

## **Financial system and economic development (Tacis project of Assistance to the Ministry of Economic Development and Trade)**

### **1. Target setting**

Targets of financial reform in emerging economy may be formulated in a different way; therefore, conclusions and recommendations of the Paper may depend both on actual material – macroeconomic (institutional) scenario and analysis of sectors and instruments – and on objectives of reformer. It is clear that there exists considerably developed discussion about bank reform, many materials about other sectors, especially about pension reform and development of insurance sector. However, common approach and target of development of financial sector eludes observation and is sufficiently expressed neither in scientific works nor in government documents. Discussing of private financial sphere takes place with regard to separate instruments and laws and not in the general context of country development and a role of financial sector.

Let's formulate two possible approaches to development of financial sector in Russia which might influence both understanding of the Paper and its usage. The first approach doesn't require actions assuming that Russia undergoes in a natural way all phases of industrial development and development of financial sector without any considerable interference of the state as a reformer. The state concentrates on formulation of common laws, and, as far as possible in emerging economy, supports ownership rights, financial control over enterprises belonging to financial sector, avoids budget deficit. Naturally, filling "gaps" in legislation takes place. However, complex reforming of the sector and its adequacy to the needs of development of country economy are not under consideration. State gives to private business (and its organizations, if possible) full initiative in credit development, choice of financial servicing in bank sector and on financial markets (home and abroad), in working out new instruments, while applying, if possible, common international norms for ensuring necessary (according to standards) level of capitalization and financial indicators. This approach is coherent and implies maximal liberalization of currency control and capital flow, all parts of financial sector both in control and ownership and in operations.

This policy carried out to certain extent at present resulted in 1998 default which focused efforts of Government on solving budget and debt problems and practically excluded possibility of scale intervention by government into savings process, intermediation of financial sector and savings. At some moment government had insufficient financial and organizational resources for large scale reforms in this sphere. Apparently private interests also played its role, for example, in the situation that large scale restructuring of bank sector had not been carried out. Reforms in conditions of budget-debt crisis have to bear structural and institutional character, being at the most cost saving for the budget and convenient for those players who have stable position on existing economic stage. Having such approach, no ambitious targets on capitalization, volume of operations or parameters of financial sector can be formulated. If we are satisfied with existing financial sector or we are expecting its independent accelerated development, there is always possibility to revert to this approach.

Considerations concerning bank system may be applied with the same commonness but more critically actually to all other segments of financial institutions: "... Lack of radical reforms predetermined present weakness of the Russian bank system, making to speak that it needs not in reform but in creation anew." The main problems which Russia bank sector faces at the beginning of a new century and which requires immediate solution are as follows:

- low level of capitalization and financial stability which seriously undermines basis of the whole system and creates terms for a new crisis;
- lack of ability of banks to carry out a role of financial intermediaries, i.e. to credit real sector and population, accumulate savings and transform them into investments;

- lack of transparency of corporate governance which makes difficult to determine real owners, groups and/or persons controlling bank;
- low risk management quality and insufficient information about bank status what make worse situation with the banks in the future and considerably hampers funds attracting for future development.”

This Paper is an example of different approach – it's try to view development of the sector of private finance in general, basing on the ground that (it will be shown further) majority of its segments are small and cannot adequately implement their usual role of financial intermediaries. Year 2002 is presumed to be the right time for the following reasons:

- Major consequences of financial collapse for state budget and debt servicing have been overcome by 2003 debt;
- Economic growth of 2000-2002 was accompanied by definite revitalizing of private finances, growth of stability of private financial system;
- Public and elite disapproval of the growth rates and too slow modernization process call for search for acceleration means;
- Low capitalization of the Russian companies contradicts to its interests and interests of companies' owners;
- Foreign capital (including Russian capital coming back to the country) meets difficulties in location of adequate financial brokers inside the country;
- Return to "raw material" model which appears to take place, makes the role of financial sector extremely important in redistribution of investment recourses from producing branches where they are excessive, to processing ones, where there is a shortage of the latter.

Protection of financial sector stability in developed countries reflects its outstanding role in development of economy, and in accumulation most of all.. It is clear that the issue is not in justifying budget injections in Russia, but rather in financial sector development being inadequate for the problem of national development. International comparisons show that Russian banks and other financial enterprises are at the level of transitional economies which do not have such a significant export, are not characterized by such a high non-uniformity of branch-specific industrial and regional development, and have not suffered, probably, such a deep crisis of accumulations in the 90-ties (four-fold decrease) as Russian economy.

Fig. 1.1. Long term sovereign currency credit ratings of Russia.  
Rating diagram – Group of economic experts.

By the fall of 2002 sovereign ratings of Russia (Fig.1.1) have nearly achieved the 1997 level . This fact indicates that macroeconomic and debt stabilization will make possible for the Russian issuers to reenter international credit markets. Portfolio capital has already started to inflow into Russia and it needs adequate financial institutions and instruments for participating in the process of accumulation. Complicated law evading forms increase financing costs making financing of big infrastructural objects especially complicated, which will be in increasing demand in the course of time, in particular due to expected reforms in natural monopolies.

Inflow of direct investments to Russia didn't increase in 2002, and in 2000-2002 it was equal to absolute value of inflow to Hungary, being two times lower than in Czech republic and three times lower than in Poland. At the same time Russia stays first among European countries with emerging economy in respect of direct (legal) outflow of capital in 2001: USD 2,6 bln. against USD 337 mln. of Hungary which is the second

in this respect. Outflow of direct capital exceeds inflow. It also indirectly indicates that by setting up joint-ventures, projects' financing or financing against guarantee (for example, by bilateral credit lines), it is not possible to ensure sufficient inflow of foreign (including Russian) capital into the country.

Inflow of portfolio capital resulted in double reduction of banks' international position from July 2001 till July 2002 (from USD 11,9 to 5,7 bln.). This trend demonstrates the beginning of massive inflow of portfolio investment capital but in the form which is characterized by its fluctuations. The latest review of the situation in bank system shows: "Credit boom typical for the last two years is abating. A specific "credit pause" is about to happen, which is characterized by reduction of credit growth rate in economy, though real threat of big scale "bad debts" crisis is quite far away".

Fig. 1.2. Savings and accumulation in Russia in 1996-2001. (in % GNP).

Source – "Review of economic policy in Russia for 2001», M., 2002, TEIS, Appendix 1 «Accounts of capital flows», p. 325.

The overall use of savings in Russian economy is illustrated in Figure 1.2 Actually it shows that after 1998 crisis Russia managed to mobilize savings for servicing external debt and continued export of capital, while accumulation rate increased from 15% in 1999 to 22% in 2001. It is true, however that in the recent time the growth was due to reconstitution of reserves while the rate of investments as such remains within 18%. Big positive value of current payment balance represents a theoretically inevitable capital outflow along several budget items: servicing and pay off of external debt, legal and semi-legal export of capital, purchase of currency by the Central Bank. In any case, Russia undoubtedly demonstrates one of the highest rates of savings in the recent history – nearly exceeding 30-32% saving rates in South-Eastern Asia and Japan (33% in 1961-1973) during the accelerated growth period. However, in those cases both savings rate and accumulations were correspondingly high, like the growth rates. World general saving rate is about 23% of GNP.

Naturally, due to stable status of low rate of savings within three years after 1998 default, problem of modernization is still open especially because according to preliminary assessments growth of investments in 2002 is slowing down (lower than GNP growth rates). Russian situation is different due to necessity to serve high debt while being in tremendous need of capital investments into infrastructure, transport, manufacturing industry and research after a decade of "investment pause", and at the same time exporting capital. The necessity and possibility of rational use of national savings lies within peculiarities of internal process of accumulation and the role of financial sector.

Table 1.1. Real GNP growth rates and ultimate capital capacity, %.

	1961-73		1973-90		1991-99	
	A	B	A	B	A	B
USA	4,3	3,4	2,7	5,9	2,8	5,0
Germany	4,4	5,7	2,2	9,2	2,9	7,4
Japan	8,5	3,9	3,9	7,7	1,3	22,2
Korea	8,8	2,2	8,6	3,4	6,0	5,8

A) Annual average GNP growth rates during the period, %;

B) Ratio of average share of investments in GNP to average GNP growth rate within the same period, times.

## Calculations based on international statistics.

International experience shows that for each 1% of annual average growth of GNP, average rate of accumulations increases by 3 to 6% (see Table 1.1) during the same period (the only exclusion being Japan during the length crisis in the 90-ties). This index is somewhat lower at the earlier stages of industrial modernization. In principle, it can be expected that in modern Russia accumulations will be slightly more effective, but this implies higher share of equipment in investments and use of the state of art technologies. In general, growth of accumulation rate in official governmental projections is based on expectation of gradual growth of accumulation rate and GNP growth rate with the factor of ultimate capital capacity 4 to 5 times, while current level is also about 4-5% at the rate of accumulation being 15-18% . Evidently, without effective financial sector it is very difficult both to raise accumulation rate and to increase efficiency of accumulation through creditor's control over borrowers and quality of their projects.

Fig. 1.3. Savings of the national economy sectors (% of GNP).

Source – "Review of economic policy in Russia for 2001" , M., 2002, TEIS

Specific feature of Russian situation is concentration of major savings in the hands of enterprises. This fundamental fact should strengthen attention given to the problem of financial sector and its tools since it is highly profitable companies which should solve the problem of choice between investment in their own companies, acquisition of other companies inside the country, investments outside the country, or acquisition of financial tools which would allow them to finance capital investments of other companies, in particular, of other sectors. Growth of state savings during the last two years did not affect the accumulation process since it reduced state capital investments. Reduction of state lending did not have any significant influence on financial sector resources, since they remained low. Actually in 2000 amount of government investments in the country dropped lower than median level in OECD (about 4% of GNP). After default government borrowings cessation undoubtedly was a benefit for real sector as a whole. However it didn't considerably change the situation in financial sector – discontinuation of resources "raking out" by the government having weak financial sector didn't dramatically improve possibilities of external investments' funding.

Fig. 1.4. Net credit position of enterprises in respect of other sectors of economy (in % of GNP).

Source – "Review of economic policy in Russia for 2001" , M., 2002, TEIS

Figure 1.4 shows a more complicated picture. It shows that during the last years non-financial sector was actively crediting "other world" (foreign countries) and financial sector. Only in 2001 the enterprises were able for the first time to obtain financing from the financial sector, which proves positive tendencies in national economy. Capital outflow or annual funding of other world equal to USD 15-20bln. (capital outflow equals to approximately 5-6% of GNP) actually represents the reserve of financing which could have been redistributed inside the economy through more powerful, efficient and trustworthy financial sector.

Comparing with 2001 important changes took place in the following spheres:

- Regarding enterprises, financial sector turned from net borrower into net creditor;
- government stopped financing real sector through accumulating debts in budget and non-budget funds;
- considerably decreased net funding of the other sectors by enterprises.

Fig. 1.5. Dynamics of private sector credit , % of GNP.

The major reason for credit inaccessibility is not vulnerability of prosperous creditors, but rather inability of most borrowers to provide liquid collateral which would attract creditors. As Russian experience demonstrates, when liquid collateral is available, banks are actively providing credits, i.e. against export contracts. Figure 1.5 shows credit dynamics in recent years. It should be noted that in 1999-2000 relative reduction of credit took place and only in 2001 it shifted upwards along with GNP. It should be noted that it was mostly provided by private sector: the share of Central Bank in the total credit represents low percentage. It can be seen from the chart that private credits increased significantly in 2001 (from 11,9% of GNP to 15,4% of GNP). However, it follows from Table 1.2 that its level remains comparatively low. At the same time the share of private credit in the internal credit has grown significantly, which in mid-2002 amounted to 67% (as compared to 31% at the end of 1998). However, the share of bank credits to enterprises for the term over 1 year is 29%, and for the term over 3 years – only 7%.

Table 1.2. Financing sources of investments into fixed assets, in %:

Own resources	50,3
Regional budgets	2,6
Federal budget	5,8
Credits of other organizations	4,9
Bank credits	3,5
Non-budgetary funds	2,6
Stock issue	0,1
Miscellaneous	20,2

Source: MDM - Bank

Situation in Russia is very typical for the countries with emerging economy. According to L.Bokrosh : «After 10 years of transitional period financial sector in Central and Eastern Europe is characterized by the following:

- Low level of financial intermediation in the limits of 5-40% GNP;
- Relatively low assets quality and serious shortage in capital;
- Minor number of services, especially in non-bank sector;
- Mainly insufficient external and internal control structures;
- Increasing complexity of legal and regulating basis;
- Weak facilities for introduction and implementation of regulation.»

It is hardly necessary to mention all reasons which determine a need for development of stable financial sector in Russia, burden of these common problems of transitional period. Apart from general shortage of outside financing factor, it is necessary to outline some specific issues which, somehow or other, are discussed in the literature:

- Access of small and medium business to credit sources is a serious problem even in developed countries – moreover, in Russia where this sector is considerably behind in development comparing with Western neighbors with emerging economy ;

- Need in considerable long-term investments in infrastructural objects which is usually financed through long-term financial instruments;
- Innovative needs of the Russian economy and problem of access to risk financing;
- Problem of low competitiveness of machine building industry when potentially products of a good quality are available and which production has to be financed from outside;

Finally, time factor which was spent during ten years crisis of transitional period makes to search for ways of ensuring growth and development. Actually, insufficiently active investing process and slow improvement of the situation is a sound basis for considering prospects of financial sector development with specific prerequisites: two scenario of institutional development on which two scenario of macroeconomic conditions are laid on (approximately according to official forecasts).

Assessment of financial market development in the perspective, in transitional economies presents a significant problem. Strictly speaking, there are too many variables, too many institutional factors of critical importance, which affect the process. For a whole number of reasons, it is impossible to create a closed system to forecast demand and offer of financial market tools:

- More or less reliable assessment of parameters of institutional (legislative and regulative) development of all aspects of financial markets is lacking - uncertainty of legislator;
- Motives for behavior, corporate management principles of Russian owners (and controllers) are not clear - uncertainty of owner ;
- Macroeconomic forecasts leave high level of vagueness regarding economy growth rates; Volume (length of rows) and reliability of available information on Russian financial organizations leaves much to be desired – uncertainty of financial institutions;
- It is difficult to take into account external economic factors for the development of country and its financial markets, in particular, investor behavior – uncertainty of foreign investor;
- Finally, it is not clear how long it will take to make Russian middle class trust national financial system – uncertainty of internal investor.

Further on, main development trends, institutional problems of specific segments and instruments of the financial market of Russia are considered. At the same time, there exist real limitations for forecasting quantitative parameters of the status of specific instruments or institutions for the nearest few years. Scenario approach makes possible to identify possible results of development more clearly.

## **2. Importance of the financial system and economic growth**

Function of financial markets can be described in different ways but we shall consider Noble prize winner G. Stiglitz's work who gave this description in a specific work on emerging economies in the beginning of 90-s (in narration):

1. Transfer of the resources (capital) from saving agents to borrowers and investors.
2. Capital agglomeration as the projects need more capital than one or group of savings agents may offer.
3. Projects selection.
4. Monitoring of project funds usage.
5. Ensuring of projects fulfillment (pay back).
6. Risk transfer, split, aggregation.
7. Risk diversification.

Existence of a close relationship between the level of financial system development and intensity of development of any country is a well-established fact. At the same time, the nature of this relationship is still discussed by economists. Some believe (for the first time this opinion was clearly formulated by

I.Shumpeter) that financial institutions have active influence on economy due to more effective transformation of savings into investments. Other influential economists attribute rather passive role to financial system, believing that its mere role is to satisfy the demand in broker services. Thus, Noble prize-winner R.Lucas stated that "significance of financial sector for economic growth is grossly overestimated". An important development in this area was achieved due to recent studies conducted by World Bank experts (R.Levine, A.Demirguc-Kunt, V.Maksimovic et al.), where relationship between financial system parameters and economic growth rates was studied empirically on a vast material. The influence analysis was conducted at several levels: by comparison of parameter levels and dynamics in a large number of countries, branches and individual enterprises. Of great importance are recent publications in which interrelation between financial system development and institutional environment (including the type of legislative system, its orientation to protection of investors' rights, provision of contracts right, etc.) is reviewed. These works have proved that the parameters of financial system development not only correlate with long-term rates of economic growth, but there is a stable cause and effect relation between these two. Along with that, new important data was obtained on the mechanisms through which financial institutes influence economy. Relative importance of various mechanisms determines the angle of view, under which it is reasonable to review the perspectives of Russian financial system development.

The view on these mechanisms largely depends on the discipline within which they are discussed. Thus, in the frame of economic development theory, fundamental importance is attributed to capital accumulation process. According to world-wide experience, production investment at the companies (at operating enterprises) are mainly made through own funds (profit and capital charges). Since even in the most developed countries the leading role in investment financing belongs to the banks, financial system is largely equaled to banking system and the analysis is reduced to the discussion of the latter.

The advocates of "banking" approach believe that banks primary importance is determined by conduction of focused analysis of credited businesses and significant control over their managers. On the other hand, a number of researches consider capital markets to be a more important part of financial system. This point of view is reasoned by importance of markets as a unique source of free-for-all signals on investment attractiveness of particular branches of industry or businesses. Significant positive contribution of market-driven assessments into growth of economic efficiency has been proved empirically.

In terms of corporate finances, since classical work by Modigliani-Miller it is believed that various ways of financing are of equal significance for a company. Clearly, this is true for more developed and efficient markets at rather strict prerequisites. As for transitional economies, the conditions for market formations are still being formed. Actual roles of banks and markets in different countries vary within a very wide range.

Recently, "functional" approach has become most pronounced, according to which it is no longer important whether brokerage is based on a bank or on a market, as long as it performs its fundamental functions successfully, namely:

- Servicing economic transactions,
- Savings mobilization,
- Investment resource distribution,
- Provision of insurance, separation and diversification of risks,
- Strengthening of corporate control.

Stressing the importance of financial services does not mean undermining the role of financial institutions. In fact, within the frames of this approach big importance is given to relationship between institutions, markets, and tools in the process of broker activity. Higher quality of broker services in principle can influence economy through increase of savings rate, more active accumulation of main capital and its more efficient distribution (in particular, more active innovation activity). However, it should be remembered that theoretically, some of these effects can be both positive and negative. Thus, availability of developed financial system along some channels provides positive effect of the level of savings in economy, while along the others it leads to reduction of this level, so that the summary result of such an influence remains

uncertain.

Capital accumulation (even at constant level of savings) may increase because risk separation (including provision of liquidity of invested resources) and additional control over the use of these resources by the managers, decrease transaction costs and through this, cost of capital.

A number of recent studies showed that when analyzing investment formation it is critically important to take into consideration imperfection of financial markets, as a result of which a significant gap exists between the cost of internal and external sources of accumulation. It is well known that theoretically availability of own investment sources should not influence investment decisions in any way. However, this is true only in "ideal" situation when all market participants have equal access to capital and credit interests are strictly related to investment risks. In real life, access to credit resources varies significantly between sectors and countries as a result of which development of many industries is in critical dependence to the access to external financing sources. In Russian conditions, access to credit remains segment-related. This problem cannot be solved by globalization of international markets of capital to which there is a lot of evidence: extremely strong correlation between the level of savings in different countries, significant inter-country differentiation of investment profitability, etc.

In the sectors where such access is limited, the volume of investments depends significantly on the amount of own resources. In particular, availability of external financing is especially important for development of small and venture businesses in which potentially most promising but highly-risky innovation projects are usually concentrated. One of the most important results of financial system development is greater access to external financing.

World Bank studies in 87 countries of the relation between financial depth (private credit as percentage of GNP) and market capitalization of stock, and the level of per capita income have demonstrated direct and stable correlation. It follows from the above that developed financial markets are of special importance for such an economy or such sectors which are in particular demand of external financing, not having own sufficient sources of accumulation. As applicable to Russia, this is particularly true for machine building and agriculture. Thus, the state of financial broking can affect not only the rates of economic growth, but also the structure of economy. Strong financial system provides equal development opportunities to those sectors where own financial sources are insufficient. In particular, it facilitates the process of market penetration by new businesses, which increases competition and by that contributes to the growth of economic efficiency.

**Inset 1.1. Spanish experience.**

*Let's consider similarity of the situation in Spain and Russia: starting development of bank sector, lagging of stock market. Constructive aspect in the Spanish financial history consisted in explosive increase in shares' circulation and acquisition (up to 40% of taxpayers) due to privatization of natural gas and power supply monopolies in the middle of 90-s. In general, during privatization period in Spain within 1993-2000, about Euro 30 bln. has been generated, and additional share issue in 1999-2000 produced extra Euro 25 bln. Considerable tax concessions (on capital cost growth) were given to the families which would keep shares within more than two years after purchase. Thus, a considerable stimulus was given to stock exchange development, improvement of financial "literacy" of the population and trustworthiness of the people to financial institutions. Involvement of the broad masses in stock acquisition, including improvement of the support by population and mobilization of home savings, considered as an important objective of the reforms.*

Clearly, the role of external financing drops in stationary conditions and increases abruptly when the structure of economy by any reasons (i.e. under the influence of external shocks) undergoes significant changes. This proves the importance of external financing for transitional economies. On the other hand, the gap between the cost of internal and external financing sources is largely determined by institutional factors such as asymmetry of information possessed by insiders and investors, adherence to contract law, etc. In Russia, transformation process is evidently accompanied by the strongest structural shifts, while institutional

environment is unfavorable even in comparison with majority of other transitional economies. This determined the special acuteness of the problem of external financing in our country.

The above studies of the World Bank allowed us to test empirically the hypothesis on possible channels of influence of financial system on economy. Traditional analysis is based on indicators, which are used to assess the degree and structural features of financial system development in various countries. These indicators are used in current work and allow us to compare quantitative parameters of Russian financial system with that of other countries, as well as assess possible effect of the further development of financial sector in our country:

**Financial development.** Is defined as a sum of internal credit (which does not include inter-bank credit) and capitalization of securities market in percent to GNP. Thus, this measure unites the parameters of banking system and capital market development.

**Liquidity parameters.** Most common in this category is the parameter called "financial depth" which characterizes the size of financial-broking sector and is defined as its summary liquid liabilities (including cash and liabilities of banking system and non-bank institutions) in percent of GNP. Table 3 shows that in most wealthy countries the liquidity is roughly two thirds of annual income while in the poorest countries it is only one fourth.

**Financial activity.** This indicator is similar to the previous one with the only difference that instead of capitalization parameter, stock market turnover is used.

**Private sector crediting.** Represents credit to private sector as a percentage of GNP. Potential importance of this parameter is determined by the fact that it shows in what degree the system provides transformation of savings into private investments. As a rule, this should be backed up by financial sector activity aimed at selection of efficient companies and investment projects, insurance and separation of risks and provision of transactions.

**Private crediting of private sector.** This indicator is similar to the previous one with the only difference that it does not include Central Bank credit. Thus, it reflects the activity of broking sector to a greater degree.

**Share of private sector in crediting.** Represents a share of credits given to private sector in the total volume of internal credit. This indicator is important since the efficiency of crediting private and state sectors differs significantly.

**The role of commercial banks.** Represents proportion between internal credit provided by commercial banks, and the sum of internal credit provided by commercial banks and Central Bank. It can be expected that commercial banks are more efficient in selection of investment projects and risk diversification, thus the high proportion is indicative of more developed financial system. In the wealthiest countries this proportion exceeds 90%, while in the poorest it is around one half.

In some studies the named variables were used in logarithmic form. All the above parameters correlate well with parameters of economic development. The table below shows correlation between major parameters of financial system with GNP value and variations of these parameters in four groups of countries (by GNP per capita).

Table 1.3 Relation between financial system parameters and per capita GNP value (1985)

	Groups of countries with per capita GNP:				Correlation with per capita GNP
	High	Above average	Below average	Low	
Financial depth	67%	51%	39%	26%	0.51

Crediting of private sector	53%	31%	20%	13%	0.70
Role of commercial banks	91%	73%	57%	52%	0.58

Source: R. Levine, Financial Development and Economic Growth. World Bank, Policy Research Paper 1678, 1996.

One should realize that these parameters are conventional to a very large degree, since their construction involves aggregating of essentially heterogeneous elements. For example, the result showed that increase of stock market capitalization (measured as percentage of GNP) by 1 percent item is equivalent in terms of influence on the growth of financially dependent companies to increase of internal credit by only 0,4 percent item. Comparatively lesser influence of capitalization parameter can be explained by the fact that its increase as such does not mean additional financing of investments.

Main general conclusions of the econometric analysis of different countries, industries and companies can be formulated as follows:

- Development of financial sector has significant positive effect on the long-term rates of economic growth. The revealed relationship can be interpreted as causal.
- The channel for such positive influence is increase of investments and improvement of general productivity of production factors. The degree of financial system development does not produce significant effect on the level of savings in economy.
- Financial system structure characterized between the relative roles of banks and markets in general does not affect the rates of economic growth. In a particular country, depending on its specific features, either one orientation - "banking" or "market" - may be more favorable.

The analysis showed that among the reviewed parameters of financial development, the strongest effect on the growth have "private crediting of private sector" and "financial activity". At the same time, influence of other parameters (i.e. "financial activity") is also significant. The degree of their possible influence on Russian economy is reviewed below. More detail analysis revealed that the role of financial sector is critically important for development in the cases when there is strong dependence on external sources of accumulation. This conclusion remains true both for countries as a whole and for individual industries. Thus, the hypothesis is proved that the key mechanism of positive broking activity is better access to external sources of accumulation.

In application to Russia it means that strengthening of financial system serves as a necessary prerequisite for diverse from "raw material" model of development and creation of conditions for expansion of critically important sector of dynamically growing small and medium enterprises. The reverse relation was also revealed: high demand for external financing creates demand for broking institutions, thus stimulating their development.

The absence of clear relation between financial system structure and its efficiency proves fruitlessness of old discussion on advantages of particular architectures. However, in-depth studies show that the issue of advantages of a certain structure is relevant but it should be formulated in a more concrete manner: under what conditions is banking or marketing broking system more advantageous? S. Tadesse concluded that efficiency of financial architecture depends on the structure of economy and its institutional environment. In particular, he found that in the countries with developed broking sector, its "market" orientation provides a positive effect on growth, while in the countries with weak broking system, on the contrary, positive effect

on the growth is provided by "banking" orientation. The authors of the study are of the opinion that in the basis of the revealed relationship lies action of institutional factors: markets can function productively only under the condition of high degree of property protection and law observance. Fulfilling of these conditions stimulates development of financial system in general and capital markets in particular. Bank activity is less sensitive to the "quality" of institutional environment. In other words, the presented results confirm the consideration voiced by many economists that strong banks have relatively more possibilities, even in unfavorable institutional environment, to collect information on enterprise performance, control use of borrowed money, and oversee contract fulfilling. This conclusion explains why at the early stages of transition to market economy the burden of financial broking is laid on banks. In the future, countries with more developed legislative base and strong market institutions may receive additional impulse for development with the help of capital markets.

A relation was also found between financial architecture and structure of economy. Namely, it was found that banking system has advantages in the environment where small businesses prevail, while market system works better under the dominance of large companies. Thus, according to one indicator (weak contract legislation), banks should be more efficient in Russia, but according to other (high concentration of production) – markets should have an advantage. This leads to the conclusion that it is necessary to develop both main directions of financial system. In development logics a certain succession is observed – from banks to markets.

Inter-country studies have also shown that if the overall structure of financial sector has no decisive significance, the fastest growing countries generally use the whole range of financial tools . In other words, the solution to the problem of bringing our economy to the stable high rate of economic growth (not less than 5% per annum) requires vigorous development of all elements of financial system, not just of one of its parts.

Even more important difference was revealed for direction of investments. One of conclusions made in above mentioned work by Rajan, Zingales (1996) states that investments into state sector produce negative, and not positive effect on the rates of economic growth. However, this results needs additional verification. World Bank studies demonstrate that there is no strict correlation between government investments and development –among countries that spend on these purposes more than other countries one can find: Germany, Italy, Portugal, Czech and Hungary. Usually it is considered to be connected with such factors like: difference in starting condition (quality and quantity) of physical capital, amount of private investments in transport and natural monopolies connected with regulating reform, size of public sector as a whole, nature of population distribution.

An important characteristics of mature financial system is its ability to provide long-term investment resources. It is well known that the shortage of "long money" is one of the main weaknesses of Russian financial system. Caprio, Demirguc-Kunt showed that the share of long-term credit in the overall assets has positive influence on development by increasing the share of companies which growth exceeds the rates achievable only through own capital sources. Readiness of investors to provide "long money" to a great extent depends on the degree of macroeconomic stability, and on general institutional factors.

Authorities may promote development of long-term investments by decreasing associated risks, for example, by developing mortgage legislation. Serious positive effect on expansion of long-term credits can be made by introduction of accumulative pension system (through efficient management of its resources). At the same time, the attempts to increase long-term crediting through direct involvement of the state (for example, by subsidizing) give opposite effect. Increase of the share of long-term credits at the account of state subsidies hinders production growth rather than accelerates it.

The relation between development of financial system and general market institutions has been studied in most detail by Levine, Loayza, Beck . They showed that critically important conditions for successful development of broking sector are:

- High standards of financial transparency, achieved due to high-quality bookkeeping and effective control of its reliability,

- Focusing of legislation and regulation on priority protection of creditors rights at bankruptcy, liquidation, etc.,
- Provision of contract fulfilling.

In particular, such measure of financial development as capitalization of securities market has high (0,39) and significant positive correlation with the quality of financial reporting which is evaluated on a regular basis by the Center of international financial analysis and research.

The effect of capital market liberalization should also be mentioned. Bekaert, Harvey, Lundblat concluded that transition from complete closeness of internal securities market to its complete openness for non-residents causes (other conditions being equal) increase (by about 1% a year) of the rates of economic growth during the next 5 years. Thus, partial opening of the market has proportionally lesser effect (for example, making 50% of all stock available to foreigners, during five year period will result in additional growth by 0,5% a year). It is true that such liberalization somewhat undermines economic stability, which is especially dangerous on the background of existing institutional weaknesses.

World publications, especially those by international financial organizations indicate the important role of developed, balanced, institutionally mature and sufficiently liberal financial sector for accelerated economic growth. Existence of simple success formulas is quite unlikely, but in principle, the directions of activity are clear. They consist in search of harmonious development of financial sector, transition from relying on bank sector to ensuring development of financial markets.

### **3 International comparisons**

Before referring to the Russian economy and its financial sector, it's necessary to determine what numbers are spoken about with reference to world financial markets. It's worthwhile to remind that according to IMF assessments, in 2002 world GNP equals to USD 32 trillion according to current exchange rate and USD 48,9 trillion by purchasing-power parity. USD10,5 trillion falls to the share of the USA, i.e. 21,4% by parity or 32,7% by current exchange rate . From 1994 to 2000, net volume of international debt securities (i.e. without internal issue) increased by five times: from USD 251 to 1246 bln. Within the same period of time borrowings of corporations increased from USD 13,5 to 181,1 bln., which is close to the issue of interest, regarding external financing of accumulation and possible capital inflow .

World Bank calculations demonstrate considerable decrease of portfolio investments into developing countries with emerging economy in 2000-2001. Direct investments growth practically stopped. UNDP assessments of 24 October 2002 (regarding 85 countries for the first half of the year) predict total world direct investments inflow decrease by 27%, up to USD 534 bln. Though investments inflow decrease in countries with emerging economy are expected to be inconsiderable, competition for investments is strengthening, in spite of recovery of economic growth in the world. In this respect status of Russia regarding direct investments stays unchangeable . IMF assessment of total investments of global investments' funds in 2001 amounted to only USD 108 bln. which indicates serious potential competition for these investments.

Let us characterize Russian financial system on the basis of the above indicators. We will compare Russian parameters with those of other developed, developing and transitional economies from World Bank representations. The data of Table 1.4 shows that Russia has a relatively high share of external financing. In principle, it can be indicative of higher demand for external capital, and of availability of external financing. Taking into account the level of development of our financial system, the first option seems more likely. Thus, the data prove higher dependence of our economic development on the "quality" of broking system. However, both major "civilized" methods of capital attraction are exceptionally poor developed in Russia; bank credits and stock issue jointly account for only 3,6% of the total financing which is 7 times less than in the average in World Bank representation. Consequentially, the share of "other" sources, including budget financing, trade credits, etc., is abnormally high. In 2001 Russian market of corporate bonds demonstrated

75% growth and continues its forward development, though its volume (about USD 2,5 bln. for the end of the first half of the year) is twice lower than of stock market.

Table 1.4 Inter-Country comparisons of the structure of financing investments into main capital (Russia – 2001, other countries – 1995-1999)

	Total external financing	Bank credit	Stock issue	Other
Russia	49.7	3.5	0.1	46.1
WB representation average	41.0	19.0	5.5	16.5
Argentina	42.9	30.1	2.5	10.3
Bulgaria	25.3	6.4	1.4	17.5
Brazil	54.1	25.6	5.5	23.0
Czech	26.9	10.2	0.8	15.9
Hungary	34.8	15.1	6.0	13.7
Germany	47.4	14.3	19.9	13.2
Indonesia	20.5	16.1	0.0	4.4
Mexico	39.3	10.8	4.4	24.1
Malaysia	57.6	16.3	10.9	30.4
Poland	58.3	13.2	30.5	14.6
Rumania	24.0	10.3	2.4	11.3
Turkey	42.2	20.9	8.3	13.0
Ukraine	24.0	6.4	2.2	15.4
USA	46.5	20.3	3.0	23.2

Using the assessment of the effect of private crediting of private sector obtained in Beck, Levine, Loayza on the basis of inter-country comparisons, we can determine expected effect of the improvement of financial development parameters, which took place in 2001 (assuming that it will preserve). Other conditions being equal, this improvement should cause increase of growth rates by 0,6% a year. The parameter describing relation between financial sector volume and GNP rather accurately defines the position of Russia among other countries . The sum of issued bonds, securities, bank deposits and market capitalization in proportion to GNP is less than 25% (1998). For comparison: among OECD countries the lowest ratio is observed, strictly speaking, in developing Mexico (over 50%). Even in Spain, which has started to develop its financial markets not that long ago, this indicator is nearly 150%. Term instruments and derivatives are not covered by the analysis as their role in the Russian economy is absolutely inconsiderable.

At that the Russian stock market, even after lengthy growth, seems under-capitalized, at least in comparison to developed markets. Thus, in percentage of GNP, capitalization of Russian securities market by the end of 2001 was about 26%, while capitalization of European zone stock market was 66,1%, that of USA was 128,7% of GNP, and that of Japan – 73,9% of GNP (at the end of 2000) . however, the market participants are still optimistic about the future growth in mid-term and long-term plan. This optimism is grounded, with account of uneven growth of stock market capitalization in 2001-2002 (mainly it was provided by abrupt burst of several large companies): one can still hope that with “dragging along” of second- and third echelon companies further growth of securities market will occur. In particular, the

improvement of corporate culture level should play its positive role, along with higher transparency of companies and acceptance of individual corporate management codes.

Table 1.5. Price/Earnings ratio, 2002

State	P/E ratio	Russian company 27 May, 2007	P/E ratio
Taiwan	21,7	-	
Argentina	18,1	-	
Philippines	17,8	-	
Malaysia	17,1	-	
Chili	15,3	-	
Thailand	13,3	-	
Poland	13	-	
China	13	-	
Mexico	12,7	-	
"Developing markets"	11,9	Sibneft	11,7
India	10,9	RAO ES	11,6
South Korea	10,9	UKOS	9,6
Czech	9,3	LUKOIL	9,4
Russia	8	Surgutneftgas	9,1
Brazil	7	Gazprom	6,5
Indonesia	6,9	Sberbank	4,2

Source: JP Morgan, CSFB, Hermitage Capital Management

Major problem of Russian stock exchange is dominance of either oil companies or natural monopolists (RAO ES and Gazprom, Rostelecom). The latter makes the growth of stock rates dependent on tariff policy of the government and plans for restructuring of natural monopolists.

In summary volume of trading and other parameters of liquidity our market is far behind the leading stock exchanges, not only American (turnover of NASDAQ in 2001 – 11 trillion of USD, NYSE – 10,5 trillion of USD), but European as well (see Table 1.6).

Table 1.6 Leading European stock exchanges in 2001

Rating	Exchange	Total turnover, bln. USD	Capitalization, bln USD
1	London	4 550,5	2 149,5
2	Euronext	3 179, 8	1 843,5
3	Italy	1 558,9	527,4
4	Deutsche Borse	1 439,9	1 071,7
5	Madrid	842,2	468,2
6	Stockholm	386,7	236,5
7	Barcelona	366,7	---
8	SWX Swiss Exchange	327,0	527,4
9	Virt-x	264,6	---
10	Bilbao	240,4	---
11	Helsinki	181,6	190,5
12	Istanbul	78,3	47,1
13	Copenhagen	72,4	85,1
14	Oslo	62,4	69,5
15	Valencia	41,1	---
16	Athens	37,7	84,8
17	MMVB+RTS	28,4	80,0
18	Lisbon	27,6	46,3
19	Irish	22,7	75,3

The scenario of "dominance of financial-industrial groups" is characterized by higher capacity of debt market in comparison to "liberal economy" scenario. Thus, the relation between internal private securitized debt and GNP for the countries with "chaebol" orientation is 0,43 for South Korea and 0,54 for Malaysia. In more liberal countries with Anglo-Saxon influence, this proportion is 0,08 for Brazil, 0,15 for Hong Kong, 0,05 for South Africa, India and Singapore, 0,11 for Czech and 0,02 for Hungary .

Table 1.7 Distribution of household savings by the types of assets (%)

Asset State	Cash + deposits	Bonds + Stock	Stock and shares of open IF (UCITS)	Insurance and pension funds
Belgium	30%	46%	15%	12%
Finland	39%	50%	4%	8%
France	40%	12%	15%	33%
Germany	39%	22%	10%	29%
Italy	21%	47%	21%	11%
Spain	34%	39%	16%	11%
Sweden	19%	29%	20%	32%
United Kingdom	21%	18%	4%	57%

Source: FEFSI site

In spite of the inconvenience of combining stock and bonds into one category, the table gives an interesting material for deliberation (Table 6). In particular, despite the long history of investment funds in Great Britain, their popularity among public is low (4%). And on the opposite, such countries as Italy and Sweden, which has only recently started to develop such institutions, demonstrate very high interest of households to investment funds – about 20% of all savings.

International comparisons demonstrate the way which Russian financial system faces to go along for approaching median index common for the countries with emerging economy. For assessment of the influence which could be made by growing financial sphere it is necessary to keep in view the fact that level of accumulation in Russia, savings level and need in renewal of physical capital happened to be, at the least, in serious lack of correspondence. Time has come to answer a principal question – either we continue to observe natural process of formation of financial system or we want to find the ways of development acceleration.

#### **4. Institutional problems of the financial sector**

Institutional issues of financial sector functioning are not among the main issues covered by this Report. However, it is difficult to assess properly real status of the sector and outlooks for its development without basic idea about legal situation, regulation and surveillance. Therefore Appendixes to this paragraph contain materials on distribution of regulating and surveying powers (Appendix 1), situation in current legislation process for the beginning of autumn 2002 (Appendix 2). In general a short list of proposals of institutional nature is given which could become a basis for further development of the proposals on financial sector development in the future. Development of such measures, complex approach to sector development is a matter for future work.

Structure of regulation of financial markets' participants in the Russian Federation carried out by government bodies is very incoherent. Due to historical reasons many countries have complicated control system. One could expect more wisdom in such system in the situation with Russia which has recently started to form its financial institutions. For example, in respect of the policy on financial markets, Spain

has chosen a way of coordinating mixed bodies by creating a special Committee comprised of representatives from Central Bank, Ministry of economy (Treasury and Pension and Insurance Inspection Department) and a body equivalent to Securities Commission. We don't have possibility to analyses all these materials in details; it's a topic for another similar Report. Let's outline some evident issues:

- Obviously there is no central body or strategic group which works out long-term policy in the country;
- Laws are developed by different departments; coordination in such conditions is not possible;
- There exists a threat of functions parallelism, contradictions in regulation;
- Probably the most important – control diversity causes red tape and huge transaction costs for running business.

The Report starting point, and after corresponding analysis final point is: the existing financial system does not provide for the Russian economy growth acceleration. The international comparison materials show that the Russian financial system is much weaker than in other transitional economies and such medium-developed countries, which follow a complicated way of building financial markets and institutes: Spain, Central and Eastern European countries.

Overcoming the direct (mostly debt-based) consequences of the 1998 collapse and the three-year upsurge of economy allow putting up a task to evaluate and forecast the financial institutions' development and reform and the financial market development. The main reason for such close attention to the financial sector problems is the low level of accumulations in the country (18% of GDP during the whole after-crisis period). The country needs for modernization cannot be provided with the low growth rate, especially in the accumulation sphere. That is why conversion of the population and company savings and foreign investments into real investments in the country economic development is inevitably in the focus of attention when the matter is not in overcoming the crisis but in growth and modernization.

It's high time to move away from partial reforms of separate sectors, from adopting basically correct but isolated laws on certain sector branches and to the complex assessment of the situation and search for ways to enhance the financial sector as an investment funding source. Strictly speaking, adopting a new legislation in the sphere of insurance and especially pension reform makes the legislators give a broader look at the possibilities of investing the pension funds into financial instruments. Particularly an assumption on compulsory investment of the pension funds into state securities envisages the emergence of such securities of relatively high quality, with particular features and in the amount providing for the law requirements fulfillment.

One should realize that the financial market development covers both for the institutional and instrumental sides, supply and demand for financial assets by both the non-financial (real) sector, the state, the outside demand and by all financial market segments in the interbranch competition.

The approach adopted in the current report is based on the assumption that the chaotic processes in the financial sector formation do not necessarily bring satisfying results at reasonable time from the point of view of the Reformer-Government. This is proved by the international experience in the banking system reform. In any case most Governments incurred considerable costs trying to secure the financial institute sustainability (see Table 1.8). What is important for us here is the decisiveness of Governments (including Ronald Reygan's) of such an unlike group of countries rather than the enterprise success. Thus in the USA the extra budget inflows made up to \$200 bln. in course of paying compensations for depositors' losses during the bank crisis of 1980-1992 and the crisis of loan and saving associations in the 80s .

Table 1.8 The total expenditure on resolving the bank sector problems in % of the annual GDP during restructuring

Country	Period	Expenditure estimation, %
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Argentina	1980-82	13-55
Chili	1981-85	19-41
Mexico	1995	15-17
Venezuela	1994-95	17
Bulgaria	90-s	14
Hungary	1992-95	10
Finland	1991-93	8-10
Japan	90-s	3
Spain	1977-85	15-17
Sweden	1991-93	4-5
USA	1984-91	5-7

Source: "Financial Transition in Europe and Central Asia", World Bank, 2001, p.80.

The main bulk of savings in the Russian economy is accumulated not with the Russian population (which is due to the higher development stage), but with enterprises. Respectively by creating the accumulation conditions we first and foremost mean the conditions for accumulating temporarily surplus capitals inside but not outside the country and setting up a system of long-term instruments. It also indicates that importance of attracting money from population – "under mattress money" – for accumulation is obviously exaggerated. Increase of population savings rate is important for the future during savings redistribution; up to now, efficient usage of enterprises' savings on the territory of the country is the most important issue.

The 4 scenarios suggested above give a general idea of possible differences in the financial market development in the country in the nearest future. It should be noted that the official reform concept in the 90s was traditionally liberal and to a great extent Anglo-Saxon being supported by massive technical aid from the respective sources. At the same time the large Russian business has been persistently and knowingly implementing a more closed, "Asian" or "Chaebol" option for business organization both in practice and in the legislation. Recently significant steps have been made towards more transparency, compliance with the international standards of corporate management. At the same time the fight between two tendencies – liberal legislation designed for free competition among the mass-scale medium-size and large business with the strengthening financial-industrial groups in their new forms – does not allow making a well-defined forecast of institutional changes.

Thus the choice from the development point of view still depends on the complexity of legislators' approach to a great extent. In particular if we omit quite a few aspects of the financial market development, we will emphasize on two or three major ones, which create uncertainty in projecting financial markets. These are the method of the bank system accelerated development, solutions to the problem of future for state and regional banks. The second problem of the same caliber is the pension reform development, particularly additional pension provision being the social insurance appendage or a powerful drive in the share and bond market development. The same pertains to the insurance and investment fund development. At last, a crucial choice should be made in the long-term debt instrument development area for the purpose of

funding large objects under the condition of high commercial risks: guarantees, issue by banks (German model) or by other institutes (American model).

A whole range of general purposes does not cause any doubt at the current stage:

- Measures to enhance the contract discipline;
- Corporate management enhancement;
- Expansion of the business and professional ethics in the business and especially financial community in the context of the business internationalization;
- Enhancement of prudential supervision both in the bank sector and other branches;
- Creation of conditions and following the competition rules;
- Opening markets for international competition;
- Setting up a system for clients, transparency of the credit and financial institutions with account of asymmetry of information going to investors, intermediates and issuers (including the insider information problem).

There is a rather tested set of specific measures covering all sector branches or a part of it:

- Transition to the international accounting standards;
- Increasing compulsory requirements to the own capital of all types of financial institutions;
- Setting up «credit bureaus», as well as information storage systems on financial sector employees and entrepreneurs (Spanish experience – in Chambers of Commerce);
- Development of the credit union systems as a small saving system with low risks and transaction costs;
- Introduction of the deposit insurance in the bank system (threshold or selective).

At the same time a whole set of problems remains unsolved for some historic and conceptual reasons. For example, materials on bank system say the following ".....even available capital does not always mean real investments. In some cases charter capital of the banks is increased artificially which doesn't result in adequate growth of rally working bank assets." One can identify some problems as follows:

- Low transparency of ownership relations in financial institutes (high proportion of off-shore property);
- High extent of the institute owners and debtors' affiliation (pocket banks etc.);
- Low level of trust among the clients (population) to the Russian financial system;
- The role of exporting savings as a risk re-allocation method,
- Capitalization methods for banks and other sector enterprises;
- A considerable shift of the credit terms towards the short-end of the scale;
- Low liquidity and capacity of Russian stock-exchanges;
- Low interest of companies to their shares' listing at Russian stock-exchanges, high proportion of the foreign share trade.

Among the problems raised in the Report there is a topical issue of matching between the demand and supply of financial instruments to fulfill the acting law requirements to the instrument quality. There is a serious problem of future discrepancy between the (low) supply of federal securities with maintaining surplus and legislative requirement to invest the pension funds into state securities. Inside the matter of financial market balanced development a sub-system was formed, which has to be balanced in compliance with the law. In particular, we might need to move from initial compulsory pension (insurance) funds investments into state securities to a reverse order: initial investments into foreign securities with gradually toughening requirements to investments into Russian securities.

The measures on resolving these or those problems mentioned in the report are sometimes practical and

sometimes conceptual. They cannot exhaust the world experience or all possible directions in the financial market development. The largest and most significant are:

- Introduction of complete disclosure (and accounting) of individual ownership of financial institutions including the final-end individuals (checking if the requirements on concentration issued by the Ministry of Anti-Trust Policy are fulfilled);
- Improvement of the bankruptcy law – creditors (especially the funded ones) should be “taken up” in the priority list for paying debts in case of bankruptcy;
- Implementation of the concept of a central depository or a depository network to eliminate violations (or suspicions on possible violations) of ownerships;
- Cancellation of 25%+1 blocking share pack rule in the law “On Joint-Stock Companies” to reduce the control pack volume, to diminish the share pack “thinning” and to raise them at entering the stock-exchange;
- Introduction of compulsory preliminary (simultaneous) listing of Russian companies at Russian stock-exchanges in case of any foreign issues of ADR, GDR and bond loans;
- Introduction of privileged taxation of profits in case it’s invested into common (privileged) shares of financial institutes;
- Tax amnesty for the middle class in case of measures aimed at investing these funds into banks and investment securities;
- A set of measures to develop venture capital. Measures to facilitate taxation of the science intensive business, to create conditions for venture fund development;
- Accounting of the Spanish experience to restructure RAO UES and Gasprom – organization and stimulation of individual investments in shares (privileged shares), as well as in pension and insurance funds;
- Formation of a more clear-cut and long-term development program for regional (industry-based) internal bonds for major infrastructure objects of national importance (subsidized interest rates, etc.);
- Massive scale property re-assessment – real estate (development of pledge system and mortgage securities);
- Application of Argentinean experience: disclosure of information on credits and compulsory bank issue of subordinate quoted bonds for market control;
- Creation of a system of the financial market forecasting, monitoring, development and general regulation;
- At last, due to a complicated (and obviously premature) change of the existing mixed system of the state control over the market segments we suggest using the Spanish experience in setting up a Coordination Committee in the Government consisting of representatives of all surveillance bodies and acting in compliance with the long-term market development strategy and control over financial institutes.

No set of separate important measures and development of “partial” legislation can replace a unified program. As mentioned before: “It is necessary to deliver active government policy targeted at setting capacious efficient stock market which represents a qualitative investment mechanism” . We suggest that the “Program of Financial Institutions reform and Financial Market Development” should be prepared, discussed with the stakeholders and adopted at the governmental level during 2003. This Program would cover all market segments and instruments and would start in 2004-2005. It is time to proceed from solving narrow legal issues, which nowadays create problems, to strategic approaches. Such program should answer the conceptual questions that were put up in the 90s but failed to be answered:

1. Liberal or close-end system of ownership and control, which can otherwise be called Anglo-Saxon or Asian (Chaebol);
2. Ratio and distribution of the role between banks development and financial markets – issue of harmonic

development;

3. Future state banks' development, particularly the issue of their evolution (Sberbank in particular), in course of which they all act more like development banks;
4. Unity of legislation and development complexity (balance) of various market segments, instruments and financial institutes;
5. Definition of the system of aims and measures in building trust to the contract system and reliability of savings institutions;
6. Definition of a long-term policy in selection criteria for reliable financial instruments for investments in financial institutes that accumulate the population savings' Sberbank, pension and private insurance funds;
7. Identification of the legislator's attitude to the desirable role played by foreign financial institutes in the Russian market in the WTO context;
8. Identification of the legislator's attitude to the role played by Western financial markets (banks and stock-exchanges inside the country) in the Russian business funding;
9. Definition of an approach to the private (voluntary) pension provision (and insurance) as a key issue of the financial market formation and reorganization of the savings system in the country, but not as a secondary element of social security;
10. Developing approaches to building a non-degenerate matrix of financial instruments by type and urgency and derivatives;
11. Provisions of adequate divisibility of financial instruments with low transaction costs of issue for personal ownership;
12. Definition of outside funding methods of long-term (commercially risky) projects, possible state involvement into this process (power engineering, transport etc.) and the role of specialized financial instruments;
13. The role of bankruptcy legislation: protection of companies from financial turmoil or a property re-allocation method;
14. The role of self-regulating organizations in adding to the state control bodies to maintain stability in the financial markets;
15. Identification of rates and content of transition to the International Standards of Financial Accounting (ISFA), enhancement of internal and external audit and control over financial institutes both in the interests of depositors and for the sake of the financial system sustainability;
16. Identification of aims and development indicators of the market segments, methods and means to achieve them, monitoring and correction;
17. Setting up a Coordination Committee consisting of the control bodies' representatives to develop and pursue a single policy and control over the financial market various segments;
18. To determine need in body responsible for general development and regulation of financial markets from point of view of development.

## **5. Scenarios of Financial System Development**

It has been shown above, that state of financial system has two-way connections with general economic tendencies. It determines the necessity of mutual estimation of prognoses of the financial sector development and macroeconomic prognoses. Scenarios suggested reflect the experts' appraisals, which follow the successive approach to the development of financial markets not as just a result of economic growth, but as an instrument for increasing of its tempos, creation of more harmonious financial infrastructure adequate to the industrial development of the country.

In the conditions of transit economy with underdeveloped structure and non-established dynamics long-term tendencies are under the influence of a number of factors of indefiniteness. So the prognosis can be only variant in its character. This work specifies 4 possible scenarios of long-term development received by possible combination of two characteristics.

The first one represents the "quantitative" measurement, it differs active development (with high funding norm, and correspondingly with rapid growth) from inertia development, where investments remain

relatively low. Which of these variants will turn to be realised will depend on the degree of government efforts effectiveness in the sphere of improvement of investment climate. If successful one can rate both at big foreign investments and at relatively quick decrease of Russian capital outflow, and consequently, rapid increase of investment resources.

The second measurement represents "qualitative" way of development. Its variants may be conditionally called "open" (or "liberal") and "closed" (or "monopoly"). The first alternative presupposes:

- Elimination of obstacles for enlarging the number of owners (including non-residents), quick increase of the number of public companies whose shares are in circulation at stock exchange;
- Significant increase of the role of financial system in resources re-distribution;
- Increase of effectiveness and reliability of financial-intermediary sector.

Necessary conditions for the implementation of this scenario are: increase of property structure transparency, strengthening of corporate management mechanism, of property owners' control over managers' activity, real increase of transparency and trustworthiness of enterprises' financial indices; active development of competition at financial markets, elimination of barriers for new participants (including foreign) to enter the markets.

The second alternative means preservation of non-transparent structure of property and obstacles for enlarging the number of owners, weakness of mechanisms of corporate control and management. Actually one can speak of the fact, that financial-industrial groups (FIGs) will prevail in such conditions.

Implementation of this scenario will result in relatively smaller role of external sources of investment financing, limited re-distribution of resources between the branches and, consequently, significantly smaller role of financial-intermediary system. In this case financial resources will be re-distributed primarily within the FIG, i.e. practically without participation of intermediary system.

From the point of view of perspectives of financial markets and instruments development, three variants of FIG development are possible:

- Closed group and closed companies the group consists of. Non-transparent character of structure of property and operations is preserved, prevailing of operations of "non-market" character among them, significant scope of cross-subsidizing, "poor" bank credits. This is the least desirable and, most probably, the least spread variant for the prognoses period;
- Closed group and open public companies it consists of. The group doesn't discover the property structure, doesn't enter a stock exchange, but it brings, at least part of its companies to IPO, that leads to remarkable positive influence to the development of financial markets. This variant seems to be the most probable for most of the groups;
- Public group and public companies it consists of. This variant seems to be probable for not more than one or two groups.

At present most of the FIGs contain more or less big banks. These banks may develop in one of the following ways:

- Preservation of "pocket" bank status is the least preferable and for majority of groups the least probable variant because of its negative consequences both for the market and for the group;
- Before-sale preparation and then sale of the bank to the strategic investor (most probably - to foreign one);
- Preservation of the bank as part of the group, but turning it into a public company with reduction of the group shareholders' share in its capital;
- Admission of the bank as a low-profitable asset from the point of view of group interests and its liquidation in case it's impossible to sell it to a foreign investor.
- Consolidation of financial block within the group, that means the development of common strategy for the bank, the insurance company and the pension fund. Russian FIGs come to understanding of

the necessity of these measures, but in reality they will be ready to undertake them only by the end of the prognoses period.

«Open» scenario would let significantly decrease interest rate on financial markets because of providing more information for the investors, and consequently, decreasing their risks.

Which of these ways economy would go depends on the combination of fundamental economic and institutional factors. The first include preservation and elimination the abovementioned unevenness of profitability and distribution of own investment resources between the sectors. With preservation of available priority of raw resources sectors over processing ones on these indices further strengthening of FIG is the most probable. The key institutional factor, determining the way of development, is the progress in creation of effective protection mechanisms for the rights of owners and investors. Development of FIG is mainly determined by the necessity, in the conditions of lack of transparency and non-protection of investors rights, to control the enterprises with significant investments.

At present there are some changes in both the first and the second directions. On the one hand, in some companies the priority of the task of market capitalisation increasing has become higher lately, and as a main instrument for implementation of this goal openness of companies was greatly increased, some measures were taken to improve relations with share-holders and investors, payment of dividends was abruptly increased.

Process of establishment control of big enterprises over enterprises of both their and some attached branches is going on parallel, i.e. horizontal integration of FIG is spreading all over.

Development of financial sector has a many-sided connection with realisation of this or that scenario. On the one hand, in the "open" variant there is an increasing necessity of financial-intermediary system development, i.e. this way of development gives rise for the financial sector. On the other hand, the very variant is impossible without efficient mediation. At last, it should be taken into consideration, that a turn towards the "open" scenario and rapid development of the financial system need mainly the same conditions.

Basing on the above (section 1.2) results, we considered the "open" way to provide higher general output of industrial factors because of more effective distribution of the resources and providing more complete financing of innovation projects. Besides, we considered "liberal" scenario to include active continuation of structural reforms, and on this basis, reduction of expenses after 2005 r., when results of reforms start to be visible. Profits of the budget in GDP percent were taken approximately the same, though they were reached on different basis: in "liberal" scenarios more decrease of taxation rate was supposed to take place alongside with reduction of tax evasion. As a result in "inertia-closed" scenario after 2005 extended budget is implemented with certain deficit, and in "active-open" during the whole period surplus is supported. So, the scenarios differ with their interest rates on financial markets.

The two changes cannot be regarded as completely independent. So, strengthening of basic market institutions simultaneously improves investment climate (increasing chances of the "active" scenario implementation and helps the development of financial system, investing into formation of open economy. Nevertheless these two changes are connected only partially, and chances of implementation of any of the four variants are rather high. Received results can be presented in the form of the following matrix.

	<b>Inertia</b>	<b>Active</b>
"closed" ("monopoly")	<u>Scenario A</u>	<u>Scenario B</u>
"open" ("liberal")	<u>Scenario C</u>	<u>Scenario D</u>

Significance of main macroeconomic tendencies of Russian economy development in long-term perspective should be estimated from the point of view of conditions for the transformation of savings into investments. The first thing that attracts attention is a gap between a rather high level of savings in Russia and not so

high level of funding (see figure 1.2 in section 1.1). The leading role here belongs to private savings. So, in 2001 the level of savings was equal to 33% GDP, including 24% GDP of private savings. To compare, we should point out that in 63 countries analysed in the work Beck, Levine, Loayza, average level of private savings is equal to 19% GDP. Such a high level of savings can be partially explained by extremely favourable for Russia trade conditions (according to the economic theory the level of consumption shouldn't significantly react to short-term positive and negative income departure from the expected long-term level). Nevertheless, even taking into consideration a certain correction on probable returning of trading conditions to "normal" long-term level (which corresponds to the price of "Brand" oil about 20-21 USD per barrel, i.e. "Urals" would cost about, 19 USD per barrel) one can expect, that the level of savings will remain rather high according to international standards.

The funded part of pension system introduced beginning with 2004 will support the high level of savings. Practically availability of funded component has not a simple influence on the level of savings. But, in our opinion, it won't influence decisions of working population, but it will decrease consumption of generations, that are already retired or going to be retired in the nearest future, for which the amount of pensions will decrease. Chilli may serve as an empirical proof of it, where introduction of the funded pension system led to the increase of savings level. In a long-term plan it does make difference for the country, which of the economic agents and in what form will keep their savings. Of great importance for the development of pension system, as a means of financing of long-term investments by means of accumulation of debt instruments, will be legislative decisions, rules and regulations of the Government, which were the subject for wide discussion in the autumn 2002.

Assuming preservation of the high level of savings in the country, taking into consideration all the above mentioned factors, the level of gross internal savings, according to our estimations will lay between 26-29% GDP in 2005 and 24-26% GDP in 2010. Gross funding in 2001 was 22% GDP. This index is close to midlevel if compared to funding in other countries. But it doesn't mean that its amount has reached the acceptable level. Firstly, a significant part of funding (4.3% GDP) consists of accretion of material working capital stock, which followed the reduction of its level in 1998 and the changes close to zero in 1999. One can expect that in the future the amount of stock will grow correspondingly to the growth of production and the average share of this component in the structure of GDP using will be much lower than in 2001. The physical amount of the fixed assets was growing faster than the economy on the whole in 2000/2001. Its amount as percentage of the GDP had grown from 14.3% in 1998 to 17.8% in 2001 over the post-crisis period of 1999 to 2001.

Table 1.9. The use of the gross domestic product (% of the GDP produced)

	1997	1998	1999	2000	2001
Gross domestic product (produced)	100.0	100.0	100.0	100.0	100.0
Ultimate consumption	76.3	76.6	68.8	61.6	65.2
Households	51.1	54.7	52.9	45.7	49.7
State institutions	21.8	18.7	14.7	14.8	14.3
Non-commercial organizations providing services to the population	3.5	3.3	1.2	1.1	1.2
Gross accumulation	22.8	16.2	14.7	18.6	22.1
Fixed assets	19.5	17.7	14.3	15.7	17.8
Stock growth	3.3	-1.5	0.4	3.0	4.3

Net export	3.0	7.2	17.3	20.2	13.0
Export	23.9	30.7	43.8	44.3	36.9
Import	20.9	23.5	26.5	24.1	24.0
Statistical deviation	-2.1	0.0	-0.8	-0.4	-0.3

Nevertheless, the amount of investment in fixed assets remains far from the required one. First of all, their current level remains not very high despite the recent growth. The physical amount of investment in fixed assets amounted to a little bit more than one quarter (27%) of the 1991 level in 2001 despite its growth in the recent years. Secondly, our economy is facing the problem of simultaneously offsetting the deep investment recession of the transitional period (1992 to 1998), which caused a dramatic growth of the average age of fixed assets, and undertaking a technological renewal within the framework of the necessary large-scale modernisation of the economy. According to our estimates, investments in fixed assets must reach at least 25% of the GDP to secure acceptable production growth rates in the mid-term prospect. To solve this problem, investment growth rates must exceed the GDP growth rate by at least 3% to 4%. In fact, the tendency towards an intensification of the investment process, which appeared in 2002, has been interrupted: the fixed assets growth rate dropped dramatically in the first half of the year and amounted to as little as 2.5% as compared with the same period of the previous year. Thus, investments in fixed assets even lag behind the GDP growth on the whole in the current year.

Fig. 1.6. Investments in fixed assets

It should be noted that the role of bank credits in investment financing is very insignificant. Their specific weight was as little as 3.5% in 2001 (the average percentage being 19% according to a sample made by the World Bank). Investment resources attracted through the issuance of shares is just negligible: their percentage was 0.1%, which 1/50 of the average value in said sample!

The next important point is the primary revenue allocation structure. The data given in Fig. 1.6 show that the gross profit percentage is rather high in this allocation: it was 39% of the GDP in 2001. This fact is reflected by the concentration of the bulk of private savings in the corporate sector as compared with relatively low savings of households (Fig. 1.3 in section 1.1). profit allocation to shareholders is formally insignificant: the dividends paid play no significant role in the population income structure. This situation results in the availability of rather considerable own resources to enterprises, which serve as a potential source of investment financing.

A comparison of the gross profit and corporate-sector savings with investments from own resources shows that only a small part of company savings is transformed in fixed assets. Company savings are mainly used to increase foreign assets i.e., capital outflow, not on investments. Whereas company savings amounted to 21.4% of the GDP, investments from own resources amounted to as little as 9.0% of the GDP in 2001.

Fig. 1.7. GDP structure by primary revenues (2001)

Fig. 1.8. GDP structure by primary revenues (2001)

In the long-term prospect, one can expect a considerable reduction (in % of the GDP) in the unallocated profit which is a leading source of the internal financing of investments. There are a few reasons for that. First, there are all grounds to suppose that the growth of the wages bill as a percentage of the GDP, observed in the recent years, will continue growing in the mid- and long-term prospect. So, it had grown from 40.2% of the GDP in 2000 to 45.0% of the GDP in 2001, and it grew to 46.8% of the GDP in the first half of this year (in the first half of the previous year,, this percentage was 44.8% of the GDP). The wages bill percentage can be expected to continue dropping in the future. First, unemployment which now amounts to 7.5% of the workforce as compared with 12% to 13% in 1999 will continue dropping. Production growth will increase the workforce requirement despite the simultaneous productivity growth. At the same time, the workforce supply remains limited by virtue of unfavourable demographic trends, which will create a deficit of workforce already in about five years. Accordingly, the cost of workforce will grow. From the economic point of view, the level of wages may be raised by about one third, as this is exactly the gap between the maximum productivity and level of wages, according to our estimates.

The wages bill growth is partially offset by a reduction of net taxes on food at present, which has retained the gross profit as percentage of the GDP virtually at the same level as a year ago (39.2%) in the first half of 2002. according to our estimates, a further reduction of net taxes on food and import (by way of reducing export fees as world oil prices do down) will mitigate the effect of wages bill percentage growth in the nearest years, but the gross profit percentage will be dropping gradually nevertheless. Increased competition caused by new enterprises entering the market and by a further liberalisation of the economy may become another factor of profit rate reduction. According to our projections, the gross profit proportion may drop to 37% of the GDP by 2010.

We expect not only a reduction of the profit rate, but also a reduction of the percentage of unallocated profits. The policy in respect of dividends has been changing in a series of largest Russian companies recently. Some of them (LUKoil, Sibneft, YUKOS) have made official declarations regarding their further policy in respect of dividends, which is to increase the percentage of the profits allocated to shareholders. So, LUKoil is planning to increase the dividend payment factor on ordinary shares to 20%-25% by 2010. A trend has emerged recently towards capital outflow (both in dollar terms and, especially vividly, in % of the GDP). We expect this process to continue, but its speed may differ significantly depending on the scenario, as the amount of outflow significantly depends both on the investment climate in Russia and the reliability and efficiency of the financial system. Capital outflow from the private sector is projected in the amount from \$15 to \$18 in 2005, and it will be \$8 to \$15 billions by 2010 (as compared with \$24 billions in 2001).

The role of foreign sources of investment is less significant at present. Investments from abroad amount to as little as 4% in the structure of financing investments in fixed assets. This fact is reflected in the very limited amount of direct foreign investments in the payment balance. In 2001, they amounted to as little as \$2.9 billion, which was even less than in 2000. The structural and institutional reforms under way should undoubtedly bring about a growth of such investments, however this process will take a lot of time.

According to our projections, direct foreign investments may grow to \$6-7 billion by 2005. In the event that a favourable investment climate is created from 2005 to 2010, foreign investments may grow significantly to a level of about \$20 billions and become a rather important source of accumulation.

Budgetary resources comprise a significant share in the structure of financing investments in fixed assets. Their share of total investments was 20% in 2001. The budgetary policy of the Government provides for a reduction of total expenditure in % of the GDP in the mid-term prospect. Although the interest expenditure will be dropping at the same time, it means that the growth of non-interest expenditure incurred by the expanded government will lag somewhat behind the GDP growth rate in real terms. The current governmental policy is to reduce investments from budgetary resources. The cancelled formation of the federal Roadway Fund may serve an example. According to our estimates, the level of budgetary investments as a percentage of the GDP will be gradually dropping, and will reach 2.1-2.6% of the GDP (depending on the scenario) by the end of the period under consideration. The above said means that the role of budgets of all levels as the source of investment financing will be decreasing in the mid-term prospect. According to our projections, it may reach 15-18% by 2005 and 12-13 % by 2010.

Trade credits have been a noticeable source of financial resources for companies until recently. The specific feature of the situation in our country is widely spread "forced" credits and poorly developed credits of this type in their usual form. However, non-payments have been quickly declining over the last years (the growth of accounts payable was 8% of the GDP in 2000 and 2001 as compared with 37% of the GDP in 1998. It seems that the contribution of the trade credit will stay at about the same level, but its "quality" (i.e., non-payment replacement with a civilised credit) will improve.

The pension reform has created a fundamentally new potential source of investment resources in the form of pension savings. The scale of these resources is rather significant: according to our calculations, contributions to the funded pension system component will gradually reach 0.7% of the GDP in 2005 and 1.5% of the GDP in 2010. Had they been completely used for investment in fixed assets, their specific weight in investment financing could have reached 4% by 2005 and 7-8% by the end of the period (note for comparison that bank credits provide as little as 3.5% of total investments at present). However, the bulk of pension monies will most probably be invested in state securities. It will positively affect investments, as other private investments will be "forced" out of state securities into the real sector. The role of pension savings would be particularly important in connection with their long-term nature, which is unique for Russia (at present, these funds have to be invested for 10 years), and so establishing an institutional and legislative base for investing the funded resources of the pension system in the real sector is one of the most important tasks from the viewpoint of creating prerequisites for a stable development.

The budgetary policy is important not only from the viewpoint of state resources allocation for financing investments. The debt policy of all levels is no less important for the financial system. We expect the policy of replacing the external debt with the domestic one will continue in the mid-term prospect. However, structural reforms (gradual elimination of subsidies, reducing state purchase prices, etc.) will reduce expenses after 2005, and so net borrowings drop virtually to zero under "liberal" options. On the other hand, a balanced or even surplus federal budget may be accompanied by a rebirth of regional borrowings and a development of municipal loans (on a new and more civilised basis). As a result, according to our estimates, domestic borrowings will need to be increased from a negative amount in 2001 to about 1.5% – 2.5% of the GDP under scenarios A-C. Despite it, domestic debt as percentage of the GDP will be growing very slowly even under these scenarios, and will not exceed 11% of the GDP i.e., quite safe a level, over this period. The total external and domestic state debt in terms of % of the GDP is decreasing under all scenarios, although the domestic debt is stabilising under scenario D alone.

Whereas macro-economic conditions on the whole can be regarded as favourable for the growth of Russian economy, a lot of most acute problems remain in it from the viewpoint of structural and institutional conditions, and the resolution of these problems will significantly affect the chances for achieving a stable development. A review of these characteristics of Russian economy is important, as mentioned above, from the viewpoint of prospects of the development of the financial system too.

Disproportions between the allocation of potential investment resources to sectors and the need for such resources are a most acute problem of Russian economy. These disproportions are due to the presence of a significant natural rent in our economy in many respects, as well as to the fact that this rent is recovered through taxation to a very small degree. This situation results in an "overaccumulation" in some sectors as compared with a deficit of own resources in other ones.

Table 1.10. Percentage of external sources of financing investments in fixed assets

	1998	1999	2000
Total over sectors of economy	46.8	47.6	53.9
including:			
Industry	23.1	28	28.4
including:			

Electric power	14.1	22.2	23.4
Fuel	24.2	26.9	34.9
Oil production	21.0	22.4	19.6
Oil refining	28.9	25.7	30.8
Gas	29.9	42.7	85.7
Coal	28.2	14.4	17.9
Black metallurgy	24.1	25.8	20.7
Non-ferrous metallurgy	33.7	5.5	9.2
Chemical and petrochemical	12.8	10.8	19.4
Machine engineering	12.2	25.6	18.9
Forest, wood-working, and wood-pulp and paper industry	34.2	19.2	19.6
Construction materials	26.0	37.8	37.5
Light industry	43.1	51.6	23.6
Food	37.5	53.8	39.0
Agriculture	22.6	22.2	27.5
Civil engineering	51.4	53.2	83.7
Transport	62.0	64.7	68.9
Communications	41.2	36.6	29.5
Trade and public catering	33.2	32.5	41.8

In principle, a comparatively high level of external financing of investments could suggest a deficit of own investment resources or a high degree of mediation sector development. However, none of the explanations is true in fact. The level of gross profits as percentage of the GDP remains rather high (39% of the GDP), and even own investment resources as shown in accounts (profit after tax plus amortisation), without regard to tax avoidance, significantly exceeds the amount of investments (by 30% in the industry). On the other hand, the amount of investments and own resources by sector of industry, corrected with due regard to industry size (i.e., per ruble of product), essentially correlate with each other (correlation factor = 0.3). It means that "richer" sectors invest more, and, accordingly, the "poorer" ones have a limited access to external financing. Thus, signs of mediation system underdevelopment are present and, at the same time, a comparison of indicators of minimum investment resource requirements in sectors and their availability suggests considerable distortions.

Table 1.11. Production and investments – Industry sector profile in 2001 (%)

Sector	Sector as percentage of total volume			
	<i>Output</i>	Production funds	Investment resources	Investments in fixed assets
Industry total	100.0%	100.0%	100.0%	100.0%

Electric power	11.3%	24.0%	8.5%	9.7%
Oil production	13.9%	20.0%	27.5%	33.8%
Oil refining	2.7%		2.9%	3.9%
Gas	2.1%		2.2%	11.0%
Coal	1.7%		1.3%	2.1%
Black metallurgy	8.6%	5.9%	5.7%	5.4%
Non-ferrous metallurgy	9.0%	7.2%	14.3%	7.5%
Chemical and petrochemical	6.6%	7.0%	4.3%	4.2%
Machine engineering	20.1%	20.1%	17.3%	6.9%
Forest, wood-working, and wood-pulp and paper industry	4.1%	3.0%	2.8%	2.8%
Construction materials	2.5%	2.7%	1.5%	1.5%
Light industry	1.6%	1.4%	0.4%	0.4%
Food	13.2%	6.1%	9.1%	7.5%

At the same time, cost efficiency has varied by more than an order from 4% in the light industry to 59% in oil production and 44% in the non-ferrous metallurgy. Sectors have varied in the ratio of investment resources to amortisation (the latter being a gross characteristic of the minimum resources required for reproduction) in an equally dramatic way from 190% in coal-mining to 809% in the gas industry. An important characteristic of Russian economy is the prevalence of large enterprises and a high concentration of production. Accordingly, the role of small business is disproportionately low in our economy. An even more significant distinguishing feature of Russian economy is the huge role played by financial and industrial groups. Investment resources are reallocated from enterprises rich in resources to enterprises lacking them within financial and industrial groups on a large scale, which considerably reduces the urgency of the problem of limited access to external financing in a significant proportion of enterprises. Let us now review the main projection results obtained for the scenarios developed.

**Scenario A: inertial growth in a monopolistically structured economy**

Under this scenario, the level of accumulation not only fails to grow, but even drops a little bit to some 20% of the GDP, investments grow no faster than GDP as a whole. This predetermines lower economic growth rates as compared with other options: from 2005 on, they stabilise at a level of between 2.5% and 3.0% p.a. The total growth of the physical amount investments is as little as 21%, and GDP growth – 30% from 2002 to 2010. Although the ratio between direct foreign investments and capital outflow improves from 2002 to 2010, their balance remains negative even by the end of the period, and the balance of current operations is estimated at \$9 billions by 2010. By the middle of the period under consideration, the budget becomes balanced, and a deficit of about 1.0% to 1.5% of the GDP occurs by the end of the period. As a result, domestic debt as percentage of the GDP grows by 1% to 2% p.a. after 2007, but remain low nevertheless, and reach 11% of the GDP by the end of the period.

**Scenario B: active growth in a monopolistically structured economy**

An essentially higher accumulation rate (about 24% by the end of the period) results in higher growth rates which stabilise at a level of 3.5% p.a. in the second half of the period (between 2005 and 2010).

Investment growth reaches 51% as compared with the projected GDP growth of 37% over the period. An approximate balance will emerge between incoming and outgoing capital flows over the period: the balance of current operations will become virtually zero by 2010. Similar to option A, a deficit will emerge by the end of the period, however it will be less and will not exceed 1% of the GDP. Thanks to this fact, net domestic borrowings and domestic debt will prove a little bit lower than under scenario A at the end of the period: the domestic debt will reach 9% of the GDP by 2010.

**Scenario C: inertial growth in a liberally developing economy**

Scenario C combines careful assumptions about the size of accumulation with the assumption that a success of institutional reforms will considerably increase the resources allocation efficiency. It seems that this scenario can be used as the principal one. GDP growth rates are projected at 4.0% to 4.5% p.a. after 2005 under this scenario. Investment growth and GDP growth are coming closer to each other under this scenario, and amount to 49% and 43% over the period, respectively, and the balance of current operations approaches zero by the end of the period as under the previous option. A comparatively active reduction in expenses enables us to have only a small deficit (about 0.5% of the GDP) by the end of the period. As a result, domestic borrowings never go beyond 1.5% of the GDP, and domestic debt never exceeds 8% of the GDP.

**Scenario D: active growth in a liberally developing economy**

Scenario D combines the most optimistic assumptions about the further development of Russian economy, which are expressed in record economic growth rates reaching 4.5% by 2005 and about 5.5% by 2010. Gross accumulation grows faster, and its proportion reaches 25% of the GDP by the end of the period, and the physical amount grows by 71% over the period (as compared with the GDP growth by 50%). Capital inflow starts essentially exceeding its outflow, and the balance of current operations proves to negative at a level of -\$10 billions by 2010. The model assumes that structural reforms are undertaken under liberal options, which enable a reduction of expenditure in the second half of the period, and the budget remains balanced on the average under this scenario on a permanent basis. Net domestic borrowings never exceed 1% of the GDP, and the ratio between domestic debt and GDP stabilises at an even lower level than the current one (about 6% of the GDP). Note that the estimate of the domestic debt instruments requirement (one half of the resources accumulated) in the funded pension system exceeds the domestic debt proper in this case: governmental borrowings are so low under this scenario that virtually the entire domestic debt turns out to be in the portfolio of the management companies managing the resources of the funded pension system. Therefore, this scenario must stimulate the development of other securities market sectors such as subfederal, municipal and corporate bonds, shares, commercial papers and bills to an even greater extent.

Common features can be highlighted from the viewpoint of forming sources of investment for scenarios as follows:

- own resources of the corporate non-financial sector grow noticeably faster than the investment demand;
- the highest growth is expected in foreign investments; their proportion may grow from current 4% to 9-12%;
- the importance of budgetary sources noticeably drops; their amount remains approximately constant in comparable prices, and the specific weight drops from, 20% to 12-13%.

Table 1.12. Sources of investment financing in fixed prices (% of 2001)

	2005				2010			
	A	B	C	D	A	B	C	D
Total investments	105%	124%	120%	127%	121%	151%	149%	171%
Unallocated profit	139%	142%	145%	149%	159%	173%	183%	198%
Direct foreign investments	173%	183%	195%	205%	254%	328%	377%	487%
Budgetary financing	96%	97%	98%	98%	78%	99%	97%	113%

The above said means (and it can be regarded as one of the main conclusions from the study) that the role of inter-sectoral capital re-allocation will dramatically grow over the period under consideration. In the event that prerequisites are created for the development of the financial system, it may prove prepared to ensure such re-allocation, and it will follow a more efficient "market" route through the mediation of financial institutions and markets. Otherwise, the "closed" scenario of development will inevitably become real. Development will be accompanied by an expansion of financial and industrial groups under this scenario, and resources will be re-allocated through non-transparent procedures within such groups.

Note that independent analysts consider the development of financial markets in a similar way within the framework of their classifications. So, A.Vedev estimates the expansion of Russian financial market at R35 to R45 billion per year under the inertial option and by R150 to R190 billion rubles per year under a more optimistic scenario (a more active policy pursued by the state bodies responsible for market development) . A fast production growth and expanding crediting operations created an impression of fast movement and gave some hope for "self-development" before late 2002. A sober estimate carried out during the period of lowering growth rates shows that lower political risks, a long-lasting stable position of the budget, and an undoubtful improvement of the investment climate on the whole have failed to change the use of savings in any radical way so far. Ultimately, exactly those 5-6% of the GDP corresponding to capital outflow (in all forms) today represent a natural reserve for financing the development of Russian economy, and the use of this reserve could give a strong impulse to development, provided that an adequate system of financial mediation is available.

The nature of individual segments of the financial system has been reviewed under the scenarios described, and the findings are presented in subsequent chapters. Figures illustrating the principal conclusions of this section are given in Appendix 4.