Dynamics of financial markets in the context of globalization

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2008

Online at https://mpra.ub.uni-muenchen.de/19889/
MPRA Paper No. 19889, posted 13 Jan 2010 02:04 UTC
The creation of a global financial space contributes, together with the expansion of international financial flows, to the modernization of financial systems due to the increase of competition at international level, to the reduced transaction costs, to the real time connection of financial markets and to the diversified risk management instruments. But globalization can have a negative impact due to the volatility of exchange rates, effects that, due to the inter-connection of the markets, can spread rapidly from a market to another.

As a consequence of globalization, in the last 20 years, international financial markets have become more and more inter-dependent. Financial globalization has had considerable benefits on national economies and on investors, but it has also modified
the structure of the markets, by generating new types of risks and challenges for the
participants and for the supervising and regulation bodies.

If we analyze the starting moment of this globalization wave, we will observe
that it has been characterized, since it started in the mid 80’s, by the increase of the
volume of capital flows between developed countries and especially between
developed and developing countries. While some of these countries have benefited
from the increase of the financial activities and have had relatively high rates of
economic growth, other countries have had periods of crisis, including financial
problems that led to high social and macroeconomic costs.

Globalization has therefore become one of the major subjects of debate and
international economic analysis, generating many studies regarding the causes, volume,
direction of movement of the capital flows, regarding the countries that were
involved in it or affected by it and regarding the benefits, systemic risks and market
volatility. At the same time the studies have focused on the reaction of the financial
markets to the new opportunities and challenges, on the products, participants and work
and information technologies and on the systems of organization, control and
regulation. Researchers have also looked for answers and have found new
interpretations for the classical theories in order to determine in which way the
financial integration influences the macroeconomic corporate financing decision and
how the structure of capital is affected by the access to globalized savings and
investments.

In the given context, the problem of financial integration of the central and
east European states has had a delayed impact; economic literature has approached the
problem of the transition countries mainly regarding reaching economic stability and
making structural adjustments, creating the institutions and the operational framework
that were necessary for a free and functional market economy, changing the ownership
structure, eliminating the distortions expressed by costs and prices and studying the
responses of some less-competitive sectors to the use of monetary and fiscal levers. As
the capital flows to the economies of former socialist countries have increased, more
and more studies have included the eastern European financial case studies in the
general analysis of the capital flows that were directed towards developing countries.

The focus has shifted later on, in the second half of the 90’s, towards the
development of the banking and stock market activities in several individual eastern
European countries. The appearance and development of stock exchange activities in
the region has been monitored and assessed as an element of local development, but
also as a possibility of connecting to the international expansion of capital markets,
especially of the European ones. The perspective of adhering to the European Union
has lead to an increased focus on the theme of monetary unification and financial
integration of the east European countries. Predilect examples for analysis on
globalization have been the countries in Latin America and South East Asia,
characterized by high levels of financial movements and market volatility, countries
that were hit by financial crises as a consequence of being exposed to globalized capital
flows.

We believe that a concise analysis of the elements of financial globalization,
made by identifying the factors and mechanisms affecting this process and the main
effects that financial globalization has generated, can give us a perspective on the
dynamics of the financial markets and of the financial mediators at a global level.
2. FACTORS AND MECHANISMS THAT HAVE INFLUENCED THE PROCESS OF FINANCIAL GLOBALIZATION

This section will focus on analyzing the factors that have determined financial globalization, because there have been several parallel forces that have lead to the appearance of this phenomenon. If we would have to classify these factors in the order of their importance, we can safely say that the increasing progress of the new information and communication technologies that have allowed a real time interconnection of the various segments of the financial markets through computer networks, satellites and through the internet is the most important of all, and that without it we would not be speaking about this process right now. Together with this highly important factor, there have been other influences, which we will analyze in detail in this section.

2.1. The process of delocalization of the activities of the national economies.

As the international trade exchanges have intensified, the activities in the real economy – production, consume, investments, labor force usage, have evolved in the last decades towards a process of physical separation, of scattering across different countries or regions that were able to offer maximized competitive advantages. The components of the final products can be made in a country, assembled in another and the resulted product can be sold on the global market, leading to a process of specialization of some economies depending on their competitive advantages. New multinational companies have appeared, and the existing ones have expanded their global activity, through mergers and acquisitions, creating worldwide networks of production and distribution. Local brands have been selected and promoted so that they could be sold outside of the borders of their country, brands of well known goods and services have had their distribution area extended or have been promoted on the national markets through direct production or local franchising. Delocalization and relocation of the activities of the real economy have initially had as a goal the access to natural resources, the access to labor at lower costs, the entrance on forming markets or on markets with a high growth potential, the use of a lawmakers framework that was more favorable to direct investments. The interconnections in the real economy have lead to cross-border financings that, together with financial liberalization, have generated mobile capital reserves and liquidity. The above mentioned phenomena are completed at the moment by the physical separation of production and consume in the tertiary sector, by the migration of several categories of services, and especially of the operations with international financial assets.

2.2. The increase of international commerce

The growing dimensions of trade flows reflect both the growth of the real economy and consume and the intensifying of international trade integration, based on the economic specialization of some countries or regions. International trade flows have increased significantly in the last 2 decades. The exports of goods and services at world level have increased considerably, from an annual average of 2,300 billion USD in 1983 -1992 to an annual average of 11.319 billion USD in 2005\(^1\). The commerce with goods and services has a major impact on financial assets. Most trade activities
attract subsequent financial flows, in the form of trade credits or export insurances. On the other hand, the commerce with goods and financial flows have a common direction in some situations, as it is often the case for direct investments, since it is known that an important part of the international commerce consists of intermediary inter-company commerce. The theoretical interactions between trade openness, financial globalization, specialization of national economies and synchronization of the economic cycles are very complex.

2.3. Monetary and fiscal politics

Financial globalization is the consequence of failures and decisions on monetary and fiscal politics of the governments of the developed countries starting in the years ’70-’80. the fiscal and trade deficits, the liberalization of thee exchange rates, the two figured inflation, the volatility of interests and stock markets, the growth of the foreign debt have been the defining factors of the financial integration process of the 80’s, a process that was preceded in the 70’s by a continuous decrease of global financial stability.

The appearance of high inflation rates in the 70’s has reduced the efficiency of the traditional financial instruments and has lead to a high volatility of the market. The monetary politics that were adopted in order to restore market stability have created the conditions for intensifying the connections between financial markets. At domestic level, the combination between market volatility on one hand – exchange rate, interests, inflation rate – and economic growth rate on the other hand has lead to high pressures on the business managers, financial managers, investors and traders acting on the market. Chronic budget deficits have lead to the increase of the presence of the government on the financial markets, as a resource beneficiary and as a competitor in collecting resources through accessible risk/price formulas.

The response to this was a progressively dereglemented market, more and more flexible and able to develop new financial instruments in order to respond to volatility and to attract new resources. The above mentioned factors have gradually lead to the development of new activities and transnational financial networks that were the answer to national economical policy errors.

At the moment, national fiscal policies continue to influence – not only by financing the budgetary deficit – the way that the capital flows are directed at international level: the financial assets of the companies are mainly heading towards countries with lower profits tax rates. This fiscal regime also attracts international financial agents who are involved in offshore transactions. From the point of view of the savings of the population, high tax rates applied to investment revenues stimulate offshore saving instruments, if their visibility for the national fiscal authorities is low.

2.4. The liberalization of financial markets

In close connection with the fast progress of the information technology and with the interconnection of the national economies, the trends of liberalization and dereglementation of the national financial markets have lead to the increase of the globalization and to the increase of financial innovation, to the encouraging of cross-border capital movements, to the globalization of financial mediation, to the decline of
trading barriers for financial services and to the access of foreign financial institutions on local markets.

Liberalization and gradual integration of capital markets has also supported the strengthening of the national financial sector, especially in developing countries. Local firms can sell shares to foreign investors that have higher knowledge and information, allowing them to monitor the management of the company in ways that are unavailable to local investors. Liberalization has also allowed the access of companies to mature capital markets. The companies listed on foreign stock markets are therefore under the jurisdiction of a superior ruling system, they have to respect higher standards of reporting their economic and financial results. The integration with international markets and institutions has also supported the local reform processes oriented towards the consolidation of the stock market. The capital markets, through the connections that they develop with the international portfolio investments, can fulfill the important function of supervising the performances of some of the financial institutions, by imposing a more strict market discipline, by increasing transparency in giving information, even by forcing governments to guarantee that their financial system is supervised and ruled adequately.

The conducted studies have showed that market liberalization has intensified their organization and the institutional financial reforms, especially after some periods of crisis. In developing countries, these reforms have extended both over the stock market sector and banking sector, leading to:
- changes in the ruling of the banking sector;
- a better supervising of the sector;
- bank privatization;
- convertibility of the local currency;
- allowing local capital investments in foreign countries;
- allowing sophisticated financial institutions into the market;
- the increase of transparency and of public reporting of the results;
- a better protection of investors and minority shareholders.

2.5. Financial innovation

The increased risks and instability of the markets have stimulated financial innovations regarding basic or derivative financial instruments. In essence, the innovation in financial markets has been a process of fragmenting the transaction risks, followed by their “packing” into financial instruments that could be sold on the capital markets.

William Silber considers that financial innovation has had 3 different forms: the appearance of new financial institutions, the appearance of new financial instruments, the appearance of new financial markets. Regarding the appearance of new financial instruments, most of the times they aren’t completely new, instead they are the result of modifying the characteristics of some financial products that already exist or of combining their existing characteristics in a new way. For example, instead of the financial packages that cover multiple and considerable risks, a investor is offered multiple financial products containing smaller individual risks, from which he can choose based on the cost-revenues ratio that he expects. Due to the financial markets, that became freer and more globalized, and due to the competition, the financial innovation have gradually become permanent. There are now many new
financial products that diversify and transform the rights of the investors upon the issuers and the ways that the investors are rewarded, and at the same time there has been an unprecedented diversification of the derivative financial instruments whose goals are to redistribute risks between the operators interested to protect themselves and those willing to take the risks.

2.5.1. The progress of the information technology

The development of the informational and communication network has given important advantages to the market participants and to the ruling authorities, as follows:

- collecting and processing the necessary information in order to measure, monitor and manage financial risks;
- setting the prices and completing the trading operations by using new complex financial instruments;
- accessing vast registers that record all the transactions that take place 24 hours out of 24 in the major financial centers in Asia, Europe and North America.

Communication and instant access to information have been a key factor in the developing and integration of financial markets, from the operations taking place in the ring to those taking place in the back-office. Even in subjective terms, traders have had the possibility to learn from each other and to see cross-market opportunities more easily, and the level of trust and of knowledge of financial techniques of the market participants has grown significantly. The capital markets have also had their role in stimulating the progress of computerized technologies, through the requests addressed to governments by the banking and brokers’ networks to make substantial investments into transcontinental telecommunication, cable, satellite and internet infrastructures.

An important step has been the completion of the electronic trading platforms. By aggregating the execution capabilities, the financial information and other services on a single platform, they allow both institutional investors and investors that are involved in retail operations to examine multiple investment options from a single location, instead of consulting different dealers. Investors can place an electronic order stating their preferences and they can get offers from the dealers they select or from any dealer that has the selected option. Electronic interfaces also allow users to sort their options based on their own personal criteria and to compare their operations with similar operations from other developed or emerging markets. Online trading systems have the potential to attract a high number of services to any client. By making the information public and available immediately – prices, comparisons, etc – investors can be confident that they receive the same information as the other market participants, so the warranty of transparency of the operations is created without having to formally establish it as a rule.

2.5.2. The increased competitiveness of financial intermediaries

Liberalization and technological progress have increased the interest of financial institutions in participating at the operations of the capital market. The ruling authorities from many countries have modified the initial framework of financial mediating in order to allow a larger institutional participation in offering financial services.
The number of traditional institutions has grown, and at the same time new categories of investors and mediators appeared, they were able to offer innovation, access to large segments of users or to niche segments, dedicated service, a diversified approach of risks, efficiency and improved feedback. Therefore, at the moment, actors on the financial markets are: banking groups, investment banks, brokerage and security companies, asset managers, mutual funds, insurance companies, agents financing trade activities, hedging funds, and also telecommunication companies, software firms, companies that sell convenience goods, all these offering services that were traditionally offered only by banks.

3. CURRENT TRENDS OF THE FINANCIAL MARKETS

3.1. National stock markets integration

Due to the will to consolidate and improve efficiency of the stock markets they are now undergoing a process of integration. We can mention Eurex, the German Swiss stock exchange, which is the biggest electronic market in the world for transactioning derivative instruments, and the pan European operator Euronext, resulted from the integration of the stock markets in Holland, Belgium, France, Great Britain and Portugal, which offers transaction services for securities and derivative financial instruments on a cross border, extended and regulated market. From the moment of its creation, in 2000, there have been made great efforts in order to consolidate it continuously, by integrating the existing European markets, in order to form a unique market that is more liquid and more efficient and that has possibilities to promote new financial instruments. After the initial merger of the Amsterdam, Bruxelles and Paris markets, Euronext has absorbed the London market for derivative instruments, LIFFE, and also the Portuguese market in 2002. The implementation of the horizontal market model promoted by Euronext, created in order to generate synergies by keeping the strengths of each local market, has proved to be an extraordinary success, as a result of the use a global vision at a local level. A technological integration followed and, of course, the harmonization of the market rules and of the legal framework in which the derivative markets function.

The universe of the emerging markets of the world has continued to expand. I have mention here the case of Chicago Mercantile Exchange (CME), which merged with Chicago Board of Trade (CBT), and the taking over of the Euronext by the New York Stock Exchange, having as a result a transatlantic financial market. The new society, named Nyse – Euronext, is an American based holding whose shares are rated in dollars at the New York stock exchange and in euros at the Paris stock exchange.

The goal of this process of market integration, that can be seen everywhere around the world at the moment, even in Romania (the merger by absorption of the Rasdaq market by the Bucharest stock exchange (BVB) and the failed merger with the Sibiu monetary, financial and goods market), is to consolidate the markets and increase their competitiveness, to diversify the financial instruments and offer a integrated services package that addresses the clients various needs. These clients can be financial institutions that have direct access to the market, companies whose shares are transactioned at the stock exchange, individual or institutional investors, other organizations that use financial services and information.
The process of integration of the capital markets is a part of a vast project of integration of global financial services, a trend that has been started by the EU and stated by the EU in numerous occasions. The direct benefits that result from creating an integrated financial services market can be summarized as follows:

- **Favoring of international trade and of cross-border investments**
  The financial integration will support the development of international trade, both inside the borders of the EU and outside of them. The EU markets will become more attractive for the domestic and foreign capital flows. The liquid financial markets can offer to the EU based companies easier access to European and foreign markets.

- **Encouraging competition**
  The financial integration will have a strong benefic impact on the competitiveness of the various markets, increasing the competition between the financial services suppliers, for the benefit of the users of financial services, who will pay smaller prices, a better quality and a great diversity of financial products. More than that, regarding the non financial sector, small and medium entities can access more diversified ways of financing at a lower cost in order to finance their economic growth, while larger companies can also benefit from the overall decrease of the cost of capital and from a diversified range of financial instruments.

- **Benefits for the companies in terms of reducing the “administration tasks”**
  The alignment of all the regulating frameworks in a single regulating system constitutes an interesting perspective from the point of view of the information and agency costs necessary for every agency in the country where the participants to the system are based. In time, harmonization at EU level will lead to a substantial reduction of the “administration tasks” that were different for each of the 27 member states, by replacing 27 sets of regulations with a common one.

- **Global macroeconomic impact**
  Given its growth potential, the value of its weight in the GDP and its role in financing the other sectors of the economy, the financial services sector has a decisive, direct and significant impact on the global competitiveness of the modern economies. Due to its integration, financial stability can improve.

**3.2. The development of the financial derivatives market**

The financial derivatives market, although it is the newest, has developed significantly in the last 30 years. The financial derivatives represent financial contracts signed between two or more parties, that have as a base the future value of a reference asset (support asset) and they allow hedging, speculative and arbitrage strategies. There are various support assets: debt instruments, equity instruments, interest rates, stock market indexes, currencies, instruments of the monetary markets, other derivatives (futures contracts, swaps). Financial derivatives of the nature of futures and options contracts allow signing forward transactions regarding the support asset which set the price that the asset will be bought or sold, the quantity of the asset that will be bought of sold, and the due date. These are offered on standardized stock exchange or OTC
type markets and therefore they are standardized regarding the transactioned quantity and the due date. These are the two minimal elements of the derivative contracts that are being standardized.

The development of the financial derivatives markets in such a short amount of time was due to the need that the investors had for financial derivatives, that are used as a protection against a series of unwanted situations or against single, predictable events, and also due to the fact that these financial derivatives offer supplementary opportunities to make money through speculation and arbitrage. Also, by using arbitrage operations, the financial derivatives markets allow the tuning and the correction of the price of the assets used as supports on the markets where these assets are transactioned on spot or on sight. The financial derivatives markets also offer indirect information regarding the estimated trend of evolution of the price of the financial support asset, as it is perceived by the investors on those markets.

According to a study conducted in 2003 by the ISDA (International Swaps and Derivatives Association) on 500 top companies from all over the world, 92% of them use derivatives in order to manage their risks in an efficient manner.

![Chart 3.1 – The weight of the companies that use derivatives in the 500 analyzed companies](image)

The companies that use derivatives are based in 26 countries and represent a large range of industries, from air transport companies to distributors of electronic appliances. Out of the companies that use derivative financial instruments, 92% use them to protect themselves from the interest rate risk (or 85% of the total number of companies), 85% in order to protect themselves from exchange rate variation (or 78% of the total number of companies), 25% use derivatives in order to protect themselves from the variation of the prices of goods (or 23.5% of the total number of companies), and 12% (11% of the total) use them in order to protect themselves from the variation of the share prices, as can be seen in chart 3.2 below.
The positive trend of the transactions with derivative financial instruments continues. The first four months of the year 2006 have shown a significant growth on all derivatives markets in the world. The global amount of transactions in the months January – April, measured in the number of signed contracts, has grown by 23,7% compared to the previous year, meaning an absolute value of 3,8 billion contracts out of which the futures contracts have had a growth of 25,8% and the options contracts have had a growth of 22,2%. From the classification of the most important derivative markets, that can be seen in table 3.1 below, 4 derivative markets have reported a 2 figure growth compared with the previous year, which is a very good sign. In first place regarding positive variation of the transactions derivatives from one year to another is Chicago Board Options Exchange, with a growth of 41,4%, followed by Korea Exchange and Chicago Mercantile Exchange with growths of 23,1% and 22,2%. Euronext.liffe, one of the few derivative markets that has recorded a decrease of the volume of transactions compared to the previous year, has done so because of the market changes it made regarding the size of the contracts for the options products.

**Table 3.1**

Classification of the derivatives markets on the number of transactioned contracts (millions of contracts)

<table>
<thead>
<tr>
<th>Derivative market</th>
<th>January-April 2006</th>
<th>January-April 2005</th>
<th>Variation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea Exchange</td>
<td>908,21</td>
<td>738,07</td>
<td>23,1 %</td>
</tr>
<tr>
<td>Eurex</td>
<td>496,89</td>
<td>416,34</td>
<td>19,3 %</td>
</tr>
<tr>
<td>Chicago Mercantile Exchange</td>
<td>421,90</td>
<td>345,23</td>
<td>22,2 %</td>
</tr>
<tr>
<td>Chicago Board of Trade</td>
<td>250,15</td>
<td>234,43</td>
<td>6,7 %</td>
</tr>
<tr>
<td>Euronext.liffe</td>
<td>241,55</td>
<td>259,92</td>
<td>-7,1 %</td>
</tr>
<tr>
<td>Chicago Board Options Exchange</td>
<td>204,94</td>
<td>144,98</td>
<td>41,4 %</td>
</tr>
</tbody>
</table>
3.3. Securitization of financial mediation

The banking systems of the developed countries have been the subject of a continuous demediation process; a higher and higher percentage of financing operations are completed through diversified securities rather than by bank loans. The beneficiaries of these trends have been both the financial-banking mediators and the people with savings and the investors on the capital markets.

Securitization can be defined as a process where loans, claims and other securities are added together with the monetary flows they generate and with their economic value and redirected in order to sustain the payments corresponding to related or associated securities. The securities resulting from the process of asset securitization are called “asset-backed securities”, meaning securities that are insured through assets or bonds or loans insured through assets.

On the markets where securitization has been introduced on a large scale there were noticed several social and economic benefits. The existence of a secondary liquid and efficient market has as an effect the increase of cash assets and the decrease of financing costs. The financing needs are often related to social government politics that offer various facilities to some sectors. Similarly, the liquidity and efficiency of the secondary market reduces the regional and geographic discrepancies regarding liquidity and the cost of financing, by globalizing the capital market. It has been noticed that a strong securitization assets market facilitates and encourages efficient allocation of capital by forcing the crediting activity to comply with the discipline of the capital market. Therefore, securitization helps allocate the capital to the most efficient users.

From the perspective of the governing body, securitization is a useful tool that allows financial institutions to focus their credits, their interest rate and their market risk associated with their activities as investors. This makes the individual risk of these institutions decrease, and therefore, the systemic risk also decreases.

In order to become more competitive and to improve their profitability and risk rates, banks have transferred some of the crediting risks from their financial situations to the securities operations – for example, by collecting and converting assets into securities, by using interest based swap operations, or by using other transactions
with securities. Securitization has therefore played a key part in the development of the
global character of the financial markets. By segmenting large risks into several small
risks and by covering those small risks with the help of diversified financial products,
the financial specialists have increased significantly the number of participants on the
international markets – both buyers and sellers – and have offered access to market
segments and trading terms that weren’t available before. The companies and
governing bodies have used more and more capital markets in order to finance their
activities. Diverse and numerous groups of investors have become interested in having
in their portfolios innovative crediting instruments or securities, bearing risks that can
be easily controlled – due to the evolution of computer technologies and of the internet
– through complex (expert) systems of mathematical decision and modeling.

3.4. The growth of hedge funds

The number of these funds has grown significantly as the states have started
lifting the barriers that they had set to the expansion of capital. According to the last
report published by Hedge Fund Research Inc., if in 1990 there were less than 1000
hedge funds in the world, in 2005, there were more than 9500 of them, and the funds
that they managed were close to 1000 billion USD. The huge size of hedge funds has
lead to the necessity of their regulation. So, Eurohedge was funded in the EU, an
institute shoes goals were to monitor the risk capital based funds. But there are still
major regulating differences between the various countries of the EU, in Great Britain
and Luxembourg, for example, the level of regulation is more liberal than in France.

3.5. Diversification of the services of the banking intermediation and the
increase of the number of non-banking intermediaries

Due to the increased competition on the market and to the existence of a
growing number of non banking mediators, the banks have been forced to extend their
traditional activities – by using the opportunities offered by the dereglementation of
national markets – to areas like business investments, asset management, insurance,
diversifying their income sources and their risk management methods.

The expansion of the operations on the capital markets has created a new
source of profit for the banking institutions – subscribing corporate shares and bonds
issues. There have also been used new sources of financing for their own investments,
by using the over the counter derivatives, especially swap operations based on interests
and on currencies.

Banking institutions have been forced to find additional sources of income,
including new ways of mediating financing and commission generating businesses,
since the increased competition from the non banking institutions has reduced the profit
margin that they receive from traditional banking activities. This trend has been noticed
especially in continental Europe, where the level of consolidation of the banking
institutions has been relatively low. In comparison, in USA and Great Britain there was
a noticeable trend of merging of the banks with other banks or with insurance or
security companies, with the intent of exploiting scale and scope economies and of
remaining competitive by maintaining or increasing their market share.

The financial non banking institutions are in a – sometimes aggressive –
competition with the banking institutions in order to undertake the savings of the
population and the excess cash of the corporations, by constantly reducing the price of mediation and of the financial instruments. Therefore, they have collected a higher and higher ratio of the cash assets on the market, and the investors have redirected their investments towards securities with higher efficiency issued by institutions – such as mutual funds – that are better oriented towards advantages like risk diversification, reducing the fiscal pressure, creating scale economies and increasing the sophistication level. The institutional investors, in the form of retirement funds, have contributed to the efficiency of the capital markets by helping to their development and by creating new financial instruments: financial asset based instruments (asset-backed securities), derivative financial instruments, credit titles with a floating rate, index tracking funds (funds that follow the evolution of some indexes), synthetic financial products, that protect investors from adverse evolutions.

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