country ranks among the countries at the bottom of the list, in terms of KAOPEN and 27th in terms of INVFREE. Regarding the trade openness, India ranks 36th, that is the very bottom of the list. The coefficient of absence of tariff and non-tariff barriers is only 43. It is one of the three countries under observation that reported GDP growth above 5% in 2009, more precisely 5.7%. In *Table 10* are presented selected macroeconomic indicators for India:

Table 10: Selected economic indicators for India

Selected indicators for India	**2007**	**2008**	**2009**
Population (mn)	1.138	1.154	1.170
GDP per capita (USD)	1.080	1.052	1.123
Real GDP growth (% yr/yr)	9.9	6.4	5.7
Inflation (HICP; %, eop)	4.7	8.3	3.7
Fiscal balance (% of GDP)	-4.1	-8.5	-9.7
Public debt/GDP	52.8	58.2	61.3
Current account balance (% of GDP)	-1.3	-2.5	-3.2
Gross external debt/GDP (%)	18.2	18.1	20.5
Debt-service ratio (%)	4.7	4.8	4.6
Foreign reserves (EUR mn)	199.200	309.700	250.000
Import coverage (months)	/	/	/

Sources: Euler Hermes Group, IMF and Central Bank of India

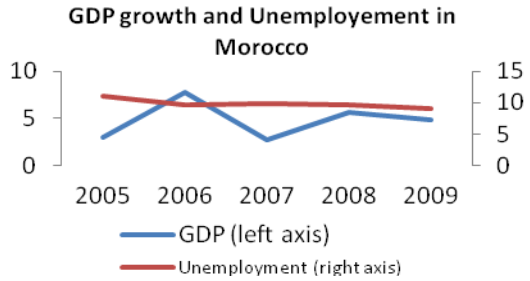
India's diverse economy encompasses traditional village farming, modern agriculture, handicrafts, a wide range of modern industries, and a multitude of services. Slightly more than half of the work force is in agriculture, but services are the major source of economic growth, accounting for more than half of India's output, with only one-third of its labour force. India has capitalized on its large educated English-speaking population to become a major exporter of information technology services and software workers. In 2010, the Indian economy rebounded robustly from the global financial crisis - in large part because of strong

domestic demand. Also the prudent monetary and fiscal policy of the central bank of India facilitated its painless transition through the crisis (CIA Factbook).

4. Morocco

Morocco is another closed economy, also confirmed through the trade and financial openness indicators that ranked this country 19th and 28th, respectively. This country is 25th in terms of CAPFLOW with only 8.4% capital flows in GDP and at the bottom of the list, by KAOPEN index. Regarding the trade openness, Morocco is on the 35th position by trade freedom with index of 51. *Graph 8* illustrates the GDP growth and unemployment rate of Morocco:

Graph 8: GDP and Unemployment in Morocco



Despite an unfavourable international environment, national economic growth remained strong owing to an exceptional crop year. Though limited, the recessionary effects of the economic situation in its main partner countries impacted considerably the sectors depending most on foreign markets. The performance of these sectors, which showed a strong synchronization with the growth cycle in its main partners, improved gradually as from the second half of the year. Against this background, overall growth reached 4.9 percent in 2009 compared to 5.6 percent in 2008. In *Table 11* are shown selected macroeconomic indicators for Morocco:

Table 11: Selected economic indicators for Morocco

Selected indicators for Morocco	**2007**	**2008**	**2009**
Population (000)	31.220	31.610	31.990
GDP per capita (USD)	2.406	2.735	2.899
Real GDP growth (% yr/yr)	2.7	5.6	4.9
Inflation (HICP; %, eop)	2.0	3.9	1.0
Fiscal balance (% of GDP)	-0.8	-2.0	-2.8
Public debt/GDP	70.9	67.4	59.7
Current account balance (% of GDP)	-0.3	-5.2	-4.9
Gross external debt/GDP (%)	27.0	25.0	23.8
Debt-service ratio (%)	14.1	10.3	10
Foreign reserves (EUR mn)	23.980	21.976	19.800
Import coverage (months)	8.0	5.6	6.8

Source: Euler Hermes Group, IMF and Central Bank of Morocco

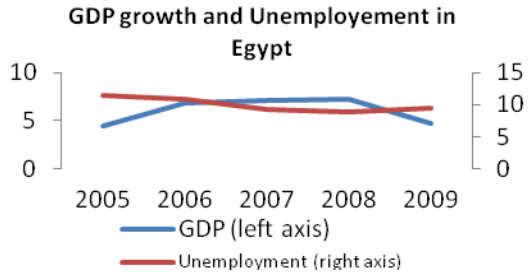
Concerning the primary sector, agricultural activity grew by 30.6 percent in 2009 compared to 16.3 percent in 2008, in connection with the expansion of cereal output which almost doubled to reach an exceptional level of 102 million quintals. At the same time, fishing activities rose by 12.2 percent compared to 19 percent a year earlier. Overall, the share of the primary sector in the overall value added rose from 15.9 percent to 19.3 percent. Conversely, after five years of continued growth, the secondary sector dropped 4.7 percent under the combined effect of the decline in mining output and the slowdown in industrial activity and building and public works. Tertiary activities, including nonmarketable services provided by public administration, grew 3.9 percent compared to 4.1 percent in 2008, in spite of the fall recorded in tourism-related services.

Overall, GDP -estimated at current prices at 736.2 billion dirhams- increased by 6.9 percent instead of 11.8 percent in 2008. On the other hand, agricultural value added grew 21.6 percent to around 100.9 billion dirhams, while the value added of non-agricultural activities rose 3.2 percent to stand at 553.6 billion dirhams (Central Bank of Morocco, Annual Report 2009).

5. Egypt

Same as India, the financial year in Egypt ends in June. Nevertheless, this country is 13th by financial and 29th by trade openness. It has low index of investment freedom (50). Egypt is 33rd by TRADEFREE with index of 60.5. *Graph 9* illustrates GDP growth and unemployment rate of Egypt:

Graph 9: GDP and Unemployment in Egypt



The fall in real GDP growth at factor cost during the reporting year was ascribed to the decline in real growth rates of some major economic sectors, headed by tourism, manufacturing, and the Suez Canal. However, this was offset by the stronger performance of other sectors which managed to perform farely well despite the spillovers of the economic crisis. The sector of extractions (oil, gas and other extractions) took the lead, with a growth of 6.4 percent (against 3.6 percent), as many of the discovered fields launched their production; followed by IT and communications (14.6 percent against 14.5 percent); and real estate (3.8 percent against 3.7 percent). *Table 12* shows selected macroeconomic indicators for Egypt:

Table 12: Selected economic indicators for Egypt

Selected indicators for Egypt	2007	2008	2009
Population (000)	80.060	81.530	83.200
GDP per capita (USD)	1.659	1.843	2.146
Real GDP growth (% yr/yr)	7.1	7.2	4.7
Inflation (HICP; %, eop)	8.6	20.2	10.0
Fiscal balance (% of GDP)	-7.5	-6.6	-7.0
Public debt/GDP	87.1	76.6	76.2
Current account balance (% of GDP)	1.9	0.5	-2.4
Gross external debt/GDP (%)	29.9	33.9	31.5
Debt-service ratio (%)	4.8	4.3	6.0
Foreign reserves (EUR mn)	30.054	32.108	30.250
Import coverage (months)	6.5	5.6	6.6

Sources: Euler Hermes Group, IMF and Central Bank of Egypt

Commodity sectors, productive services sectors and social services contributed 2.6 percentage points, 1.5 percentage points, 0.6 percentage point, respectively, to the GDP growth. The commodity sectors were led by oil, gas and other extractions (0.9 percentage points), followed by manufacturing (0.6 percentage point), and construction and building (0.6 percentage point). At the level of the productive services sectors, the main contributors to the overall GDP growth were wholesale and retail trade (0.6 percentage point), communications (0.5 percentage point), financial intermediaries, and transportation and storage (0.2 percentage point each). By contrast, the Suez Canal contributed a negative 0.3 point.

On the other hand, as a major contributor to the overall growth (4.7 percent), the private sector was far ahead of the public sector, with a share of some 3.5 percentage points (Central Bank of Egypt, Annual Report 2008/09).

6 THE IMPACT OF THE GLOBAL FINANCIAL CRISIS IN MACEDONIA

As we will see below, Macedonia did not stay immune to the crisis. The characteristics of the banking sector prevented the financial crisis, but the downturn was felt in the real sector.

6.1 Overview of the Macedonian economy

Macedonia is a small economy with a gross domestic product (GDP) of about $9.17 billion (2010 est.), representing about 0.01% of the total world output. Agriculture and industry had been the two most important sectors of the economy in the past, but the services sector has gained the lead in the last few years. Economic problems persist, even as Macedonia undertakes structural reforms to finish the transition to a market-oriented economy. Modernization of the largely obsolete infrastructure is happening slowly, and foreign investment has not kept pace with neighbouring economies. Labour force education and skills are competitive in some technical areas and industries but significantly lacking in others. Without adequate job opportunities, many with the best skills seek employment abroad. A relatively low standard of living, high unemployment rate, and modest economic growth rate are the central economic problems.

Five years of continuous economic expansion in Macedonia was interrupted by the 2001 conflict, which led to a contraction of 4.5% in 2001. Growth started to pick up in 2003 (2.8%) and continued in 2004 (4.6%), 2005 (4.4%), 2006 (5.0%), 2007 (6.1%), and 2008 (5.0%). In 2009 and 2010, the economy slowed as a result of the world economic crisis, although the financial sector remained sound. This was largely due to conservative banking and financial regulation and limited exposure to global financial markets. Real GDP dropped by 0.8% in 2009. The economy slowly started to recover in 2010 as real GDP is estimated to have grown by 1.3%. Consumer Price Index (CPI)-based inflation was -0.8% in 2009 and 1.6% in 2010. Living standards still lag behind those enjoyed before independence (Travel Document Systems).

● **Background** - After the break-up of Yugoslavia in 1991, Macedonia, the former Yugoslavia's poorest republic, faced formidable economic challenges posed by both the transition to a market economy and a difficult regional situation. The break-up deprived Macedonia of key protected markets and large transfer payments from the central Yugoslav government. The war in Bosnia, international sanctions on Serbia, and the 1999 crisis in neighbouring Kosovo delivered successive shocks to Macedonia's trade-dependent economy. The government's painful but necessary structural reforms and macroeconomic stabilization program generated additional economic dislocation. Macedonia's economy was hurt especially by a trade embargo imposed by Greece in February 1994 in a dispute over the country's name, flag, and constitution, and by international trade sanctions against Serbia that were not suspended until a month after conclusion of the Dayton Accords. The impact of the 2001 ethnic Albanian insurgency in Macedonia, decreased international demand for Macedonian products, cancelled contracts in the textile and iron and steel industry, and poor restructuring of the private sector affected Macedonia's growth and foreign trade prospects through 2004 (CEA: “Global financial crisis impact on Macedonian economy”, 2009).

Macedonia's political and security situation is stable. This has allowed the government to refocus energies on domestic reforms, boosting economic growth, and attracting increased levels of foreign investment. In 2004, the government passed a progressive Trade Companies Law aimed at easing impediments to foreign investment, providing tax and investment incentives, and guaranteeing shareholder rights. The government's fiscal policy, aligned with International Monetary Fund (IMF) and World Bank policies, helped maintain a stable macroeconomic environment which sent promising signals to investors. However, economic growth remained sub-par in 2005 and 2006, due in part to poor government results in combating corruption, a weak judiciary, poor contract enforcement, and high domestic finance costs.

The new government that took office in August 2006 put the fight against corruption and attracting foreign investors at the very top of its priority list. In 2007, it launched an expensive marketing campaign promoting the country as a good investment destination and put in place a one-stop process for business registration that considerably shortened the time required to register a new business. It provided business incentives by cutting rates on profit tax and personal income tax and implemented a so-called "regulatory guillotine," an activity which

reduced procedures and legislative requirements for doing business. Reinvested profits became tax free, social contributions rates on salaries are being gradually reduced, and a regulatory impact assessment (RIA) procedure is being carried out to re-evaluate legislation for doing business.

Macedonia's moderate economic growth was halted by the world economic crisis in 2009, which hit the real sector strongly, although the financial sector remained sound and stable. Exports dropped dramatically and the economy entered into a recession, albeit one that was shorter and, given the already low level of economic development, far less severe than in many other transitional and developed economies (ODI – Effects of the global financial crisis on developing countries, 2008).

Macedonia is somewhere in the middle by all parameters analyzed. It takes the 16th place from 29 countries by financial openness indicators and the 18th place from 36 countries by trade openness indicators. With GDP fall of -0.8%, Macedonia is on the 18 position from the 36 countries.

6.2 Financial openness of Macedonia

The Macedonian financial system is dominantly based on the role of banking sector as a financial intermediary. On the other hand, in the last few years, the capital market became attractive as an investment opportunity for the domestic, as well as the foreign investors. We analyze the effects of the global crisis on these two segments of the financial system.

The most of the Macedonian banks are in dominant foreign ownership. The banking sector itself consists of 18 banks. The 11 banks were in dominant foreign ownership at the end of 2007, while 3 other banks having being acquired by foreign banks in 2008. Also, at the end of 2008, the foreign capital participates with 74,3% in the total equity capital of the Macedonian banks (5,2% more than the 2007) and the assets owned by the banks under dominant foreign ownership represent 92,7% of the total assets in this sector (6,8% more than the 2007).

Fortunately, the banking sector has remained stable. The main reasons for the resistance of the Macedonian banks are: (1) The banks maintain a rather conservative structure of their operations, with savings deposits as a major source of funds and loans as the major item in their investment portfolio. The coefficient credits/deposits is 92,8% in 2008 (14,9% higher than 2007), which is significantly lower than 135% from the developed countries. (2) The credit penetration of the Macedonian banks is 42,9% of GDP at the end of 2008 (6,9% higher than 2007). In comparison, the credit penetration is 132% of GDP in the developed countries. (3) The banking system is well capitalized. The coefficient of the capital adequacy was 15% at the end of September 2008, which is almost two times higher than minimum of 8%. Macedonian banks had 6% higher capitalization than commercial banks and 3,5% higher capitalization than investment banks in the developed countries. (4) The financial crisis most hardly stroked international investment banks. The Macedonian banks in their portfolios

didn't have financial derivatives from the international markets. So they weren't directly exposed to the global financial crisis.

In the financial sector, the effects of the crisis are most visible on the Macedonian stock market. The Macedonian stock market has experienced a sharp decline in both prices and trading volumes. MBI10 is reduced for 81,91% in the period from September 2007 to March 2009. The total trading volume in 2008 is 202 million euro and it is significantly lower than 2007 (681 million euro) and 2006 (506 million euro).

There are three main factors for this bear market: (1) Macedonian stock market has been to a large extent dependant on the liquidity provided by the foreign portfolio investments. During the period of bull market (January 2006 – August 2007), the average monthly net foreign portfolio investments is 7,89 million euro. In contrary, because of the global crisis, there is continual outflow of foreign portfolio investments in the period from November 2007 till now (Figure 2). The average monthly net foreign portfolio investment is -4,22 million euro in 2008. (2) The activity of domestic investors is significant proportion of the overall market activity. The policy of strengthening the credit conditions lower the available capital for investment in the stock market. (3) The investors did not react on the Government anti-crisis measures. Their expectations for the Macedonian economy became pessimistic. Also, the investors' expectations were influenced by the political failure of the April 2008 NATO Summit (Rahkola, Tevdovski, Stambolieva: "The global financial crisis and its socio-economic effects in Macedonia", 2009).

6.3 Trade openness of Macedonia

a) Characteristics of exports in 2008 - The structure of exports in 2008 by type of products shows that the largest portion of the exported value has been realized by the following groups: "iron and steel", "clothing", "food", "other semi-finished products" and "fuels". As in previous years, this year we can draw the same conclusions – that the Macedonian economy is concentrated in several sectors. The share of aforementioned groups of products is 77.98% of the total exports of the Republic of Macedonia, which reaffirms the aforementioned conclusion. The remaining group of products, whose share in the total export of the Republic of Macedonia is 22.02%, are products that create high added value.

The most interesting facts in the trend of the export in 2008 are the following:

a) Large growth in 2008 was noticed in the group of "mineral raw materials" by 77.96% or by $101 million compared to 2007. The increase in the value of export of "fuels" is much larger than in the previous years and it amounts 90.34% of the total export. This means that "processed products" has the greatest share in the export of this type of product, i.e. increase by $136.4 million compared to 2007 and residual products, the increase of which is 15% compared to 2007.

b) The group of products “iron and steel”, in spite of the fact that it is at first place when the value of exports of the Republic of Macedonia is concerned, it experienced insignificant growth of 2.44% compared to 2007, but yet, it amounts to 32.50% of the total exports in 2008, as a result of the fall of industrial production and the fall of the price of metals.
c) In spite of the fact that the group of products “clothing” comes second when the value of export is concerned, this year it experienced an insignificant growth of 12.12% or an increase by $77 million, where the following products achieved the fastest growth: male and female ready-to-wear and other clothing of woven fabrics This growth is a result of the fact that most of the Macedonian textile companies have focused on the European market, where the prices are more favourable, and where the current fluctuation of the American dollar is an important factor.
d) Compared to 2007, the group of products “food” reported a growth of $80 million, where “live animals and meat” has the greatest share, as well as “animal and vegetable oils and fats”, whereas “coffee, tea, cocoa and spices” as well as beverages reported a fall in the value of exports.
e) In 2008, the same as in the previous two years, the group of products “other semi-finished products” registered a significant growth of 32.94%. The growth has been achieved in the following groups of products: Manufactures of non-metal minerals and metal manufactures, such as structures and parts of structures of steel, iron or aluminium, where an increase in the value by 13% was achieved compared to 2007.
f) The trend of growth in the export of “machinery, office and transport equipment” by 23.04% and “other consumers’ goods” by 24.58% is retained this year as well.
g) The negative rate of export compared to 2007 is noticed in the groups of “non-ferrous metals” and “raw materials”.

b) Characteristics of imports in 2008 - In 2008, the import of the main groups of products continued growing compared to previous years. The group of “agricultural products” went up by 23.17%, “mineral raw materials” by 37.29%, imports in the production sector increased by 27.93% and value of products not classified by kind crashed down by 99.79%. The total imports in 2008 compared to 2007 rose by 29.65% which is 10% less in imported products than in 2007. The group of “products” has the biggest share in Macedonian imports, where mostly products with medium or high added value can be found.

If we analyse the imports per main production segments, in 2008, the group of products “machinery, office and transport equipment” has the biggest share of Macedonian imports with 21% in the total import, the share of the group of products “fuels” is 20.92% of the total imports, the group of “food” is 11.09% and the group of “iron and steel” is 11.17% in the total imports. The share of the aforementioned groups of products is 64% of the total imports of the Republic of Macedonia. This information points to the fact that the Macedonian economy is extremely dependent on the import of the aforementioned products, which represent an important factor for Macedonian production. On the other hand, the import of the group of products “machinery, office and transport equipment” and the growth thereof contributes to the long-term competitiveness of the Macedonian economy. If we analyze this

group in more details, we can see that all the products show significant growth. Compared to the stagnation and the minor growth in the previous years, in 2007 and 2008, the growth is surprisingly high, which creates a positive climate in the sense that the business community believes in the future and invests in its production facilities. Here it is worth mentioning the improved conditions for financing offered by Macedonian commercial banks.

The composition of imports shows that they are equally distributed among groups of products. The biggest share is noticed in the group of "machinery, office and transport equipment" and "fuels", while a reduction in the value of imports is noticed in the groups of "food", "iron and steel", "chemicals" and "other semi-finished products" in the total of imports of the Republic of Macedonia.

The most interesting facts in the trends of the imports in 2008 are the following:

a) The import of machinery, office and transport equipment increased by 40% or 10% less compared to the previous year; all the products in the group achieved an increase.
b) In the group of "fuels", there is an increase of 44%, but it is worth mentioning that this increase is due to the higher import of crude oil (47%), and electricity (37%) in 2008, compared to the previous year.
c) The import of "food" in 2008 went up by 23%; in this group a significant increase is noticed in the cereals and cereal processing of 23%, i.e. barley account for most of the import of this group of products with 300% compared to 2007. Compared to the previous year, the import of rice and wheat flour decreased. The biggest percentage of growth in imports was noticed in the group of tobacco by 45% and animal and vegetable oils and fats by 43%.
d) In 2008 the import of "ore and other minerals" registered an increase of 19.4% compared to the previous year, due to the increase in the import of iron waste and other ores or concentrates of base metals of 66% and 229%, respectively.
e) In 2008, iron and steel rose by 39% compared to the previous year.

c) Structure of exports by country - Macedonian products in 2008 were being exported to markets in Serbia ($934 million), Germany ($563 million), Greece ($535 million), Bulgaria ($376 million) and Italy ($321 million). The share of exports in the aforementioned countries is 68% of the total exports of the Republic of Macedonia. These are the percentages of the exports by country: Serbia - 23.14%, Germany – 14.16%, Greece – 13.45%, Bulgaria - 9.47% and Italy – 8.04%.

Exports to Serbia have been continually growing in the last four years, but in 2008, it reported an enormous growth of $264 million or 46.17% compared to the previous year. The export growth rate to Germany decreased compared to the previous year. In 2007 there was an increase of $108 million compared to 2006, while in 2008 there has been an increase of only $79 million. The export to Greece has been continually growing in the last four years, whereas in 2007 it was by 16.4% higher compared to the previous year, while in 2008 it grew by 27.6% compared to 2007.

If we analyse in more details the Macedonian export in 2008 by export destination, we can notice the following trends:

a) Serbia is the most important importer of Macedonian products in 2008. The 94% higher exports compared to 2007 was made by the "fuels", and 84% by the "mineral raw materials".
b) Exports to Germany make up 14% of total exports, while the value has been increased by 16% compared to 2007. The biggest percentage is achieved by the group of "textile", which this year has reported by 222% higher exports compared to 2007.
c) With Italy we have a negative growth of export of 7%, particularly in the group of "fuels" and "nonferrous" metals which has continued the trend of negative growth since 2007.
d) Croatia, and Bosnia and Herzegovina reported a significant increase of exports compared to 2007, with Croatia accounting for the largest share of 139% ("iron and steel" and "other semi-finished products"), and Bosnia and Herzegovina accounting for the second largest share of 119% ("iron" and steel" and "chemicals").
e) This year has not been favourable in terms of export to certain countries, relative to previous years when we achieved high rates of growth. In 2008 compared to 2007, apart from Italy, negative growth of export was also reported in Thailand (88.89%), USA (78.53%), Spain (55.55%), Turkey (40%) and Belgium (only 38.61%, compared to 2007 when it reported a growth rate of 113%).
f) Macedonian exports tend to concentrate on particular regions, which can be illustrated by the share of the five most important markets which represent 68% of the total exports of the Republic of Macedonia. The five most important destinations accounted for 68% of total exports in 2006, and 69% in 2005.

d) Structure of imports by country - The sources of imports to the Republic of Macedonia in 2008 have not changed in regard to the origin of the import. The most important importing partners to Macedonia are Russia ($930 million), Germany ($635 million), Serbia ($529 million) and Greece ($505 million). If we look at the structure of imports, we can notice that products imported by the Republic of Macedonia from Russia are mostly from the group of "fuels", the share of which is 97% of the total imports from Russia to Macedonia. The imports from Germany consist of machinery, office and transport equipment, whereas the textile and chemicals contribute with 77% of the total imported value from Germany. The import from Serbia to Macedonia is almost equally distributed in all groups of products.

The imports from the ten most important sources are continually growing especially from Russia. In 2007, imports from this country increased by 13% compared to the previous year, and in 2008, compared to 2007, it increased by 17%

If we analyse in more details the Macedonian imports in 2008 by source destination, we can notice the following trends:

a) Although the value is very small, merely $291.44 million, Switzerland reported the greatest rate of growth this year compared to the previous years, i.e. growth of imports of 154.90%.

The "fuels" were most imported group of products, making up 76% of the total value of imported products.

b) This year, all countries reported positive growth of imports, save for Germany and Greece that registered almost the same decrease in the value of imports (20%) compared to the last year.

c) The situation with Serbia is similar, i.e. 58.53% growth in 2007, and 18% growth of imports from this country in 2008.

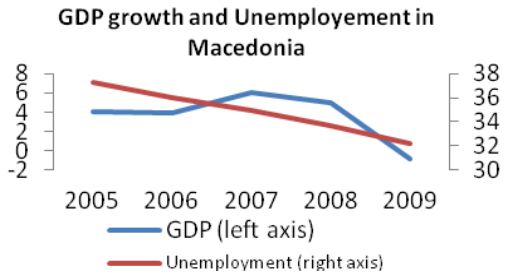
d) Bulgaria, as one of the largest exporters to Macedonia, increased its export growth rate from 6% in 2007 to 20% in 2008.

e) There is an interesting fact about Ukraine, which experienced a negative growth of imports of 2%, and in 2008 it reported a 96% growth compared to 2007. The situation with the Czech Republic is quite opposite. In 2007 compared to 2006, it registered a 95% growth of imports, and a growth of only 0.41% in 2008 compared to 2007 (USAID, Report on Foreign Trade of Macedonia, 2009).

6.4 Modest recession

The adverse effects from the global financial and economic crisis on the domestic economy led to a decline in the domestic economic activity in 2009. The initial effects were evident in the last quarter of 2008, when the annual growth decelerated, and in 2009, when GDP registered an annual decline of 0.8% in real terms. In *Graph 10* are illustrated GDP growth and unemployment rate of Macedonia:

Graph 10: GDP and Unemployment in Macedonia



Thus domestic economy registered a slowdown in the economic activity for the first time since 2002. Negative results were common at the beginning of the year, with the most intensive deceleration of the economy being registered during the third quarter. The first positive annual growths were registered in the last quarter (real growth of the economy of 1.2%). After the significant decline in the exports at the beginning of the year, driven by the fall in the external demand, the remaining part of the year witnessed a significant downward adjustment of the domestic demand. The refrain of the households and the corporate sector due to the high uncertainty, as well as the significantly lower credit support, are some of the factors which explain such trends. On the other hand, the stagnation of the private consumption and decline in investments, combined with the fall in the external demand, caused a significant downward correction of the imports. Thus the contribution of the net-

exports to the economic activity was positive. From a viewpoint of the main sectors of the economy, worse performances compared with the preceding year were registered in the primary and in the secondary sector, entirely driven by the large negative contribution of the industry, partially offset by the increased construction and agricultural activity. The significant negative contribution of the primary and the secondary sector was partially mitigated with the positive contribution of the services sector, driven primarily by the increased value added in the financial intermediation (Petar Goshev: "The crisis, its impact and future challenges", 2009). In *Table 13* are presented selected macroeconomic indicators for the country:

Table 13: Selected economic indicators for Macedonia

Selected indicators for Macedonia	**2007**	**2008**	**2009**
Population (000)	2.050	2.060	2.060
GDP per capita (USD)	3.866	4.785	4.501
Real GDP growth (% yr/yr)	6.1	5.0	-0.9
Inflation (HICP; %, eop)	6.7	4.1	-1.6
Fiscal balance (% of GDP)	0.6	-0.9	-2.6
Public debt/GDP	28.0	24.0	27.0
Current account balance (% of GDP)	-7.6	-12.4	-7.0
Gross external debt/GDP (%)	52.5	47.6	59.3
Debt-service ratio (%)	9.6	9.1	12.8
Foreign reserves (EUR mn)	1.524	1.495	1.598
Import coverage (months)	4.3	3.1	4.2

Sources: Euler Hermes Group, IMF and Central Bank of Macedonia

Compared with the countries of the region, the Macedonian economy has experienced a relatively small contraction of the economic activity. For one part, this could be explained with the weak international financial integration, due to which there was no sudden termination of the external financial support for the economy. This was not the case with other economies, in which the fast growth before the crisis was supported with high capital inflows. Their decline during the crisis caused a significant economic contraction. At the same time, the labour market developments, as well as the significant downward correction of the import demand, also explain the slower decline of the Macedonian economy. Also, despite the significant fall in the external demand and exports, the inertia in the concluded contracts in the period before the crisis mitigated the deceleration of the activity of some of the exporters. From a viewpoint of individual country, the Turkish economy was hit most severely with real GDP fall of 8.6% in the first three quarters of 2009, followed by Romania (-7.0%), Croatia (-6.2%), Bulgaria (-4.6%), Montenegro (-4.0%) and Serbia (-3.6%). Positive results in the countries of the region were registered only in Albania (GDP growth of 4.9%), which is largely explained by the heavy government investments in infrastructural projects (NBRM, Annual report 2009).

a) Domestic supply - The effects from the global recession were gradually transmitted to the domestic economy in 2009. Thus, the third quarter registered the sharpest fall in the domestic economic activity since the beginning of the global financial and economic crisis, of 1.8% (in the preceding two quarters, the real GDP fall was 0.9% and 1.4%). However, the last quarter

of 2009 witnessed the first signs of recovery of the domestic economy, when the real GDP growth was 1.2%, whereby the average annual decline of the economy for the entire 2009 was 0.8%. The deceleration of the economic activity in 2009 was a result of the lower domestic and export demand. Depreciated demand had transmission effects on the activity of several branches, reducing the new supply in the economy. The analysis by branch indicates that the industry registered the fastest decline (9.4%) and has dominant contribution to the total deceleration of the economy. Permanent negative results were also registered in "hotels and restaurants" (a decline of 4.8%) and in "transport and communications" (a decline of 4.6%). On the other hand, the other activities registered positive results, with more significant growth being registered in the construction activity (9.6%) and in financial intermediation of 7.1% (however, this growth is lower compared with the growth of 8.7% in 2008).

The insufficient utilization of the capacities in the export-oriented branches, supplemented by the fall in the activity due to the lower domestic demand, caused a decline in the value added in industry of 9.4% in 2009. The low base effect in the last quarter of 2008, when the first more serious effects of the global crisis emerged in this segment, resulted in an annual rise of the value added in industry of 3.5% in the fourth quarter of 2009. Such a growth in the last quarter of 2009 mitigated the cumulative annual decline in the industrial output, which equalled 7.7% for the entire 2009. The results accomplished in 2009 are any way better than the results of the countries in the region. Croatia, Turkey, Serbia and Montenegro registered annual rates of decline of 9.2%, 9.6%, 12.1% and 32.2%, while only Albania had a lower decline in the industrial output (in the first three quarters the decline in industry equalled 6.3%). In 2009, decline in industry was registered in 21 out of 24 branches, accounting for 81.4% of the index. The decline in the production of basic metals had the largest continuous influence on the decline in the industrial output in 2009, with contribution of 5.7p.p. The decline in the total index was supported also by the reduced production of the textile industry, products of other non-metal minerals, electrical machinery and apparatus, as well as manufacture of chemicals and chemical products. From among the branches that registered positive results, more significant were the positive results in the manufacture of fabricated metal products, as well as in printing (partially due to the local and presidential elections). Also, positive contribution was that of the production of electricity, due to the improved hydro conditions in the country, as a result of the favourable weather conditions.

The deterioration in industry is indicated by the results of the Survey on Business Tendencies in Manufacturing of the State Statistical Office. The observations of the managers from the manufacturing industry confirm the condition in industry during 2009, and according to them the business condition of the companies has been continuously deteriorating since the beginning of 2009. Most emphasized restrictive factors for the manufacturing are the lower external and domestic demand, uncertain economic environment and lack of finances.

The annual fall in the production of basic metals in 2009 was 42.1%, given the lower prices of metals and lower external demand. Analysed from a viewpoint of the dynamics, it is evident that the decline which started in August 2008 continued without interruption until the third

quarter of 2009. The positive production in the last quarter of 2009 with annual growth of 13.4% is a result of the low base effects in the same period of the preceding year, but also of the recovery of the world metals market since August, 2009. Significant deterioration was registered also in the textile industry (branch employing the largest number of workers), where the volume of production in 2009 registered an annual decline of 14.8%, the exports fell by 11.0%, and the number of employees dropped by 9.7%. However, the annual rates of decline of the textile production registered in the second half of 2009 are much lower compared with those registered since the beginning of the year.

Value added in trade (second most important activity in the economy, according to the share in GDP creation) during 2009, went up by 1.5% in real terms, given a minimum increase in private consumption of 0.2%. At the same time, the number of employees in this sector increased by 11.8%, compared with the preceding year. However, the assessment of the growth of the trade activity is consistent neither with the real decline in the VAT revenues (by 8.6%), nor with the real decline in the total trade turnover (by 9.1%). Such trends do not correspond either with the assessments of the managers of the trading entities, which describe the business situation in 2009 as worse compared with 2008, emphasizing lower demand, higher financial costs and difficult access to credits as the most important restrictive factors.

The accelerated activity in the construction during 2009 largely contributed to the mitigation of the GDP decline. Thus, in this period, construction activity increased by 9.6%, with remarkable acceleration in the second quarter of 2009, which corresponds with the growth in the capital investments in this quarter (by 7.1%). Observed by construction buildings, fast growth was registered in hydro construction and in building of 98.6% and 29.6%, respectively, while the number of completed residential buildings and civil engineering works is lower compared with 2008. However, managers of construction companies assess the business condition in 2009 to be worse than in the previous year, and they emphasize the insufficient demand as the most serious restrictive factor.

Beside construction, the agricultural sector has also made a positive contribution. Its increased production in 2009 acted toward mitigation of the decline in GDP. The annual growth of the value added in agriculture of 5.7% in 2008, continued in 2009 at a growth rate of 4.0%. The production of industrial plants, viticulture and livestock breeding had the largest contribution to the growth of the agricultural output. Along with the favourable weather conditions, important factor for the growing activity in the agriculture were the continuous government subsidies, which contributed to the stimulation of the production.

Value added in the sector comprising financial intermediation, real estate and other business activities, as well as other services, registered a real growth rate of 7.1%, which is a moderate deceleration of the growth intensity compared with the growth registered in 2008 (8.7%). The increased value added in this sector had the most important positive contribution to the creation of GDP during 2009. The developments in financial intermediation, covering around one third of this sector, partially reflect the growth of banks' net-interest income, which went

up by 17.5% in nominal terms in 2009, and which is also slower compared with the growth registered in the preceding year (20.3%). On the other hand, the activity in the sector transport, storage and communication was mainly heading in the same direction as industry, and in 2009, it registered an annual decline of 4.6%. Such a decline is mostly a result of the significantly lower transport of goods, while the activity in the telecommunications sector continued to grow also in 2009.

b) Domestic demand - Deteriorated expectations of domestic entities for decelerated activity and lower possibilities for financing, amid a decline in the global economic activity, caused a decline in the domestic aggregate demand. The structural analysis of the GDP decline of 0.7% in 2009 indicates negative contribution of the domestic demand given the simultaneously positive contribution of the net exports. Such changes indicate a modification in the structure of growth in 2009, compared with the preceding five years, when the domestic demand continuously moved within the zone of positive contribution.

The analysis of the dynamics indicates the existence of two sub-periods. The first one refers to the first quarter of the year, when the main factor of the decline in the economy was the fall in the export demand, led by the depreciated external demand, while the domestic demand still had positive contribution. In conditions of high degree of trade integration, the initial effects of the crisis were felt through the exports channel, which in the first quarter of 2009 registered a relatively high rate of decline. The second sub-period pertains to the remaining part of the year, when a significant downward adjustment of the domestic component of the demand was registered (although in the last quarter also the private and investment consumption grew minimally). Households refrained from consumption in conditions of negative expectations about the future growth of the income and employment, and simultaneously, deteriorated conditions for additional financing had a significant effect. The new investments of the corporate sector also registered a decline, reflecting the continuous fall of the domestic and foreign demand, deteriorated terms of financing, as well as the uncertainty about the pace of recovery of the global economy. In such circumstances, a significant decline in the imports was registered, whereby the contribution of the net-exports to the change in GDP in this period was positive.

After the high growth rates in the past two years, in 2009 private consumption was relatively stable, despite the unfavourable economic environment and high uncertainty (minimal real annual growth of 0.2%). Having in mind the growth in disposable income in 2009, the unfavourable future expectations of the households and the lower possibility for new borrowing, are factors which mainly drove the deceleration in the growth of private consumption. Thus the data on individual components of the disposable income point to its significant annual growth in 2009. The wage bill registered a high real growth rate of 14.6%, given a real annual growth of the net-wage of 10.8% and growth in employment of 3.4%. Also, during 2009, pensions registered a relatively high real growth rate of 9.6%, and positive annual dynamics was registered also in private transfers (real growth of 20.7%). Despite the growth in disposable funds, propensity to consume was relatively low, especially in the

second quarter of the year, reflecting the unfavourable perceptions of households. The negative expectations were heavily influenced by the uncertainty regarding the duration of the global economic crisis and its effects on the domestic economy, i.e. job security and sources of financing in the future. However, the negative developments were interrupted in the last quarter of the year, when real annual growth rate of private consumption of 1.5% was registered, as a combined effect of the continuous growth of the disposable income and more stable perceptions of the households (due to the commenced recovery of the global economy and unrealized previous expectations regarding employment and income).

The narrowing of the new credit supply acted toward deceleration of the growth of private consumption. The real average annual growth rate of household credits dropped down to 13.5%, as opposed to the average growth of 46% in the 2004-2008 period. Also, in 2009, the share of household credits in GDP at the end of the period (in nominal amounts) equalled 17.4% and it is almost the same as in 2008, when it equalled 17.3%. This indicates an interruption in the trend of growth of financial intermediation of this segment, having in mind that in the 2007-2008 period the average increase of this indicator was 3.4 percentage points p.a. Such developments in 2009 were caused by banks' perceptions about the growing risks and slower growth of the sources of financing, which resulted in an increase in the interest rates and tightening of the lending terms. At the same time, households' demand for credits declines, amid the uncertainty about the future and possibly higher costs of financing.

After the growth in the previous year, investments registered a significant annual decline of 9.2% in real terms, thus giving the largest individual contribution to the GDP decline. The slower investment activity corresponds with the generally unfavourable environment for taking serious decisions on new investments throughout most of the year. Main feature of the investment activity environment was the extremely high uncertainty and the impossibility to assess the duration of the effects from the adverse shock in the second and in the third quarters of the year. Especially emphasized were the risks regarding the perspectives of the already significantly lower demand and the possibilities for maintaining or expanding the markets, access to financing, as well as regarding the future capital cost. Also, the fall in investments is partially explained by the relatively high base effect in 2008. From a viewpoint of the dynamics, after the relatively fast growth in the first quarter, investments registered high rates of decline in the second and in the third quarters of the year. The largest part of the fall in the investments could be explained by the significantly lower inflows through foreign direct investments (annual decline in real terms of 59.2%), as a result of the lower global liquidity and growing risk aversion of investors. The more difficult access to financing through bank credits is also a factor which contributed to the decline in the investment activity. Thus, the growth rate of long-term corporate credits was twice lower than the one registered in 2008 (13.4%, as opposed to 25.9%), creating additional adverse effect on investments. Also, a decline was registered in government capital investments with annual growth in real terms of 14.6%. However, after the first positive signs of lower global uncertainty, in the fourth quarter investments registered a moderate annual increment of 0.3%, which is partially explained also with the low base effect from the preceding year.

Unlike the previous two years, government spending in 2009 was more moderate. In conditions of a nominal growth of 6.7%, in 2009, public consumption registered an annual decline in real terms of 4.7%. Lower public consumption in 2009, could be partially explained with the lower realization of revenues, which resulted in a downward revision of the total expenditures twice during the year, in order to remain within the framework of the projected deficit of 2.8% of GDP. The dynamics of public consumption was uneven during the year. Thus, after the neutral effect for the growth in the first three quarters (real growth of 0.2%), in the last quarter of the year the public consumption had a significant negative contribution, with an annual decline in real terms of 16.6% (given the high base effect from the previous year).

Despite the decline in the exports, the more significant downward correction of the import demand enabled the net exports in 2009 to have positive contribution to the overall GDP growth. The largest decline in the exports was registered in the first quarter of the year, as a result of the lower external demand, as well as the decline in the prices of our main export products. The continuity of such trends and the uncertainty regarding the intensity and the duration of recovery of the global economy, were the main factors for continuation of the decline in the exports also in the other part of the year, although with relatively smaller intensity, especially in the last quarter. As a result of such developments, the real decline in the exports in 2009 equalled 8.2%. On the other hand, the downward adjustment of the imports occurred with certain time lag, primarily due to the effect of a relatively more resilient private and investment demand at the beginning of the year. However, the downward adjustment of all components of the domestic demand, combined with the decline in the imports due to the reduced export demand, caused a significant decline also in the imports starting from the second quarter, so that for the entire year the decline in the imports in real terms was 10.7%. Similarly as in the exports, the rate of decline in the imports in the last quarter was relatively lower, as a reflection of the positive developments in both the private and investment demand and lower decline in the exports (NBRM – Quarterly report, July 2009).

6.5 Solutions for overcoming the challenges facing the Republic of Macedonia

Having in mind the mentioned effects the global economic crisis is having on the domestic economy, the primary challenges facing economic policy decision makers are:

a) how to alleviate the effects of the crisis without disrupting market principles, while at the same time helping with long term measures that will improve the competitiveness of the domestic economy, and
b) how to finance the domestic economy, in circumstances of reduced domestic demand and reduced economic activity as a result of reduced external consumption.

The approach which promises the most appropriate solutions is cooperation between economic policy decision makers, experts and the business community. Based on the already established dialogue with the business community, from the end of 2008 up to the third quarter of 2009 three packages of so called anti-crisis measures have been implemented.

The first package of anti-crisis measures (November 2008) was comprised of 10 measures aimed at relieving the economy, valued at 300 million [euro]. These measures were directed at improving the liquidity of companies by eliminating certain income taxes (companies do not pay income tax if they do not distribute it to owners of the companies, which means this money remains as operational funds for the companies); the writing off of interest payments due to unpaid personal income tax, income tax and real estate tax, payments for pension insurance of the most vulnerable categories of labor intensive companies; reprogramming of tax obligations, more precisely those companies that are experiencing difficulties in their work will be able to pay their tax in installments up to three years. Furthermore, among the first package of anti-crisis measures are also measures that were implemented at the request of companies-customs breaks for importing equipment, raw materials and repro-material intended for production. This lifted customs for approximately 500 tariff items.

The second package of anti-crisis measures (March 2009) promoted an investment program with infrastructure projects in energy, transport, environmental protection, education and culture. Total investments amounted to 8 billion [euro] which will be realized over the next 6-8 years with state investments, private investments or public-private partnerships. The goal is to more easily overcome the global crisis in the coming period and to continue the investment cycle, and with that to alleviate the effects of reduced external demand on the domestic economy.

The third package of anti-crisis measures (May 2009) encompasses 70 measures which refer to three segments: first the rebalancing of the 2009 Budget; second credit support for companies; and third other measures aimed at reducing barriers and costs of doing business by companies.

The rebalancing of the 2009 Budget was aimed at reducing expenditures in order to adapt to reduced income, which would save money that will be used to maintain the macro-economic stability of the country and maintain a stable exchange rate for the denar. The need for a rebalance is because of the creation of a fiscal policy, which through increased productive investments, which also include public investments, is aimed at efficiently stimulating the expected slowing of economic activity caused by the crisis.

As far as credit support for companies is concerned, a package of measures for direct support of the private sector was adopted, through a credit line from the European Investment Bank (100 million [euro]). The money is earmarked for support of small and medium size companies, which employ the largest percentage of workers in the Republic of Macedonia (approximately 90% of all employed in industry). The support will be realized through the

Macedonian bank for development promotion (100 million [euro]) and the commercial banks (100 million [euro]). Macedonian Bank for Development Promotion will participate with subventions for interest payments for small and medium size companies (interest rates will be approximately 6%, which is less than the current market interest rate of 12%), and in subventions for the guarantees that the commercial banks are asking from companies for extending credit lines to them, as well as for extending guarantees from the Macedonian bank for development promotion for Macedonian companies trying to enter foreign markets.

The other measures for supporting companies, through a reduction of barriers and costs of doing business in the Republic of Macedonia are part of a mosaic of greater measures. More precisely, this package of measures refers to measures to simplify customs procedures and speed up the flow of goods through the border. The second phase of the project Regulatory guillotine is under way. The successful implementation of the first phase contributed to a reduction of bureaucracy, expenses that companies make to receive permits, confirmations, approvals and other administrative services, which burden every day work.

Besides the three packages of anti-crisis measures – aimed at securing macroeconomic stability, sustaining domestic financial liquidity and stability of the exchange rates in circumstances in which trade deficits have increased and reduced FDIs, - the need appeared for additional external financing of the domestic economy in order to compensate for reduced external demand. This is especially important for our macro-economic stability, especially because of the policy of the monetary authorities to maintain a stable exchange rate, when foreign financing will directly influence the reduction of interest rates and increase foreign currency reserves. Having these arguments in mind, the Republic of Macedonia issued Eurobonds in the amount of 175 million [euro].

Macro-economic developments in the first three quarters of 2009 indicate that macro-economic stability has been maintained, in the sense of stable prices and a stable exchange rate, which for a small and open economy is of exceptional importance in creating a favorable business climate. In the long run this creates conditions to attract more investments, which with new technology and know-how will make the domestic economy more competitive on the world markets.

There will be additional positive effects if certain optimistic scenarios come to light, such as the positive signals concerning the overcoming of the crisis, according to announcements from developed countries – the USA, EU member states, Hong Kong, China and other Asian countries. This will initiate greater optimism in the developed economies, and with a certain delay this will impact our economy in the direction of realizing greater growth and securing better conditions for economic development.

Along with the continuing dialogue with the business community and the monitoring of current economic developments, further measures are being prepared, such as new rebalancing of the Budget, new reductions and elimination of customs duties for repro-

material and equipment for production, as well as other forms of support for companies based on market principles and the functioning of an open economy.

Despite the challenges we are facing due to the effects of the global economic crisis, we still have to solve the chronic transition problems, more precisely the several year long trade deficit and unemployment. At the same time the main challenge remains – how to increase the competitiveness of the domestic economy so that it can handle global competition, which is especially important for a small and open economy. The goals of our economic, industrial and trade policy is to create a horizontal frame (according to the Lisbon convention), which has to link the constant improvement of the business climate, attract investments and increase innovation in science. This will influence the creation of a new structure of import and export, constant economic growth and improve the living standard (Fatmir Besimi – Minister of Economy of RM, 2009).

CONCLUSIONS

In the last decades, countries around the world have become more economically integrated, driven by the potential benefits of economic globalization. One of the main benefits of economic globalization is the development of the financial sector. Financial markets become deeper and more sophisticated when they integrate with world markets, increasing the financial alternatives for borrowers and investors. Financial markets operating in a global environment enable international risk diversification and facilitate consumption smoothing. Although financial globalization has several potential benefits, it also poses new challenges. The crises of the 1990s, after many countries liberalized their financial system, have questioned in part the gains of globalization. Countries become exposed to external shocks and crises not only generated in their own country but also from contagion effects. In the initial stages of liberalization, if the right infrastructure is not in place or put in place, financial liberalization can lead to increased risks. Moreover, in a financially integrated economy, policymakers have fewer policy instruments to conduct economic policy (IMF – Making the global economy work for all, 2009).
It is clear that in good times, globalization brings benefits for emerging economies. But, in time of crises, if wrong policy choices are made, the consequences can be disastrous. In the current crisis we saw that a lot of emerging economies fell in deep trouble. But this certainly does not mean that globalization is bad. It simply means that the ways of practicing it, should be determined prudently. The recent experiences with financial globalization yield some useful lessons for policymaking (Schmukler: "Financial globalization", 2004).

a) Importance of sound fundamentals and strong institutions. Sound macroeconomic and financial fundamentals are key in lowering the probability of crises and contagion and in enabling more effective management of crises. Preventing currency and banking crises should be one of the primary objectives of any policymaker because of the high cost of crises. This objective is more important in a world of free capital mobility because both foreign and domestic investors exercise market discipline and because foreign crises might have

contagion effects at home. Attacks on currencies can occur whenever confidence is lost even if a country has sound fundamentals. A crisis in a foreign country can rapidly trigger a crisis at home. Weak fundamentals tend to scare investors more easily and make crisis management more difficult. Countries with bad fundamentals – for example, with large fiscal deficits and public debt – have fewer instruments to use in the midst of a crisis. Therefore, countries should focus on key policies that help them prevent and manage crises. These policies include avoiding large current account deficits financed through short-term private capital inflows and large asset-liability currency mismatches.

Improving the contractual and regulatory environment is also important. Better institutions make an emerging country more fit to join in the financial globalization process. In particular, they increase the capacity of the domestic financial system to intermediate prudently large international capital flows. Also, improvements in the contractual and regulatory framework can enhance the access of resident corporations (at least in the case of larger countries and for the larger corporations) to financial services supplied abroad.

b) Initial conditions matter. Measures to isolate countries (such as capital controls) are unlikely to work on a long run. When there were attempts to isolate partially open economies, investors have tended to find ways to avoid the restrictions over time.

The initial conditions matter, the effectiveness of policies relies on the degree of integration with world markets. Countries with a very low degree of integration with world capital markets and with underdeveloped financial markets are more able to delay or reverse the process of financial globalization than countries already partially integrated. A country with a low level of integration should ensure that its financial sector is prepared to cope with open capital markets. If the domestic financial sector does not manage risk properly, does not have sufficient reserves and capital, or does not have the right incentives, large capital inflows and outflows can create severe problems in the domestic financial sector. However, it is not the case that all the conditions need to be met before governments liberalize the financial sector. As the discussion on sequencing shows, the process of integration itself can in some ways help improve the conditions of the domestic financial sector.

When countries develop, more comprehensive policies for risk management will be needed. These measures should try to avoid imperfections in capital markets and the buildup of vulnerabilities. In more open economies, the distinction between foreign and domestic capital becomes increasingly difficult. As the economy becomes integrated with the rest of the world, restraints to capital movements are more difficult to make effective since they can be circumvented easily. Therefore, a more comprehensive approach will be needed to build solid financial economies. This approach involves proper regulation and supervision of the financial system.

c) Need for international financial cooperation. As economies become more integrated, governments have fewer policy instruments and have to rely more on international financial

policies. For example, governments tend to have fewer options about their monetary policy and exchange rate policy. In open economies there is a higher transmission of international interest rates and prices to the domestic economy. Moreover, bank regulation and supervision by one government is more difficult when liabilities and prices are denominated in foreign currency and when the banking sector is part of an international banking system. Also, in the midst of contagious crises, governments tend to lack sufficient resources to stop a currency attack, and individual governments can do little to stop crises being originated in foreign countries. In these cases, international financial coordination can help individual governments achieve their goals.

There are different policies in which there is scope for cooperation. One policy is the timely mobilization of external liquidity of sufficient magnitude to reverse market expectations in a context of sound policies. That liquidity usually comes from the international financial institutions. Given the magnitude of capital flows and the clustering of crises, isolated actions of individual governments or institutions are not sufficient to gain the required confidence. A coordinated action among governments and the international financial institutions is necessary to overcome crises and contagion at both regional and global levels. To minimize potential moral hazard, it would be necessary to involve the private sector so that private international investors share in the costs as a penalty for excessive risk taking.

Another policy that requires international coordination is to build a strong "international financial architecture" to prevent and manage, in a systemic way, financial crises. Even though there are different meanings of the architecture, in general terms it refers to international arrangements for mutual consultation, monitoring/surveillance, and collaboration covering a broad range of subjects of economic policy and possible financing in the event of crises. The international financial architecture is still under construction. The initiatives under consideration focus on crisis prevention, crisis management, and crisis resolution. The current initiatives include setting international standards for transparency and information dissemination, bank supervision and regulation, disclosure in securities markets, accounting and auditing rules, bankruptcy procedures, and corporate governance. The new initiatives also include private sector involvement in financing packages to complement IMF resources and to discourage moral hazard that could be associated with bailouts.

d) Main challenge – integrate all countries, sectors, and firms. One of the main challenges of financial globalization is to integrate all sectors and countries that do not participate in the globalization process. Financial globalization can bring about many positive benefits. But not all countries, sectors or firms have access to global financial markets and services or can take advantage of the benefits included by globalization. Among developing nations, only some countries, particularly middle-income countries, receive foreign capital. Within each country, investment is concentrated in certain sectors. Selected companies can obtain foreign funds. The lack of participation in the financial globalization process might put countries, sectors, and companies in disadvantageous positions. There is no easy solution on how to integrate them. Future research might shed light on how some countries, sectors, and companies are

benefiting from financial globalization while others are being left behind. Furthermore, future research might shed light on how all countries, sectors, and companies might take advantage of the possibilities offered by financial globalization.

Regarding Republic of Macedonia, we can say that as a small and open economy, the effects of the global economic crisis were felt with a certain delay. The impact was primarily in the real sector, through the foreign-trade exchange, as a consequence of which we noticed a drop in industrial production, an increased trade deficit and reduced FDIs. This in turn reflected itself in reduced budget income, reduced financial liquidity and increased interest rates.

Eliminating certain taxes, reducing customs duties for raw materials and machines, the investment program in infrastructure, the rebalancing of the Budget, foreign credit lines (in order not to reduce domestic demand), as well as the securing of funding for the Macedonian Bank for Development Promotion in order to secure less expensive credits for small and medium size companies, were part of the measures which the Government undertook to alleviate the consequences of the crisis.

At the same time, attention was paid to make sure that the measures would have an effect in reducing the consequences of the crisis but at the same time that they are market oriented so that on a long run they would increase the competitiveness of the domestic economy.

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APPENDICES:

APPENDIX A:

Economic openness indicators

	FBANKS	
		2005-2009
1	Estonia	84%
2	Poland	84%
3	Peru	83%
4	Romania	81%
5	Bulgaria	72%
6	Mauritius	71%
7	Czech R.	71%
8	Hungary	67%
9	Slovak R.	61%
10	**Macedonia**	60%
11	Latvia	54%
12	Mexico	48%
13	Morocco	45%
14	Turkey	44%
15	Chile	41%
16	Lithuania	41%
17	Indonesia	41%
18	Egypt	41%
19	Brazil	37%
20	Argentina	33%
21	Jordan	30%
22	Malaysia	30%
23	Colombia	25%
24	Thailand	24%
25	Pakistan	23%
26	South Africa	16%
27	Philipiness	14%
28	China	10%
29	India	10%
30	Russia	7%
31	Oman	0%
32	Sri Lanka	0%

	CAPFLOW	
		2005-2009
1	Estonia	89.45
2	Latvia	35.84
3	Bulgaria	34.23
4	Lithuania	29.11
5	Hungary	25.95
6	Kuwait	24.02
7	Malaysia	23.99
8	Czech Republic	22.07
9	Jordan	20.66
10	Chile	19.76
11	Russian Federation	19.59
12	Philippines	17.93
13	Romania	16.66
14	Egypt, Arab Rep.	16.32
15	Colombia	16.20
16	Turkey	14.79
17	Poland	13.56
18	Mauritius	13.02
19	Thailand	12.59
20	**Macedonia**	11.85
21	China	10.88
22	South Africa	10.53
23	Peru	10.44
24	Argentina	9.08
25	Morocco	8.40
26	Mexico	7.69
27	Indonesia	7.18
28	Sri Lanka	5.84
29	Brazil	5.36
30	Pakistan	4.25

	KAOPEN	
		2005-2009
1	Latvia	2.47762
2	Estonia	2.47762
3	Hungary	2.47762
4	Czech R.	2.47762
5	UAE	2.47762
6	Peru	2.47762
7	Jordan	2.47762
8	Oman	2.47762
9	Qatar	2.47762
10	Mauritius	2.42443
11	Egypt	2.42443
12	Lithuania	2.31806
13	Romania	2.31806
14	Chile	2.31806
15	Bahrain	2.26487
16	Bulgaria	1.85883
17	Slovak R.	1.26738
18	Mexico	1.14797
19	Kuwait	1.14797
20	Indonesia	1.14797
21	Brazil	0.38119
22	Malaysia	0.1516
23	Colombia	0.1516
24	**Macedonia**	0.09729
25	Philipiness	0.09729
26	Poland	0.09729
27	Sri Lanka	0.09729
28	Russia	−0.0443
29	Thailand	−0.51776
30	Turkey	−0.64998
31	Argentina	−0.65397
32	South Africa	−1.14817
33	Pakistan	−1.14817
34	Morocco	−1.14817
35	India	−1.14817
36	China	−1.14817

	INVFREE	
		2005-2009
1	Estonia	90
2	Hungary	74
3	Chile	74
4	Latvia	70
5	Lithuania	70
6	Slovak R.	70
7	Czech R.	70
8	Mauritius	68
9	Morocco	66
10	Bulgaria	60
11	Peru	58
12	Colombia	54
13	Poland	54
14	Jordan	54
15	Bahrain	54
16	Oman	54
17	Romania	50
18	Mexico	50
19	Turkey	50
20	South Africa	50
21	**Macedonia**	50
22	Brazil	50
23	Argentina	50
24	Egypt	50
25	Kuwait	46
26	Pakistan	42
27	India	42
28	Malaysia	36
29	UAE	34
30	Philipiness	32
31	Sri Lanka	32
32	Qatar	32
33	Russia	30
34	Thailand	30
35	Indonesia	30
36	China	30

Continues

Continued

APPENDIX A:

Economic openness indicators

	TRADEOPEN	2005-2009
1	Malaysia	195.2
2	Slovak R.	175
3	Bahrain	170.25
4	UAE	158
5	Estonia	156.4
6	Hungary	152.5
7	Czech R.	145.6
8	Thailand	141.2
9	Jordan	134.2
10	Lithuania	126
11	Mauritius	123.6
12	Bulgaria	123.2
13	**Macedonia**	118.4
14	Latvia	101.6
15	Kuwait	91.5
16	Oman	90.5
17	Qatar	89.8
18	Philipiness	83.2
19	Poland	80.8
20	Chile	76.8
21	Morocco	76.2
22	Romania	73.4
23	Sri Lanka	65.2
24	Egypt	63.8
25	China	63.8
26	South Africa	62.2
27	Mexico	57.4
28	Indonesia	56
29	Russia	53
30	Turkey	49.4
31	Peru	48
32	India	45.6
33	Argentina	43
34	Colombia	37
35	Pakistan	33.8
36	Brazil	25.4

	TRADEFREE	2005-2009
1	Estonia	85.12
2	Lithuania	84.96
3	Latvia	84.16
4	Poland	84
5	Czech R.	83.52
6	Slovak R.	82.72
7	Turkey	82.28
8	Hungary	82.16
9	Chile	81.44
10	Philipiness	79.28
11	Romania	78.92
12	Kuwait	78.84
13	Bulgaria	78.08
14	UAE	77.64
15	Malaysia	76.72
16	Oman	76.08
17	Qatar	76
18	Bahrain	75.92
19	South Africa	75.68
20	Indonesia	75.04
21	**Macedonia**	74.92
22	Mexico	73.88
23	Thailand	72.2
24	Sri Lanka	72.04
25	Mauritius	71.96
26	Jordan	70.48
27	Peru	70.48
28	Brazil	69.28
29	Colombia	69.04
30	China	66.4
31	Argentina	64.92
32	Pakistan	61.6
33	Egypt	60.48
34	Russia	58.68
35	Morocco	51.08
36	India	43.04

APPENDIX B:

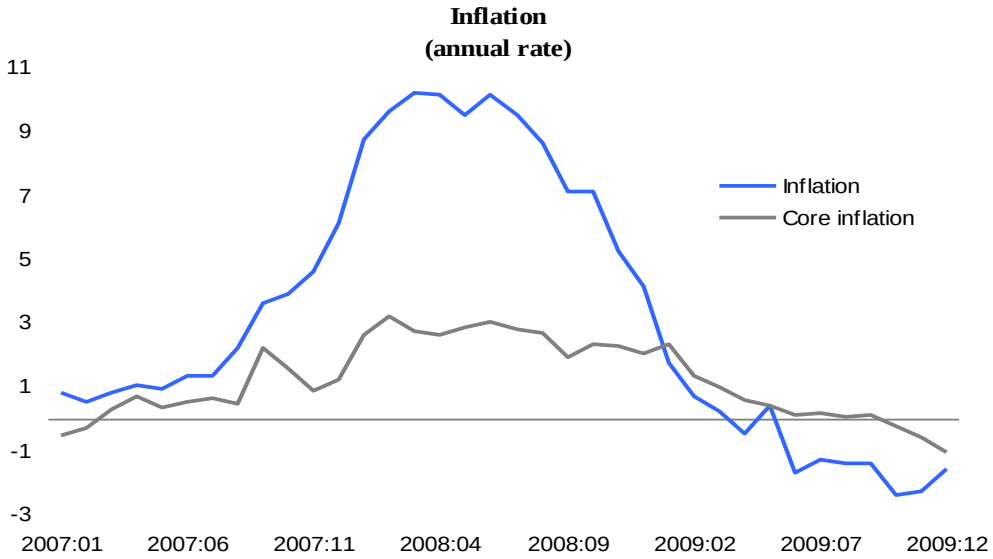
Gross domestic product of Macedonia – annual growth rates

National classification of activities	**GDP total**	Agriculture, hunting, forestry and fishing	Mining and quarrying, manufacturing and electricity, gas and water supply	Construction	Wholesale and retail sales	Hotels and restaurants	Transport, storage and communications	Financial intermediation	Public administration and defence
2005 Q1	3.0	1.2	0.6	-4.1	2.7	-1.3	10.7	-2.9	3.7
Q2	5.1	0.7	8.7	-3.3	5.0	3.2	11.8	-2.4	3.4
Q3	4.2	-0.1	1.8	3.0	5.4	3.2	12.4	-1.9	5.1
Q4	4.0	-1.0	0.0	6.0	5.4	0.1	7.1	-0.3	6.5
2006 Q1	6.7	2.4	-0.8	36.2	23.9	6.3	18.7	4.8	2.4
Q2	3.4	8.5	0.7	29.8	-0.7	8.8	8.5	9.5	1.3
Q3	4.8	6.7	5.6	8.3	10.0	7.6	6.1	11.2	2.0
Q4	1.1	2.4	3.5	-10.3	-1.1	7.2	9.8	12.1	3.3
2007 Q1	5.5	7.2	16.0	-3.5	-1.8	4.5	4.2	6.7	1.6
Q2	4.2	1.0	3.9	-0.5	9.5	16.3	5.4	6.0	2.5
Q3	5.2	-5.1	6.3	5.6	7.5	13.9	6.3	9.9	2.6
Q4	8.3	-8.8	9.4	11.5	10.3	7.5	17.1	11.0	2.9
2008 Q1	6.4	1.4	7.7	-5.3	3.3	14.5	14.1	11.8	3.9
Q2	7.9	7.0	10.9	-3.6	2.7	3.2	21.0	13.2	4.0
Q3	6.4	13.0	11.0	-8.9	-0.6	4.6	11.5	7.9	4.8
Q4	1.2	1.9	-7.5	4.1	-2.2	3.5	2.5	5.6	5.1
2009 Q1	-0.9	2.9	-13.4	9.2	1.3	-4.5	-3.6	9.2	3.3
Q2	-1.4	4.3	-13.7	14.4	0.3	-6.4	-8.4	5.3	4.5
Q3	-1.8	4.9	-13.4	7.5	2.1	-4.1	-2.3	8.2	3.5
Q4	1.2	3.7	3.5	7.4	2.4	-4.1	-3.8	5.9	3.3

Source: NBRM

APPENDIX C:

Inflation and core inflation in Macedonia (excluding food and energy) – annual rates



Source: Stopanska Banka AD Skopje

APPENDIX D:

Industrial production in Macedonia – annual growth rates

		2005/2006	2006/2007	2007/2006	2008/2007	2009/2008
Total	**100**	**7**	**2,5**	**3,7**	**5,5**	**-7,7**
Energy	**18,26**	**4,6**	**1,5**	**-6,9**	**-0,1**	**2,5**
Intermediate goods industries, except energy	**34,08**	**14,2**	**7,3**	**12,9**	**7,7**	**-14,3**
Capital goods industries	**5,14**	**-3,2**	**8,2**	**19,7**	**-1,3**	**-24,5**
Durable consumer goods industries	**2,24**	**-14,9**	**-5**	**8,8**	**64,2**	**-20,7**
Non-durable consumer goods industries	**40,28**	**3,8**	**-2,2**	**-2**	**4**	**-1,4**
MINING AND QUARRYING	**3,85**	**40,4**	**28**	**9,8**	**9,9**	**-12,3**
Mining of coal and lignite; extraction of peat	1,6	-3,5	-3,3	-1,3	16,7	-3,6
Mining of metal ores	0,73	-100	47	68,9	24,8	-4,7
Other mining and quarrying	1,53	3,1	21,9	-8,1	-8,5	-31
MANUFACTURING	**83,94**	**7,3**	**2,4**	**5,2**	**6,3**	**-9,3**
Manufacture of food products and beverages	16,05	4	0,1	7,7	7,6	-2,1
Manufacture of tobacco products	5,71	2	5,5	-0,8	1,9	-3,2
Manufacture of textiles	1,72	0,4	6,7	-7,3	1,6	-32,6
Manufacture of wearing apparel; dressing and dyeing of fur	11,07	4,3	-3,7	-14,5	-20,4	-11,7
Tanning and dressing of leather; manufacture of luggage, han	1,52	-13,7	-11,7	0,5	-8,6	-2,9
Manufacture of wood and of products of wood and cork, excep	1,21	-20,6	-33,5	0,1	-23,5	-41,6
Manufacture of pulp, paper and paper products	1,12	8,4	5,5	1,1	-5,2	-6,2
Publishing, printing and reproduction of recorded media	3,12	-3,3	-17,9	-12,2	59,4	34,6
Manufacture of coke, refined petroleum products and nuclear	4,45	16,6	12,3	-2,4	1,6	-8,9
Manufacture of chemicals and chemical products	4,63	-0,1	1,4	0,1	20,4	-10,3
Manufacture of rubber and plastic products	1,93	-5,4	-5,9	2,2	25,9	-1,7
Manufacture of other non-metallic mineral products	7,27	21,5	14	3,8	-3,2	-12,1
Manufacture of basic metals	11,24	33,4	11,8	34,3	-6,6	-42,1
Manufacture of fabricated metal products, except machinery a	3,25	18,9	5,7	45,6	51,4	38,5
Manufacture of machinery and equipment n.e.c.	1,39	9,1	7,2	39,1	7,4	-18,1
Manufacture of electrical machinery and apparatus n.e.c.	3,47	8,8	3,7	-24,4	25,8	-29
Manufacture of motor vehicles, trailers and semi-trailers	1,05	-26,5	3,3	-27	-7,3	-38,1
Manufacture of other transport equipment	1,14	-7,5	-6,9	33,4	-18,4	-46,4
Manufacture of furniture; manufacturing n.e.c.	2,01	-11,8	-22,5	-15	97,8	-24,4
Recycling	0,59	34,2	12,8	-35,6	117,1	-11,6
ELECTRICITY, GAS AND WATER SUPPLY	**12,21**	**2,5**	**-0,6**	**-9,5**	**-3,1**	**8,8**
Electricity, gas, steam and hot water supply	12,21	2,5	-0,6	-9,5	-3,1	8,8

Source: Stopanska Banka AD Skopje and State Statistical Office

APPENDIX E:

Macedonian balance of payments

In EUR Million

	2005	2006	2007	2008	2009
I. Current Account	**-122,5**	**-23,4**	**-421,2**	**-862,2**	**-449,3**
GOODS, net	**-858,5**	**-1001,5**	**-1181,0**	**-1762,5**	**-1551,1**
Exports, f.o.b.	1642,9	1914,0	2472,2	2692,6	1920,9
Imports, f.o.b.	-2501,4	-2915,5	-3653,2	-4455,1	-3472,0
SERVICES, net	**-24,7**	**22,4**	**25,1**	**5,8**	**28,0**
Credit	416,2	477,3	594,5	688,1	618,3
Debit	-440,8	-455,0	-569,4	-682,3	-590,3
INCOME, net	**-92,6**	**-26,1**	**-277,7**	**-90,9**	**-58,5**
Credit	79,0	107,2	155,2	185,2	128,1
Debit	-171,6	-133,4	-432,9	-276,1	-186,6
CURRENT TRANSFERS, net	**853,3**	**981,9**	**1012,4**	**985,5**	**1132,3**
Credit	887,5	1015,3	1081,3	1033,2	1180,0
Debit	-34,2	-33,4	-68,9	-47,7	-47,7
II. Capital and Financial Account	**127,7**	**18,3**	**454,0**	**862,5**	**426,0**
CAPITAL ACCOUNT, net	**-1,7**	**-0,8**	**3,7**	**-12,2**	**20,2**
Credit	0,0	0,0	0,0	0,0	25,4
Debit	-1,7	-0,8	3,7	-12,2	-5,3
FINANCIAL ACCOUNT, net	**129,4**	**19,1**	**450,3**	**874,8**	**405,9**
Direct investment, net	**74,9**	**344,7**	**506,9**	**409,4**	**136,9**
Abroad	-2,3	-0,1	0,9	9,5	-8,1
In reporting economy	77,2	344,8	506,0	399,9	145,0
Portfolio investment, net	**200,8**	**72,7**	**114,1**	**-50,6**	**104,0**
Assets	0,7	-0,4	-2,0	-0,5	-37,6
Liabilities	200,1	73,1	116,1	-50,1	141,7
Other investment, net	**201,6**	**-100,7**	**-68,9**	**464,4**	**234,3**
Assets	-39,8	-117,6	-61,5	207,4	-107,1
Trade credits	0,0	0,0	0,0	0,0	0,0
Loans	-7,0	6,0	0,0	-4,7	-19,1
Currency and deposits	-35,3	-122,8	-61,8	211,3	-88,1
Monetary authorities	0,0	-5,7	-0,2	16,0	0,0
General government	0,0	0,0	0,0	0,0	0,0
Banks	7,4	-50,1	0,7	238,5	-86,0
Other sectors	-42,7	-67,0	-62,3	-43,2	-2,1
Other assets	2,6	-0,8	0,3	0,8	0,1
Liabilities	241,4	17,0	-7,5	256,9	341,4
Trade credits	105,9	-17,4	-22,7	-4,4	157,6
Loans	105,0	-11,7	-93,8	241,9	69,9
Currency and deposits	20,1	40,3	50,6	12,1	26,0
Monetary authorities	0,0	0,0	0,0	0,0	0,0
General government	0,0	0,0	0,0	0,0	0,0
Banks	20,1	40,3	50,6	12,1	26,0
Other sectors	0,0	0,0	0,0	0,0	0,0
Other liabilities	10,3	5,8	58,5	7,4	87,9
Gross official reserves (- = increase)	**-347,9**	**-297,6**	**-101,8**	**51,6**	**-69,4**
III. Errors and Omissions	**-5,3**	**5,1**	**-32,8**	**-0,3**	**23,2**

Source: NBRM

APPENDIX F:

Official foreign reserves of Macedonia

(in millions of euro)

	31.12.2005	31.12.2006	31.12.2007	31.12.2008	31.12.2009
A. Official reserve assets	**1.122,93**	**1.416,67**	**1.524,36**	**1.494,94**	**1.597,68**
(1) Foreign currency reserves (in convertible foreign currencies)	1.027,34	1.309,04	1.399,09	1.360,04	1.366,09
(a) securities	28,65	158,54	498,55	1.114,70	901,17
of which: issuer headquarted in reporting country but located abroad					
(b) total currency and deposits with:	998,69	1.150,50	900,55	245,34	464,92
(i) other national central banks, BIS and IMF	919,16	702,35	849,25	238,46	464,17
(ii) banks headquarted in the reporting country					
of which: located abroad					
(iii) banks headquarted outside the reporting country	79,53	448,15	51,30	6,88	0,75
of which: located in the reporting country					
(2) IMF reserve position	0,00	0,00	0,00	0,00	0,00
(3) SDRs	0,66	2,26	0,99	0,97	63,51
(4) gold (including gold deposits and, if appropriate, gold swapped)	94,92	105,36	124,28	133,93	168,07
volume in millions of fine troy ounces					
(5) other reserve assets (specify)	0,00	0,00	0,00	0,00	0,00
- financial derivatives					
- loans to nonbank nonresidents					
- other					
B. Other foreign currency assets (specify)	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**
- securities not included in official reserve assets					
- deposits not included in official reserve assets					
- loans not included in official reserve assets					
- financial derivatives not included in official reserve assets					
- gold not included in official reserve assets					
- other					

Source: NBRM

APPENDIX G:

Deposit and lending interest rates of the National Bank of the Republic of Macedonia

	2004	2005	2006	2007	2008	2009											
	XII	XII	XII	XII	XII	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1. Discount rate	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
2. Lombard credits interest rate	13.0	13.0	9.5	7.5	8.5	8.5	8.5	8.5	10.5	8.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
3. Interest rate on loans not paid back on maturity, i.e. loans pertaining to regulations violation (default interest rate)	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
4. Interest rate on uncovered daily overdraft	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
5. Interest rate on compulsory reserves not deposited on time	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
6. Interest rate for utilization of compulsory reserves	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
7. Interest rate on Central bank bills sold on auction	9.0	8.5	5.7	4.8	7.0	7.0	7.0	7.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.5
8. Interest rate paid on compulsory reserves - banks	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
9. Interest rate paid on compulsory reserves - saving houses	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Source: NBRM

APPENDIX H:

Lending and deposit interest rate in Macedonia

	XII.05	XII.06	XII.07	XII.08	XII.09
A. DENARS INTEREST RATES					
1. INTEREST RATES ON DENAR LOANS	**12,1**	**10,7**	**9,9**	**9,8**	**10,3**
2. INTEREST RATES ON DENAR DEPOSITS	**5,6**	**4,4**	**5,3**	**6,5**	**7,5**
B. FOREIGN CURRENCY INTEREST RATES					
1. INTEREST RATES ON FOREIGN CURRENCY LOANS	**7,8**	**8,5**	**8,5**	**7,2**	**7,6**
2. INTEREST RATES ON FOREIGN CURRENCY DEPOSITS	**1,4**	**1,8**	**2,0**	**3,0**	**3,4**

Source: NBRM

APPENDIX I:

Deposits with banks and saving houses in Macedonia

In EUR million	Dec-07	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
TOTAL DEPOSITS	2,547	2,852	2,830	2,841	2,814	2,845	2,821	2,855	2,826	2,904	2,908	2,974	3,002	3,066
- Annual growth rate	32.3%	12.4%	10.3%	8.7%	7.7%	6.3%	2.9%	2.1%	-0.1%	0.5%	-0.3%	3.6%	7.2%	7.1%
- Monthly growth rate	5.1%	2.2%	-0.7%	0.4%	-1.0%	1.1%	-0.8%	0.8%	-1.0%	2.8%	0.1%	2.3%	0.9%	2.1%
Currency structure														
in denars	*1,432*	*1,487*	*1,439*	*1,437*	*1,360*	*1,350*	*1,341*	*1,357*	*1,277*	*1,316*	*1,320*	*1,367*	*1,390*	*1,423*
- Annual growth rate	52.7%	4.2%	1.1%	-0.9%	-5.1%	-8.0%	-10.8%	-12.1%	-17.5%	-15.5%	-15.8%	-12.1%	-5.2%	-4.6%
- Monthly growth rate	7.4%	1.8%	-3.2%	-0.1%	-5.4%	-0.7%	-0.6%	0.7%	-5.9%	3.1%	0.3%	3.5%	1.7%	2.4%
in foreign currency	*1,115*	*1,365*	*1,391*	*1,404*	*1,454*	*1,495*	*1,480*	*1,498*	*1,549*	*1,588*	*1,588*	*1,607*	*1,612*	*1,643*
- Annual growth rate	12.9%	22.8%	21.9%	20.7%	23.2%	23.6%	19.7%	19.5%	20.7%	19.1%	17.7%	22.1%	20.9%	19.9%
- Monthly growth rate	2.1%	2.7%	1.9%	0.9%	3.6%	2.8%	-1.0%	0.8%	3.4%	2.5%	0.0%	1.2%	0.3%	1.9%
Deposits by sectors:														
1. Other financial corporations	18	35	98	100	93	93	98	106	100	103	111	118	126	132
2. Nonfinancial Corporations (public and private)	935	1,008	941	931	906	898	865	867	814	877	845	868	865	859
- Annual growth rate	31.2%	8.2%	0.8%	-3.6%	-5.7%	-9.5%	-16.8%	-17.9%	-23.2%	-20.3%	-21.9%	-16.9%	-11.8%	-15.1%
- Monthly growth rate	10.2%	3.2%	-6.7%	-1.0%	-2.7%	-0.9%	-3.6%	-0.2%	-6.1%	7.7%	-3.6%	2.7%	-0.4%	-0.7%
in denars	*650*	*684*	*624*	*640*	*611*	*601*	*602*	*615*	*540*	*581*	*562*	*573*	*577*	*564*
- Annual growth rate	40.3%	5.6%	-3.3%	-4.2%	-7.6%	-12.4%	-16.4%	-16.8%	-27.3%	-23.9%	-25.2%	-22.5%	-12.1%	-17.8%
- Monthly growth rate	13.7%	4.6%	-8.8%	2.6%	-4.6%	-1.6%	0.1%	1.8%	-12.2%	7.6%	-3.1%	1.8%	0.7%	-2.2%
in foregn currency	*285*	*324*	*317*	*291*	*295*	*297*	*263*	*252*	*274*	*296*	*282*	*295*	*288*	*294*
- Annual growth rate	14.3%	14.2%	10.0%	-2.5%	-1.6%	-3.0%	-17.9%	-20.4%	-13.6%	-12.0%	-14.5%	-3.6%	-11.0%	-9.3%
- Monthly growth rate	3.0%	0.5%	-2.1%	-8.2%	1.5%	0.5%	-11.3%	-4.7%	8.7%	8.0%	-4.6%	4.7%	-2.5%	2.4%
2.1. Public Nonfinancial Corporations	41	50	118	90	92	90	81	75	66	77	67	65	60	56
2.2. Other Nonfinancial Corporations (private)	894	957	823	841	814	808	784	793	748	800	777	804	805	803
3. Other Resident Sector	1,594	1,808	1,790	1,809	1,814	1,853	1,857	1,880	1,912	1,923	1,950	1,987	2,010	2,073
3.1. Households (Individuals and Self-Employed Individuals)	1,537	1,756	1,754	1,772	1,775	1,816	1,819	1,841	1,875	1,885	1,909	1,945	1,968	2,033
- Annual growth rate	31.8%	14.6%	12.7%	12.7%	12.6%	12.4%	11.8%	10.7%	10.3%	10.0%	8.7%	11.4%	13.2%	15.4%
- Monthly growth rate	2.9%	1.4%	-0.1%	1.0%	0.1%	2.3%	0.2%	0.8%	1.8%	0.6%	1.3%	1.9%	1.2%	3.3%
in denars	*712*	*724*	*699*	*680*	*635*	*637*	*624*	*616*	*619*	*614*	*623*	*654*	*666*	*708*
- Annual growth rate	64.4%	2.1%	-1.4%	-4.4%	-9.4%	-11.0%	-12.7%	-15.7%	-16.0%	-15.1%	-16.1%	-12.0%	-9.2%	-2.5%
- Monthly growth rate	4.1%	-0.9%	-3.5%	-2.7%	-6.6%	0.2%	-1.9%	-1.7%	0.5%	-0.9%	1.6%	4.9%	1.8%	6.4%
in foregn currency	*826*	*1,032*	*1,055*	*1,092*	*1,140*	*1,179*	*1,195*	*1,225*	*1,255*	*1,271*	*1,285*	*1,291*	*1,302*	*1,325*
- Annual growth rate	12.6%	25.4%	24.4%	26.9%	30.2%	31.0%	31.0%	31.3%	30.5%	28.2%	27.0%	28.6%	29.7%	27.9%
- Monthly growth rate	1.8%	3.1%	2.3%	3.5%	4.3%	3.5%	1.3%	2.1%	2.5%	1.3%	1.1%	0.5%	0.8%	1.7%
3.2. Nonprofit institutions serving households	56	52	36	37	39	37	38	39	37	38	42	42	42	40
4. Local Government	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Source: Stopanska Banka AD Skopje

APPENDIX J:

Banks and saving houses' loans in Macedonia

In EUR million	XII.07	XII.08	I.09	II.09	III.09	IV.09	V.10	VI.11	VII.09	VIII.09	IX.09	X.09	XI.09	XII.09
TOTAL LOANS	2,093	2,803	2,822	2,856	2,871	2,878	2,870	2,864	2,872	2,866	2,861	2,867	2,891	2,912
- Annual growth rate	39.2%	34.4%	32.1%	29.0%	25.3%	21.4%	18.5%	14.3%	11.2%	9.3%	6.4%	4.6%	4.1%	3.5%
- Monthly growth rate	3.7%	1.3%	0.7%	1.2%	0.5%	0.3%	-0.3%	-0.6%	0.3%	-0.2%	-0.1%	0.2%	0.9%	0.7%
Currency structure														
in denars	*1,591*	*2,177*	*2,181*	*2,214*	*2,229*	*2,233*	*2,236*	*2,238*	*2,246*	*2,242*	*2,240*	*2,243*	*2,259*	*2,275*
- Annual growth rate	42.2%	37.3%	34.2%	30.6%	26.1%	22.1%	19.4%	15.5%	12.9%	11.2%	8.6%	6.3%	5.2%	4.1%
- Monthly growth rate	3.8%	1.7%	0.2%	1.5%	0.7%	0.2%	0.1%	-0.3%	0.4%	-0.2%	-0.1%	0.1%	0.7%	0.7%
in foreign currency	*502*	*626*	*641*	*642*	*642*	*645*	*634*	*626*	*626*	*624*	*621*	*624*	*632*	*637*
- Annual growth rate	30.3%	25.2%	25.4%	23.7%	22.9%	18.9%	15.2%	10.4%	5.7%	3.1%	-0.6%	-0.8%	0.4%	1.4%
- Monthly growth rate	3.6%	-0.2%	2.4%	0.1%	0.0%	0.5%	-1.7%	-1.7%	0.1%	-0.3%	-0.4%	0.4%	1.3%	0.8%
Loans by sectors:														
1. Other financial corporations	52	30	131	267	218	226	180	161	2	2	104	103	76	72
2. Nonfinancial Corporations (public and private)	1,261	1,666	1,656	1,689	1,700	1,707	1,695	1,683	1,689	1,683	1,679	1,684	1,707	1,735
- Annual growth rate	30.2%	32.6%	29.1%	27.0%	23.8%	20.0%	17.6%	13.1%	10.3%	8.9%	5.6%	4.1%	3.9%	3.7%
- Monthly growth rate	3.5%	1.8%	-0.6%	2.0%	0.7%	0.4%	-0.7%	-1.2%	0.4%	-0.3%	-0.3%	0.3%	1.4%	1.7%
in denars	*798*	*1,111*	*1,086*	*1,120*	*1,131*	*1,133*	*1,132*	*1,125*	*1,130*	*1,125*	*1,123*	*1,124*	*1,138*	*1,160*
- Annual growth rate	30.6%	39.7%	33.8%	31.2%	26.2%	22.0%	19.7%	14.7%	12.4%	11.5%	8.4%	6.1%	5.0%	4.1%
- Monthly growth rate	3.6%	2.8%	-2.2%	3.1%	1.0%	0.2%	-0.1%	-1.0%	0.4%	-0.4%	-0.2%	0.1%	1.2%	2.0%
in foregn currency	*463*	*556*	*570*	*569*	*570*	*574*	*564*	*557*	*559*	*558*	*556*	*560*	*569*	*574*
- Annual growth rate	29.7%	20.3%	20.8%	19.3%	19.3%	16.3%	13.6%	10.0%	6.2%	4.0%	0.3%	0.3%	1.9%	3.0%
- Monthly growth rate	3.3%	-0.1%	2.5%	-0.1%	0.1%	0.8%	-1.8%	-1.6%	0.4%	-0.2%	-0.3%	0.6%	1.7%	1.0%
2.1. Public Nonfinancial Corporations	5	2	6	6	8	8	8	7	7	7	7	7	7	7
2.2. Other Nonfinancial Corporations (private)	1,256	1,664	1,650	1,683	1,692	1,699	1,687	1,675	1,682	1,676	1,671	1,676	1,700	1,728
3. Other Resident Sector	831	1,136	1,164	1,162	1,166	1,167	1,171	1,178	1,181	1,181	1,180	1,181	1,183	1,176
3.1. Households (Individuals and Self-Employed Individuals)	827	1,131	1,162	1,161	1,165	1,166	1,170	1,177	1,179	1,179	1,179	1,179	1,181	1,174
- Annual growth rate	54.8%	37.2%	37.0%	32.0%	27.6%	23.4%	19.8%	16.3%	12.7%	10.2%	7.9%	5.6%	4.6%	3.5%
- Monthly growth rate	4.1%	0.6%	2.7%	-0.1%	0.3%	0.1%	0.4%	0.2%	0.2%	0.0%	0.0%	0.0%	0.2%	-0.6%
in denars	*61*	*61*	*61*	*61*	*61*	*61*	*1,102*	*1,110*	*1,114*	*1,114*	*1,115*	*1,116*	*1,119*	*1,112*
- Annual growth rate	55.8%	34.9%	34.8%	30.1%	26.1%	22.5%	19.5%	16.6%	13.6%	11.3%	9.1%	6.7%	5.8%	4.5%
- Monthly growth rate	4.0%	0.7%	2.9%	-0.1%	0.4%	0.2%	0.4%	0.3%	0.3%	0.1%	0.1%	0.1%	0.3%	-0.6%
in foregn currency	*2,342*	*4,328*	*4,367*	*4,327*	*4,271*	*4,196*	*68*	*67*	*66*	*65*	*64*	*63*	*63*	*62*
3.2. Nonprofit institutions serving households	216	298	97	102	103	105	101	89	2	1	85	100	96	85
4. Local Government	0	24	24	24	24	23	23	22	22	22	21	21	20	20

Source: Stopanska Banka AD Skopje

APPENDIX K:

Financial soundness indicators of Macedonian banks

No.	Financial Soundness Indicators	12/31/2005	12/31/2006	12/31/2007	12/31/2008	12/31/2009
	Capital adequacy					
1	Capital adequacy ratio	21.3%	18.3%	17.0%	16.2%	16.4%
2	Tier I capital/Risk weighted assets	21.6%	18.9%	15.7%	14.0%	13.8%
3	Equty and recerves / Total assets	15.9%	13.3%	11.4%	11.5%	11.4%
	Asset quality					
4	Nonperforming loans/Total loans*	14.9%	11.2%	7.5%	6.7%	8.8%
5	Nonperforming loans net of provisions/Own funds	2.0%	0.7%	-0.05	-6.2%	-0.6%
6a	Total loans to residents/Total loans	98.4%	98.9%	99.1%	99.4%	99.4%
66	Total loans to nonresidents/Total loans	1.6%	1.1%	0.9%	0.6%	0.6%
	Profitability					
7	ROAA-Financial result/Average assets	1.2%	1.8%	1.8%	1.4%	0.6%
8	ROAE-Financial result/Average equity and reserves	7.5%	12.3%	15.2%	12.5%	5.6%
9	Net interest income/Gross income	53.8%	57.1%	57.0%	58.9%	62.6%
10	Noninterest expenses/Gross income	68.1%	63.6%	60.3%	64.0%	64.5%
	Liquidity risk					
11	Liquid assets/Total assets**	38.0%	37.7%	34.7%	22.9%	25.7%
11a	Highly liquid assets/Total assets**	15.0%	18.0%	20.9%	16.9%	20.6%
12	Liquid assets/Short-term liabilities***	55.0%	52.7%	46.8%	32.4%	37.5%
12a	Highly liquid assets/Short-term liabilities***	21.7%	25.2%	28.2%	24.0%	30.1%
	Sensitivity to market risk					
13	Net open FX position/Own funds ****	51.6%	47.1%	38.2%	25.1%	13.0%

Source: NBRM