UDC 339

The Modern Paradigm of Operation of the World Financial Market

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ABSTRACT. For the purpose of further development of the world financial market theories fundamentals, the article specifies interpretation of its concept as a combination of inter-related segments – stock market, foreign exchange market, credit market, insurance market and investment market, subject to functional and institutional aspects. Based on the extended interpretation (of the financial market as a combination of inter-related segments) and analysis of a number of financial market notions, there have been comprehensively considered the notions of the world financial market in functional aspects (as a field of market relations which provide accumulation and interstate flow of money capitals in order to assure continuity and profitability of the recovery process) and institutional aspects (when attention is focused on a number of banks, specialized financial and credit establishments, stock exchanges through which world financial flows move). To identify specific features of the modern world financial market the systems approach principles were applied as a general scientific methodology of fundamental research. Based on such approach the inter-relation of segments, items and objects has been analyzed, the relation between the development factors of the world financial market has been determined.

KEYWORDS. Financial market, national financial market, international financial market, segments of international financial market, international finances, international financial relations, international financial system, financial globalization.

Introduction

World economy globalization causes qualitative changes in development of the world financial market. First of all, it is manifested by blurring of boundaries between its different segments because of which problems of some countries and segments of economics affect other countries and segments.

Development of the world economy under conditions of deepening of globalization processes, enhancement of economical process deregulation tendencies make to re-evaluate the objective necessity and the possibility of operation of the world financial market being a part of the world economy.

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Today, on the world financial market not only its organizational model but also factors of formation and peculiarities of behaviour of crisis on the same, which have taken global form, are changing fundamentally. The role of the world financial market has considerably increased in accumulation and redistribution of inter-country flows of money capitals resulting in its unprecedented growth.

The necessity of new understanding of the problem of world financial market operation, development of principally new methods and tools are dictated by the transition to a qualitatively new stage of economic life internationalization – globalization of economic activity.

World financial market operation problems are investigated in studies of national and foreign scientists and experts. Among foreign big works in this field we should mention the works of J. Blake[2], Dolan E. Dzh.[3], Kravchuk N.Ya.[4], Krasavina L.N.[5], Lukianenko D.G.[6], Lutsyshyn Z.O.[7] Modigliani F., Fabozzi F.[8], Fama E.[9], Fay M., Tito Y.[10], Hausler G.[11], Sornette D.[12], Stiglitz *J*.[13], and others.

Analysis of works of the above authors shows that as a rule investigations dedicated to the analysis of operation of one of the world financial market sectors, mostly foreign exchange, credit or financial one. However, the experience of development and improvement of the system of world financial market operation accumulated from year to year still hasn't been systematized and integrated.

Therefore, the aim of our study is to specify, based on the systems approach, the concept of the world financial market as a combination of its different segments and to identify specific features of operation of the world financial market in the context of financial globalization of economics.

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[2] Blake J. *An analysis of the financial markets*. Moscow: Infra, 1997. [In Russian].

[3] Dolan E.J., Campbell, K.D., and Campbell R.J. *Money, banking and monetary policy*. Translated by V. Lukashevich, etc ; Edited by V. Lukashevich. Moscow.: Turan, 1996. [In Russian].

[4] Kravchuk N. *Divergence global development: formation of modern paradigm heofinansovoho space*. Kyiv: Knowledge, 2012. [In Ukrainian].

[5] Krasavyna L. N. *The International monetary and loan and fynansovыe relationship. Textbook*. Moscow: Finance and statistics, 2007. [In Russian].

[6] Lukianenko D., Poruchnyk A., and Stolyarchuk J. "Global financial imbalances and their macroeconomic effects." *Journal of the European economy* 9 no. 1 (2010): 73-92 [In Ukrainian].

[7] Lutsyshyn Z.O *Transformation of the global financial system in the context of globalization*. Kyiv: Publishing Center "DrUk". [In Ukrainian].

[8] Fabozzi F., and Modigliani F. *Capital Markets*. 3-rd ed. USA: Prentice Hall, 2003.

[9] Fama, and Eugene F. "Efficient Capital Markets: A Review of Theory and Empirical Work." *The Journal of Finance* 25, no. 2 (1970): 383. doi:10.2307/2325486.

[10] Fay, Marianne, and Tito Yepes. "Investing in Infrastructure: What Is Needed from 2000 to 2010?" *Policy Research Working Papers*. 2003. doi:10.1596/1813-9450-3102.

[11] Hausler G. *Derivatives and Monetary Policy*. Washington, DS: Group of Thirty, 1996.

[12] Sornette D. *How to predict the collapse of financial markets: the critical events in complex financial systems*. Translated by N. Zaporovich, T. Cherpakov; Library at Princeton University. Moscow: SmartBook: I-Trade, 2008. [In Russian].

[13] Stiglitz J., and Weiss A. "Credit Rationing in Markets and Imperfect Information". *American Economic Review* 71 (1981): 393-410.

Main Part

The modern world economics is characterized by intensification of the internationalization process, which started about one hundred years ago and dissolved into globalization in 80–90-ies of the past century. This was promoted by new principles of international labour distribution formed not only on the basis of specialization according spheres of production but also of the practice of issue and supply to the world market of individual components and parts.

The dialectic of this process consists in the fact that in opposition to globalization a counter tendency arises i.e. regionalization of economics for the purpose of protection of national economic security and counteraction with the rules of interstate regulation of economic activity.

Under the current conditions, financial flows have become a prevailing form of international economic relations. Financial crisis has revealed interconnection and interdependence of financial market segments thus causing the urgent need in international cooperation in order to overcome its consequences. Besides, the crises demonstrated the necessity to apply the systems approach for the development of a strategy of world financial market development.

An important feature of international economic relations is an increase of the scope of capital export, development of the world financial market, liberalization of agreement execution conditions. Institutional investors look for the ways of re-direction of their investments to the countries with more business-friendly economic and political situation.

Globalization promotes blurring of institutional, legal and technological barriers between national economic markets, including financial ones. The world economy and the world financial market come to a greater integrity.

The basis of international finances, as a component of the system of international economic relations, is cash profits formed in the process of operation of the world economy and which maintain mutual exchange of operating results of national economies. International finances has historically been related to the cash profit system, therefore the shortest definition of international finances is a flow of cash profits in the world economy field[14].

The fundamental preconditions of creation of international finances are: 1) development of international money economy up to an adequate level and continuous money circulation in the world economic relations in great amounts; 2) completion of formation of such money function as

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[14] *Finance*. Edited by V.I. Ospischev. Kyiv, 2008. [In Ukrainian].

world money, since international finances are not a flow of funds at all, but rather a flow of foreign currencies. From this point of view, international finances may be defined as a comprehensive system of foreign currency flows between participants of the world economy.

International finances mediate currency and financial flows in the world economic relations belonging to both the real sector, i.e. to the primary industry relations, and the sector of distribution, re-distribution, exchange and consumption.

There are direct and inverse relations between international finances and world material wealth recovery processes. Since international finances are a cash profit flow in their foreign currency form on the world market, then the concept of foreign currency profit should be defined[15]. Profit (whether in monetary or foreign currency form) provides for realization of any kind of needs of all participants of international economic, political, cultural and social and other life. In other words, by distributing and spending its foreign currency profit each participant of international economic relations may satisfy its needs and interests being literally a production resource itself. Foreign currency resources pay a great role in material wealth recovery, without them no capital can be acquired on the world market.

No new project in the field of international relations may be implemented without prior valuation of the amount of foreign currency flows required for project realization, sources of their actual formation and allotment. Distribution and accumulation of foreign currency profits acquires a purposive character. This gives rise to such an important concept as international financial resources – accumulated foreign currency profits remaining after covering of expenses. Surely, foreign currency profit is an important component of international financial resources, but if for example realization of plans of a company requires considerable foreign currency resources then only profit from foreign currency sales will be not enough. How this situation is resolved? Apparently, by means of purchase of the missing foreign currency resources i.e. obtaining of international loans.

Therefore, there are two types of international finances: 1) own foreign currency resources of international relations participants; 2) borrowed funds (on the WFM – world financial market)[16].

The own foreign currency resources play the role of international investments and securities. The borrowed foreign currency resources are represented by international loans and to a certain extent by international insurance resources.

[15] Ryazanova N. S. *International Finance*. Kyiv: KNEU, 2001 [In Ukrainian].
[16] D'yakonova I.I. et al. *International Finance*. Ed. I. Makarenko M. and I. D'yakonova. Kyiv: Center of educational literature, 2013. [In Ukrainian].

International finances took a form of a completed economic phenomenon only by the end of XIX century with the development of such an important form of world economy as international trade. But the sphere of influence of international finances is much wider than international economic relations: they affect politics, culture, science, private life of citizens, historical destiny of entire peoples. International finances are conditioned by foreign currency profits, which are generally classified according to three stages: distribution, redistribution, end use.

Distribution of foreign currency profits formed as foreign currency revenue of an enterprise (firm) from sale of goods and services on the world market is mostly carried out as follows: having distributed the revenue according to expenses of production factors and remunerated employees, a company receives the foreign currency profit which is distributed in different ways at different enterprises. This is a stage of foreign currency profit distribution, which gives rise to a key moment for the formation of international finances and products of the world financial market. International finances arise as a result of savings formed on the stage of foreign currency profit distribution[17]. Saving is a balance of profit after payment of all expenses related with current consumption. Savings are formed by legal entities (firms and organizations) as well as by individuals (population). This function of consolidation of all foreign currency savings (of firms, organizations) is performed by international finances.

After primary distribution and creation of savings in foreign currency the foreign currency redistribution process starts: contributions to various international organizations and funds from both national budgets of states and foreign currency profits of firms, organizations and citizens. The last stage of distribution of international finances is their application. Foreign currency profits being applied are called final profits: they are applied for acquisition of goods, services, for investments, partially for additional savings, for acquisition of securities. It is important to note the level of operation of international finances:

$$\sum Д_{п} = \sum Д_{к} , \quad (1)$$

where $Д_{п}$ –primary profit; $Д_{к}$ – final profit.

International finances as economic category are characterized by a number of specific features. They operate as a single, integral and global hyper-system of financial relations between participants of international economic activity.

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[17] Kozak J.G., Logvinova N.S., and Kovalevsky V.V. *International finance. Textbook.* Kyiv: Centre uchbovovoyi literature, 2007. [In Ukrainian].

The integrity of international financial relations consists in the fact that specific elements of the international economic system are closely interrelated – its impossible to change one of them without decreasing of other elements[18]. Any influence on international finances, whether direct or indirect, is reflected on the whole complex of components of the international financial system.

The integrity of international finances is expressed in the fact that their specific elements have the same social nature and single laws of development. This particular fact makes possible international flow of capital and promotes development of international financial relations.

Finally, the global nature of international finances is connected with the fact that international finances embrace the whole world economy, since they are related in one way or another to all national finances and all international economic and political structures and institutions. Accordingly, development of international finances is conditioned by the whole set of processes of the world political and economic development and affects all aspects of these processes. Therefore, analysis of evolution of international finances is impossible without the parallel study of evolution of the world political and economic system.

The term "hyper-system" proposed by us concerning the definition of international finances as an economic category, in our opinion, is important because it, being a higher level structure, characterizes international interrelation of national finances. Accordingly, operation of this structure elements is not explained by simple objective laws, it continuously changes.

International finances, like any other hyper-system is developed, to a considerable degree, stochastically, i.e. in an indefinite, unpredictable way. And even if internal laws of development of international finances exist they are not steady and often change. Therefore, any forecast of development of international finances describes only some probable scenario of development of financial events.

One more essential feature of international finances consists in the fact that they always operate in a currency form because any international financial relations are connected with currency values flow. Accordingly, operation of international finances is greatly related to development of the international currency system. Every new stage of operation of the international currency system causes the qualitative transformation of international finances.

Any international financial system is a form of organization of international financial relations. International financial relations are a combination of economic, legal and other relations formed under the

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[18] Romanenko A.R. et al. *Finance*. Kyiv: KNEU, 2003. [In Ukrainian].

operation of international finances in the world economy and provide for exchange of operating results of the national financial and economic system[19]. International financial relations, as a sphere of operation of international finances, are a part of both economic and legal international relations. International laws, legal rules and customs regulate the process of operation of international financial relations which in essence are integrity of world economy and law.

International financial relations inevitably acquire certain form of organization which is commonly called the international financial system. Since the end of XIX century it has become a necessary tool of international and domestic currency payments. The international financial system is a form of organization and regulation of international financial relations set forth by provisions of international law, international treaties, regional agreements and national legislations of member countries of the international financial system. The nature of operation and stability of the international financial system depends on the extent of compliance of its principles with the world economy structure, interests of the leading countries and general correlation of political forces. Any change of any of these conditions gives rise to a global or local crisis in the international currency system. However, the international currency system is aimed at the servicing of the globalizing world economy and has its own mechanism of operation; it is closely related to national financial systems. This relation is maintained through national export-import banks supporting foreign economic activity and shows itself in the inter-state currency exchange control and coordination of financial policies of member countries.

In our opinion, the thoroughly completed creation of the international financial system would mean a gradual failure in the context of financial globalization of national financial systems and considerable limitation of national sovereignty not only in financial but also in social and economic and political spheres. The interrelation formed up to the present moment between the national and international financial systems doesn't mean their equivalence, since there are different conditions of their operation and regulation.

The interrelation of international finances, international financial relations and international financial system is shown on picture 1.

As may be seen on Fig. 1., international finances, international financial relations and international financial systems in their cooperation are formed up like a nest-doll, where every next doll is a form of organization and operation of the previous one.

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[19] Cheremisova T.A. "International financial and monetary relations in a globalizing market." *Journal of social and economic research* 2 no.49, part. 1 (2013): 195-201.

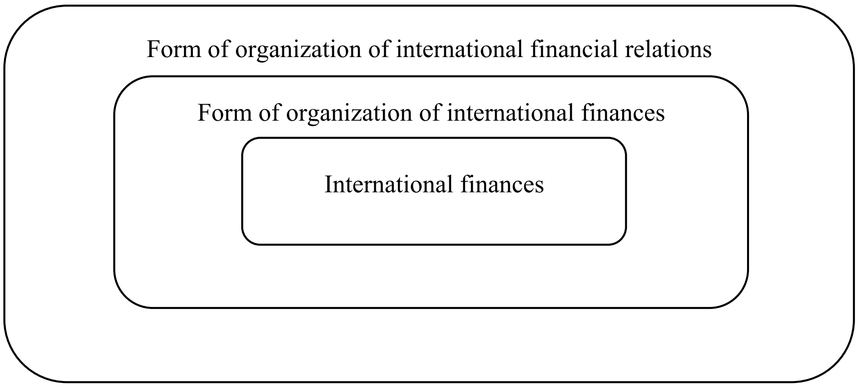

Fig. 1. Interrelation of International Finances, International Financial Relations and International Financial System

The world financial market (WFM) is the relations between participants of financial markets (national and international) in the field of issue and circulation of national and foreign financial products due to which redistribution of capitals occurs both at the domestic level and between countries of the world. The WFM is a financial market of all countries of the world or a combination of financial markets of all countries of the world. National financial market is relations between market participants of a specific country in the field of sale and purchase of financial products without capital import into or export from the country. Many authors don't make distinction between the concepts of WFM and international financial market. Today, investigations of economists lack a single approach to the distinction between the world financial market and the international financial market. Thus, in the book of A.A. Suetin "International Financial Market" the author doesn't outline any differences between the world financial market and the international financial market and irrespective of the title provides in fact the detailed analysis of the WFM[20].

In the work of D.M. Mykhailov "World Financial Market" there is a substitution of all of the three notions: national, international and world financial markets[21]. In the study of Yu.I. Lvov "Banks and Financial Market" there is also no distinction or specification of the notions, and some abstract financial market is investigated as "a sphere of operation of the financial mechanism"[22]. One of the leading Russian experts in the financial management field I.T. Balabanov in his work

[20] Suetin A.A. *The international financial market*. Moscow: KnoRus, 2007. [In Russian].
[21] Mikhaylov D.M. *The global financial market. Trends and Tools*. Moscow: Examination, 2000. [In Russian].
[22] Lvov Y.I. *Banks and financial markets*. Edited by M.H.Lapidus. St. Petersburg: The cult-inform press, 1995. [In Russian].

"Financial Management" investigates the financial market as "a sphere of manifestation of economic relations between sellers and buyers of financial resources and investment values (i.e. of financial resources creation tools)"[23]. In the manual under the editorship of V.S. Torkanovskiy "Securities Market and its Financial Institutions", the financial market is considered as a national market without reference that the structure of the financial market, as economic phenomenon, includes, among others, the world and international financial markets[24].

As well, the leading foreign economists often make no distinction between the international, world and national financial markets. Well-known American experts in the field of financial markets F. Fabozzi and F. Modigliani in their fundamental theoretical paper "Capital Markets" don't outline separately a notion of international or world market analyzing in details the process of their globalization. The above work describes division of the national financial market into external market (often called by the authors as international or offshore, or euro market) and internal market (called by the authors as national market and divided into national financial operation market and foreign financial operation market) [25]. The notion of WFM is not differentiated in their work.

J. Blake in his monograph "Financial Market Analysis" doesn't divide the financial market into world, international and national markets, but divides it only according to the types of financial instruments circulating on it[26]. In monograph of J.C. Van Horne "Fundamentals of Financial Management" both world and international financial markets are represented as a single notion[27]. American financial market researcher J. Tobin includes into the term "Financial Market" only a national market[28]. French economists P.Courbis and F.Penot also make no distinctions between the world and international financial market[29].

In our opinion, the clear categorization of the world, international and national financial markets is necessary to study the practices and instruments of WFM regulation. Without understanding what exactly is subject to the control it is impossible to conduct an effective research of such regulation. As far as the author has already provided definitions of

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[23] Balabanov I. T., Krylova T.B., and Stoyanova E.S. *Financial management: theory and practice: A textbook for high schools*. Moscow: Prospect, 2007. [In Russian].

[24] Torkanovsky V.S. *Securities market and financial institutions*. Moscow: Business and Service, 1998. [In Russian].

[25] Fabozzi F, and Modigliani F. *Capital Markets*. 3-rd ed. USA: Prentice Hall, 2003.

[26] Blake J. *An analysis of the financial markets*. Moscow: Infra, 1997. [In Russian].

[27] James C. Van Horne. *Fundamentals of financial management*. Translated by Y. V. Sokolov. Moscow: Finance and Statistics, 2005. [In Russian].

[28] Tobin J. *Properties of Assets*. US: California University, 2005.

[29] Courbis P., and Penot F. *Quelle informatique pour maitrise du risques*. Paris, 548 (2002): 45–47.

the world and national markets above, and shown that most researches dedicated to this problem don't contain distinctions between the world and international financial markets, we deem appropriate to suggest the following meaning of the international financial market: international financial market is a component of the WFM which provides redistribution of capitals between countries through different forms of financial resources. In such conceptual view, the international financial market is:

– relationship between national and foreign participants (residents and nonresidents) in one or more countries concerning national capital export or foreign capital import;

– relationship between residents of different countries.

The international financial market after separation from national markets with regard to execution of external operations has closely united all national markets at international scale, creating an important factor of such current economic phenomenon as financial globalization. However, the international financial market doesn't include internal (actually principal) operations of national financial markets and that's why it can't be called a world market. The international financial market is, as a rule, an organized market but unlike organized national markets it is regulated by a state or a group of states to a lesser extent, and by different unions of participants of this market to a greater extent.

The international financial market, in our opinion, can't exist apart from national markets; it is based on them since things happening on it don't differ from those would happen on national markets. Clarifying this assumption we can specify that the international financial market is based from the one side on national markets and national organizations as well as on the infrastructure and instruments of regulation of these markets. From the other side, it is based on international organizations (international stock exchanges and currency exchanges, international clearing systems, payments and custody service systems, transnational bank syndicates), their infrastructure and regulation. The listed above organizations are located on the territory of specific countries (in USA, Japan, Switzerland, Great Britain, France etc.) and are residents of the same. But at the same time, the international financial market doesn't include internal operations of national financial markets and thus can't be called a world market (Fig. 2).

As is seen from picture 2, the WFM is a combination of financial markets of all countries of the world. Practically, the WFM is an economic abstraction because trade in financial resources and its regulation is always performed on the territory of a specific country. This may include trade both in national financial resources and in foreign financial resources. Besides, national "players" (residents) as well as foreign participants (nonresidents) may take part in this trade.

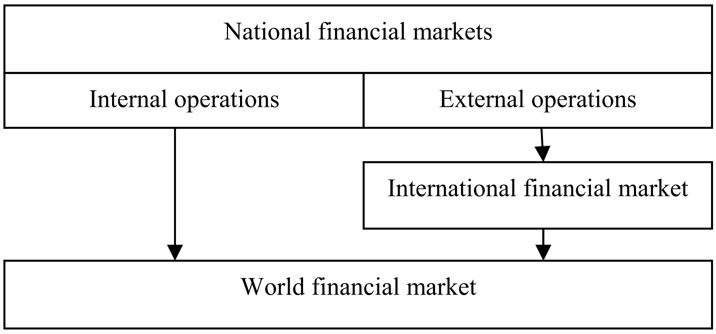

Fig. 2. Diagram of the Relations Between National, International and World Financial Markets

There are four possible kinds of relations between WFM's participants[30]:

– between national participants – with respect to sale and purchase of national financial products;

– between national participants – with respect to sale and purchase of foreign financial resources;

– between foreign and national participants – with respect to sale and purchase of foreign and national financial resources;

– between foreign participants – with respect to sale and purchase of foreign and national financial resources.

Any participant of the national financial market is by definition a participant of the WFM, that's why national instruments of regulation of financial operations of such participant is also a part of instruments of WFM regulation. This conclusion is extremely important for the further analysis of WFM regulation instruments. However, a participant of the national financial market doesn't automatically become a participant of the international financial market. It may become the latter only when it starts to operate on it or in the result of the processes of integration of national markets into the global financial market.

Participation in national financial markets in operations of the international financial market is preconditioned by a number of factors (table 1).

The proposed system of macroeconomic factors, which condition the moving of the national financial market into the international one not

[30] Ash S. M. Financial market. Tutorial. Kyiv: Center of educational literature, 2011. [In Ukrainian].

only reflects the national economy state but also confirms readiness of the national market to get integrated into the international financial market. External macroeconomic factors provided in table 1, show trends and perspectives of development of the world economy system, rapid evolution, internationalization and globalization of which are main factors of development of the international financial market. Factors of the world geopolitics formed by the world community reflect basically interests of industrialized countries.

Table 1 **Classification of Factors Affecting the Participation of National Financial Markets in Operations of the International Financial Market**

Macroeconomic factors		Geopolitical
Internal	**External**	
1. Country economic status: - economy maturity level; - internal debt and reserve indicators. 2. National financial system maturity. 3. National financial market organization level. 4. Financial intermediary institute maturity. 5. Capital flow liberalization. 6. National political situation stability. 7. Quality of international rating of country solvency.	1. Country status in the world economy: - balance of payments indicators; - external debt - exchange rate. 2. International currency and financial system development level. 3. International financial market organization. 4. International financial intermediary development level. 5. Crisis or growing status of the world economy and WFM. 6. Methods of regulation of the global financial market.	1. Country interest in integration into the world economy. 2. Role of the country in international distribution of labour. 3. Place of the country in the world economy. 4. World economic relations development level. 5. Level of integration into the world financial system. 6. Geographic position. 7. World geopolitical situation stability. 8. Level of regionalization of national economy and regional economies.

In our opinion, the international financial market extends the possibilities of national markets creating conditions for the transfer of financial resources from the economies where they are in excess to the economies where financial resources are in deficit. However, national financial markets are not always able to provide their participants with the required variety of financial market management options and regulation instruments. It is especially important to emphasize that the international financial market supplements national markets with regard to the variety of (state or market) tools for their regulation, and allows providing of the possibility for the effective regulation of the flow of financial resources on the WFM.

This conclusion allows us to research the whole system of WFM regulation tools on both national and international markets.

However, only understanding the current structuring of the WFM is not enough for analysis of regulation tools of the same. One more aspect, after the structural component giving a clear understanding of the thing, which actually has to be regulated, is a subject-matter of the WFM. The WFM conducts trade in all forms of finances – currency, securities, loans, investments, insurance products, financial derivatives.

It must be emphasized that such understanding of the subject-matter of the WFM is not currently a single and undisputable one. Thus, D.M. Mykhailov[31] and B.B. Rubtsov[32] consider the world financial market generally to be the world stock market, A.A. Suetin thinks that on the WFM loans, financial derivatives and stock values circulate[33]. F. Fabozzi and F. Modigliani consider the WFM as a combination of credit, currency and stock markets[34]. In the fundamental theoretical work of American economists Brigham E. and Gepanski L. "Financial Management Theory and Practice" the WFM is represented by foreign exchange, credit, stock and investment sectors[35]. In other words, until now in researches of economists there has not been elaborated a single opinion on which financial resources (capitals) are traded on the WFM.

In our opinion, five main forms of financial resources are traded on the WFM. As to the market of derivatives, to a greater or lesser extent derivatives are present in trade in all the above financial products (there are currency, stock, credit derivatives). The experience of application of financial derivatives in investment and insurance operations is gradually acquired.

In our opinion, the WFM structure built up taking into account various financial resources being an object of sale and purchase on this market may be represented as follows (Fig. 3).

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[31] Mikhaylov D.M. *The global financial market. Trends and Tools*. Moscow: Examination, 2000. [In Russian].
[32] Rubtsov B.B. *Modern stock markets*. Moscow: Alpina Business Books, 2007. [In Russian].
[33] Suetin A.A. *The international financial market*. Moscow: KnoRus, 2007. [In Russian].
[34] Fabozzi F., andModigliani F. *Capital Markets*. 3-rd ed. USA: Prentice Hall, 2003.
[35] Brigham E., and Gepanski L. *Financial Management Theory and Practice*: 14-rd ed. Chicago: The Dryden Press, 2011.

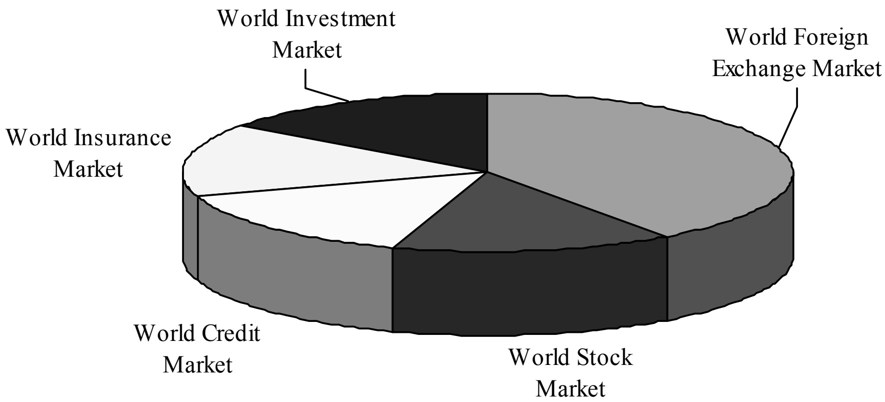

Fig. 3. WFM Structure

The proposed structure of the WFM is a system of interrelated and interdependent markets, on which trade in different financial products is performed: world foreign exchange market, world credit market, world stock market, world investment market and world insurance market. The difference between world markets represented on picture 3 is determined by the special nature of financial products sold and purchased in each of the listed sectors of the WFM. For the world foreign exchange market they include currencies and derivatives; for the world credit market – credits and derivatives; for the world stock market – securities and derivatives; for the world investment market – investment products (projects); for the world insurance market – insurance operations. Thus, practically all sectors of the WFM are imbued with a single structural component – financial derivatives. In our opinion, there is no economic sense in separation of a world market of derivatives in WFM structure like many foreign and domestic specialists do. The world market of derivatives is a structure uniting now all sectors of the WFM, dissolving boundaries of these sectors and making them interrelated and interpenetrating. Derivatives opened new opportunities for creation of an effective mechanism of WFM regulation with the aim to decrease market risks, allowed to redistribute risks while trading in different financial products and to insure risks of loss on exchange, interest rate (credits), securities, investment and insurance operations.

It is understood that the WFM trades in all forms of financial products, and an independent profit, not being a deduction from financial funds of any economic entity but supplements (increases) the total amount of world finances, is created on this market. The WFM creates conditions for advantageous (profitable) placement of financial resources in any of the above forms and simply for sale and purchase of the same. Naturally, the following questions arise: where do funds for sale on the WFM come from? Who is a seller on this market? This role is played by owners of savings and holdings – legal entities and individuals. In general, savings and holdings are a remainder of profits after covering of all expenses of an economic agent. In this context, savings are always a reduction of the current consumption i.e. a future consumption. A holder of savings seeks for those who are ready to take the savings "in process" to make them grow but not depreciate. Analysis of WFM statistics for the last 35 years shows that savings correlation factor throughout the WFM and individual groups of national financial markets increased from year to year.

The WFM plays an important role consisting in amalgamation of interests of saving holders (sellers of financial resources) and potential investors (buyers of financial resources)[36]. It is the WFM due to which savings are invested, that is to say converted into capital and give to their holders the right to a share in future profits. In this case, the WFM stands as a system of market relations which provide accumulation and redistribution of capitals between national financial markets and their regulation.

If the WFM doesn't offer new financial products sourced mostly from savings, then it will lose quickly its dynamics and volumes. That's why it is important to maintain relative conformance of savings and investments, as well as main economic determinants affecting their dynamics. The main operative motive of the acquisition of financial products for the investment purposes on the WFM is a profitability level of such investment.

The WFM like any other market (for example the commodity market) forms, subject to action of the market supply and demand law, a price for a financial product. Depending on a segment of the WFM, a price for a traded financial product takes different forms: foreign exchange gain, dividend, interest, profits from capital investments, insurance premium. Commodity (financial product) price is a profit to be provided by a buyer of this product to a seller. The specific nature of financial product pricing consists not only in the action of market supply and demand laws but also in the duration of the period of disposal of the financial products from their owners. Their owners (sellers of financial resources), for their readiness not to use their savings for a longer period, usually charge an increased price (fee).

[36] Mozhovyi O.M., Obolenska T.E., and Musiyets T. V. *International Finance: textbook*. Kyiv: KNEU, 2005. [In Ukrainian].

Thus, on the WFM, dependence between the price of capital being invested and the repayment time arises. This dependence may be demonstrated on the example of an econometric model of the relationship of gross investments, profits received therefrom and lead time on investment:

$$V = \sum_{t=1}^{T} \frac{x_t - I_t}{(1+r)^t} + \sum_{t=1}^{T} \frac{FS_t - FB_t}{(1+r)^t} + \frac{V}{(1+r)^T}, \quad (2)$$

where V is a market value of firms in which capital is invested; x_t is an amount of cash flow from investments in year t; I_t is gross investments in year t; FS_t is a market value of firms excluded from the sampling in year t; FB_t is a market value of firms included into the sampling for a 10-year period in year t; r is an interest rate, %.

Financial product price set on the WFM is a profit level at which an amount proposed for savings investment and amount of investments which firms are ready to receive, coincide. For the assessment of an equal weighted price for WFM products the following condition should be met:

$$Д^{i}_{1 \ldots n} \geq Д^{з}_{1 \ldots n}, \quad (3)$$

where $Д^{i}_{1 \ldots n}$ – profits from investments on the WFM; $Д^{з}_{1 \ldots n}$ – profits from savings sold on the WFM.

In addition to WFM structuring according to a type of financial assets (five sectors plus derivatives circulating on it), its structure may be represented in the context of the possibility to regulate and control financial resources sale and purchase processes. Such classification allows division of most of the WFM sectors listed above (foreign exchange, stock and financial derivatives world markets) into the exchanging markets (regulated) and over-the-counter markets (unregulated).

In the modern WFM structure, in addition to the possibilities of its regulation and control, an important role is played by execution of agreements[37]. According to this, the WFM may be represented in the form of three interrelated parts (Fig.4).

The WFM classification structure shown on picture 4 demonstrates that all the three components are closely interrelated and practically (except the national financial market) loosely regulated and controlled. The freedom of movement of financial resources between these three components of the WFM in the represented classification significantly

[37] Amelina I.V., Popova T.L., and Vladimirov S.V. *International Economic Relations: a tutorial*. Kyiv: Center of educational literature, 2013. [In Ukrainian].

complicates resolution of a relevant objective; to combine national sovereignty in regulation and world market financial unification. The great problem is that existence of the WFM has led to the simplification of the procedure of capital transfer beginning. The regulating international organizations (IMF, WB, EBRD etc.) can hardly forecast and timely identified destabilizing flows of the world financial resources in order to form a corrective strategy.

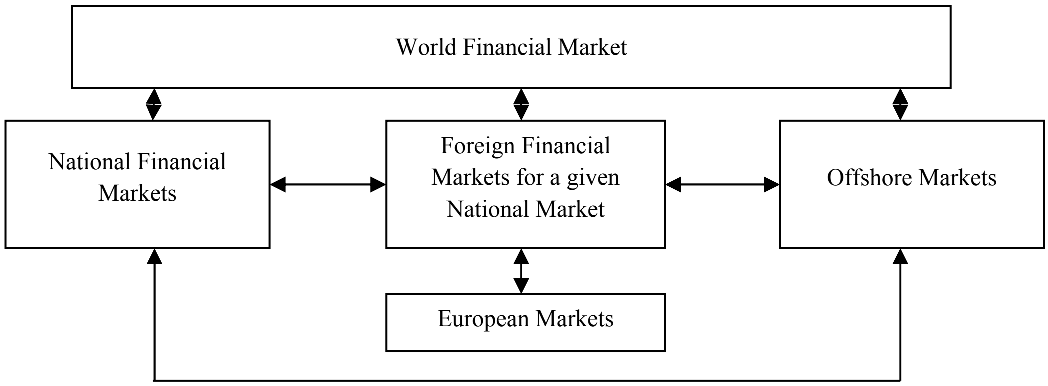

Fig. 4. WFM Structure According to Sites of Financial Operations

It is impossible to imagine the modern structure of the WFM without institutional component. From the institutional point of view, the WFM is a combination of credit and financial institutions and organizations through which the sale and purchase of world financial products are carried out. This classification feature of WFM structure is WFM participants or players (Fig. 5).

WFM participants are mostly credit and financial organizations consisting of central banks, commercial banks, saving and postal systems, credit unions, insurance companies, investment banks and companies, pension and other funds[38].

Direct participants of the WFM, in case of the organized market (exchange market) are members of the exchange market who enter into agreements at their own expense (dealers) or at the expense and under instruction of customers (brokers and jobbers). In the over-the-counter sector of the WFM direct participants are market-makers, all other participants are indirect.

[38] Yukhimenko P.I. et al. *Theory of finance*. Edited by Fedosov V.N., Yuria S.I. Kyiv: Center of educational literature, 2010. [In Ukrainian].

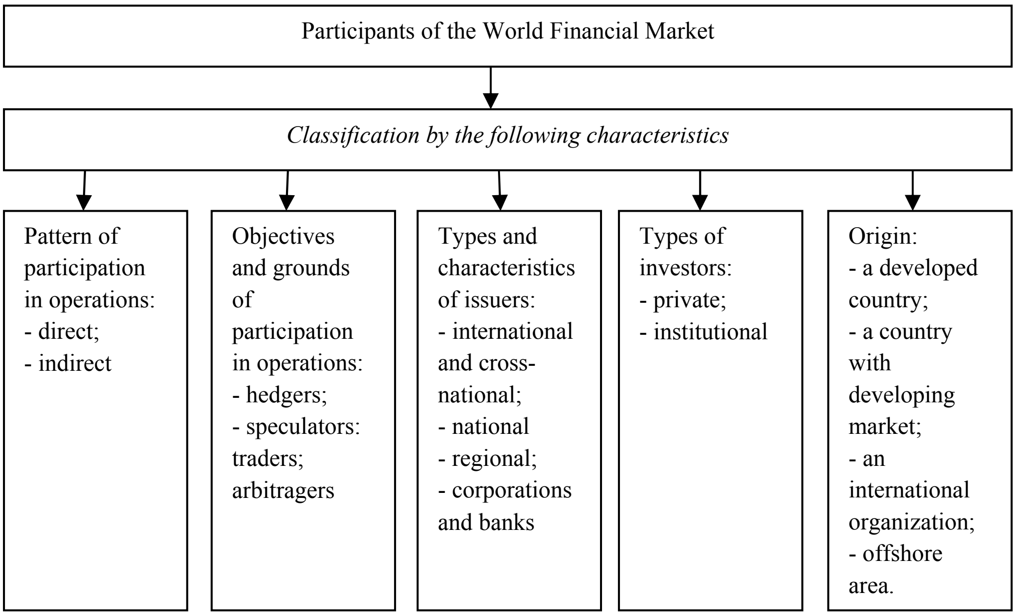

Fig. 5. WFM Structure According to the Main Players

According to the objectives and grounds of participation in operations, WFM participants are represented by hedgers and speculators (traders and arbitragers). Hedger is a participant of the financial market who insures foreign exchange (price) risks, transfer risks, own assets, specific agreements. Speculator is a participant of the financial market seeking for profits due to the difference of underlying assets market value. At that, a trader tries to use fluctuation of rates under one or more contracts, and an arbitrager receives profit due to simultaneous sale and purchase of one and the same asset on different markets.

Arbitrager is a participant of the WFM who wants to use the difference between financial product values (rates) on different markets. The arbitrager sells assets in the place where the asset is more expensive and buys in the place where the asset is cheaper. The arbitrager's profit is a price difference. Arbitragers, by their business, promote the equation of exchange rates and prices, recovery of the parity correlation between interrelated assets in different WFM segments. Moreover, if one of the groups of participants (hedgers, traders and arbitragers) is not adequately represented in any segment of the WFM, this segment becomes imbalanced.

WFM participants are divided into the following categories according to types of issuers:

- international and cross-national organizations, mainly of financial nature (IMF, WB, EBRD, BIS etc.);
- national governments;
- regional and local governments;
- corporations, banks and other business entities.

On the WFM, all participants characterized as issuers are grouped according to their credit ratings. In the context of credit rating, main issuers on the WFM are transnational banks and corporations.

According to types, investors may be divided into two groups of participants of the WFM: 1) private and 2) institutional. Private investors are physical persons performing operations with international financial assets. However, a larger group of investors on the WFM is represented by institutional investors or collective investment schemes. For the past 20 years the role of commercial banks, pension funds, insurance, investment and financial companies, savings banks, mutual savings companies and other credit and financial institutions as well as international financial institutions has increased.

According to countries of origin, buyers (borrowers) on the WFM are divided into four groups: 1) developed countries; 2) developing countries; 3) international institutions; 4) offshore areas.

The WFM structurally is also divided into primary, secondary and tertiary sectors. In the primary sector of the WFM new issues of financial products are placed. In the secondary sector the already issued financial products (40-50% of all WFM) are sold and purchased, and the tertiary sector is a trade in financial derivatives (concerning the whole volume of the WFDM)[39].

WFM development was characterized by a set of peculiarities :

- The great volumes and accelerated rates of growth of the world financial operations.
- The absence of clear time and spatial boundaries.
- Dominance of transnational corporations (TNCs) and transnational banks (TNBs) as participants.
- Application of currencies of the leading countries (USD – 50%, EURO – 22%, Yen – 12%).
- WFM universality.
- Simplified standardized procedures of agreement execution using new computer and information technologies (Reuter, Bloomberg, Internet etc.).

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[39] Petrashko L.P. *International Finance*. Kyiv: KNEU, 2003 [In Ukrainian].

The main activities of the WFM, in our opinion, may be represented as follows:

- to mobilize and efficiently distribute temporarily free financial resources;
- to define the most profitable directions of financial resource investment;
- to assess market prices for financial products;
- to provide mediation between a seller and a buyer of financial products;
- to form conditions for financial market risk minimization;
- to create effective instruments of regulation of financial operations.

The two last directions of WFM operation are a cause-to-effect mechanism. It is understood that a high level of risks on the WFM will objectively create a need of its regulation, and the WFM regulation will lead to the development of a system of its effective operation.

Conclusion

The objective basis of development of the world financial market consisted in inconsistency between internationalization of economic relations and limited capabilities of corresponding national markets. International operations are used as an alternative to the operation on the national financial market. National financial markets, retaining their independence, interlink with similar world markets. Due to the rapid growth, great opportunities and mobility, the world financial market has become one of important branches of international economic relations. Inactivity of money capital is in conflict with its nature and market-based economy laws. Thanks to the market mechanism, temporarily free money capitals are re-involved into capital circulation through different segments of the world financial market providing continuousness of recovery and profits for companies.

Quality of operation of the world financial market determines specific characters of recovery. Now, the financial globalization process is actively being developed, which process is supported by international financial institutions (World Bank Group, IMF, WTO etc.) which hold huge financial, political and administrative resources, serve the interests of the leading economically developed countries, large TNCs and TNBs.

The dual role of the world financial market in the context of economy globalization is justified taking into account the current financial and economical crisis. There has been determined a positive effect of the increase of the volume of redistribution of monetary capital by different segments of the world financial market for the purpose of development of the economy, including innovation development. At that, an increase of negative role of the world financial market is observed. It is referred to separation of its operation from the recovery processes and dominance of speculating virtual transactions. It enhances a disproportion of operation of the world financial market, restrains implementation of the global strategy of the world community aimed at the enhancement of steady development of the world financial system.

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