

INVESTMENT CLIMATE PARAMETERS IN TRANSITION ECONOMIES:
THE CASE OF RUSSIA

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ABSTRACT

INVESTMENT CLIMATE PARAMETERS

IN TRANSITION ECONOMIES: THE CASE OF RUSSIA

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This thesis incorporates institutional definition of the economies in transition into the economic analysis of the investment variable. Probability environment of the real world is another point of analysis. Decision-making framework is analyzed and incorporated into analysis as well. Thesis tries to answer questions such as: Why same projects are treated differently in different circumstances. Finally the Russian experience is investigated and used to prove hypothesis about investment climate parameters and to give examples of investment into institutional matrix.

Keywords: Institutions, Institutional Matrix, Susceptibility, Cognition, Investment Decision-Making Framework, Investment Climate Parameters, Russian Reforms.

ÖZ

GEÇİŞ EKONOMİLERİNDEKİ
YATIRIM ORTAMI DEĞİŞKENLERİ: RUSYA ÖRNEĞİ

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Bu tez yatırım analizine kurumsal yaklaşımı dahil etmektedir. Ayrıca gerçek dünyadaki olasılık ortamı da tezin odak noktalarından başka bir tanesidir. Bu tezde karar verme mekanizmaları incelenmekte ve genel analizin içine katılmaktadır. Örneğin, “Aynı yatırım projesi farklı durumlarda neden farklı biçimde değerlendirilebilir?” gibi sorulara yanıt aranmaktadır. En sonunda da Rusya deneyimi incelenmektedir. Bu örnek sunulan hipotezin sınanması için ve kurumlar matrisine yatırımın nasıl gerçekleştiğini göstermek için kullanılmaktadır.

Anahtar Kelimeler: Kurumlar, Kurumlar Matrisi, Duyarlılık, Algılama, Yatırım Karar Verme Mekanizmasının Çerçevesi, Yatırım Ortamı Değişkenleri, Rusya Reformları

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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INTRODUCTION

Profound political and economic transformations marked the last decade of the twentieth century. The dissolution of the USSR represents the best political example of these transformations. At the same time, the transition from centrally planned socialist economies to market oriented economies reflects the economic side of the processes mentioned above. Undoubtedly the 1990s will always be regarded as the turning point and the results of events and processes that then occurred will be increasingly questioned in the course of time.

The situation of the 1990s gave economists a unique chance to implement and test all theories and policies. The situation was seen as an opportunity given to defenders of mainstream economics. Already formulated Washington Consensus was thought to be a way to achieve prosperity, stability and growth. However reality put an abrupt end to such wishful thinking.

Results of economic reforms in the Eastern European states were far from rose pictures drawn in minds by the reformists. The situation in the republics of former Soviet Union was even worse. GDP and investment declined sharply. Unemployment and poverty level increased. So what went wrong? In this thesis we try to find an answer to some of the questions that arose as a result of the economic

situation in transition economies by investigating investment variable in a transition environment.

CHAPTER 1
THE ROLE AND THE CONCEPT OF INVESTMENT
IN ECONOMIC THEORIES

If only we knew more about the determinants of investment! But, unfortunately, our knowledge in this direction is still very meager. One might well ask, what is wrong with the theory of investment? Or, perhaps, what is wrong with the subject matter itself! For one thing, this variable, -- the pivot of modern macroeconomics -- has apparently lived a somewhat nomadic life among the various chapters of economic theory. Perhaps it has not stayed long enough in any one place. Perhaps it has been ill-treated.

Trygve Haavelmo, *A Study in the Theory of Investment*,
1960, p.3

1.1 Origins of the Concept of Investment

First of all we would like to start our work with the general review of the role of investment in economic theories. We start with one of the most important questions of economic science, namely growth, and then proceed with fluctuations.

The relationship between the economy-wide amount of final goods and services produced and the inputs (so-called factors of production) used in the process is called the aggregate production function. Stress that by production here, we mean

not only manufacturing but any value-creating activity as well. As a general rule, anything that tends to increase our utilization of inputs will increase our real GDP.

Thus aggregate output can increase due to an increase in the quantity (and quality) of inputs or due to an increase in our ability to obtain output from inputs. In the subsections that follow, we consider this in more detail.

One of the most obvious ingredients to production is labor. The more time people spend working, the more final goods and services are likely to be produced. Recall that the supply of labor consists of the total number of hours that people are willing to work in the economy, while the demand for labor represents the amount of labor that firms want to hire.

One can distinguish between physical capital, human capital and natural resources. All of these three are vital for production.

Economists use the word capital to denote any durable input. Examples of capital include computers, buildings, roads and factories. In each case, these inputs last for many years and tend to increase the amount of final goods and services that an economy can produce. Because physical capital lasts for a long period, the amount of capital available in the economy in any given time is typically much greater than the amount that has been added in the year. The amount of capital available in an economy determines how much it can currently produce, but unfortunately physical

capital has the property to deplete with time. One can identify three types of physical capital: (1) fixed capital, (2) working capital and (3) liquid capital.

Fixed capital is defined as long-lived items, or stated in other words the capital that survives more than one production period. This in its turn implies that the planning horizon corresponding to their purchase is longer than the immediate future. Thus fixed capital goods are affected by uncertainty to a large extent. The initial supply price of fixed capital goods is usually high and at the same time they can be bought in a set of integrated units only, thus creating the problem of indivisibility. Another important property is that these goods are usually highly specialized in their functions and differentiated according to their age, which is due to continuous technological progress. So, as one can clearly see then, these entire end in the highly illiquidity of fixed capital goods. Thus the potential losses that the investor can incur due to the attempt to resell them can be very high, so their initial purchase can be induced by very optimistic view of future. So, in principle, the decision to invest in fixed capital goods is a very risky strategy. Given the time-horizon involved in the decision, the inducement to invest in these goods is the state of long-run expectations. However, these expectations are very complex. To determine long-run values one has to know all elements affect the result, and assume them to remain constant while some convergence process operates in a given run of time. For the investor however, the opposite is true, not all relevant variables are known and given the uncertainty environment, nothing guarantees that they will remain constant. And even in the situation where one can argue that he at least identified almost all relevant variables and showed that they are subject to some convergent process, he

always will face technological constraint considering his computational abilities. In this situation an investor will have to complement what he knows with what he imagines to construct scenarios in terms of which he may be able to decide.

Another group of capital goods is working capital. This type of capital includes goods-in-process and goods held to ensure smoothness in production. On the contrary to fixed capital goods these are usually short-lived goods. Besides they constitute building blocks for final output and thus by definition they are usually divisible. The nature of working capital is defined by its role in the technical process. Thus since it is held in certain proportion to the volume of current production it is independent of short-run expectations. Economic importance of working capital originates in its three properties, which can be stated as follows: (1) working capital the speed with which production can be accelerated, (2) working capital acts as an amplifier of fluctuations in production and (3) it represents an additional channel through which monetary policy can affect output. So, given short-run planning horizon and relative liquidity of working capital, investment decisions related with this type of capital goods are not as crucial as in the case of fixed capital goods. However due to some kind of accompany property of working capital, investment decisions related with it can be considered only as a function of current production.

Third type is liquid capital. Resembling working capital it is also constituted of raw materials and finished goods. However, unlike working capital, liquid capital has no technical relation with production and is held for speculative purposes only. Properties of liquid capital can be stated as comparatively liquid, represented by

short-run planning horizon and usually divisible. Liquid capital used to be the main focus for those writing on the theory of business cycles. In times of unstable prices, these goods become very attractive for the holders of investable funds. Investors holding them speculate that the prices will go up; on the contrary investors who liquidate inventories speculate that prices will go down.

Economists have long noted that the education (and training) of the population is an important factor in the aggregate production function. The better educated and trained the population, the more final goods and services they are able to produce. Since education and training may be accumulated over time it is often useful to think of them as a type of capital that is embodied in human beings. For this reason, economists often treat the education level of the population as a proxy for the economy's human capital. Another point to underline here is the importance of the quality of labor employed. That is the higher the quality of employed labor the more and cheaper goods and services are likely to be produced in economy. And one can argue with high degree of confidence that the quality of labor is the most important factor for the cost-reduction and for the process of progress in whole. At the same time the quality of labor is determined by the amount of human-capital in the economy. However human-capital in keeping with the physical capital has the property to deplete with the passage of time. Investing in human capital however, is a very difficult decision. Given the uncertain environment agents cannot know the expected costs and benefits of investing in human capital. Obtaining new human capital is very costly in terms of time, effort and resources. At the same time benefits cannot be easily foreseen. Another important property of human capital is its high

illiquidity (perhaps only slavery is exclusion, but we do not consider such a case in modern society). Rephrasing Arrow's (1962) 'information paradox' one can state that: unlike the investment (production) in physical capital where at least some costs and benefits can be calculated with some degree of confidence, so that resources can be optimized subject to knowledge possessed, the investment into human capital cannot be subject to such rational calculus.

Natural resources are raw materials and minerals, such as oil, that are found in nature and are useful in production. Clearly, the more natural resources available to an economy, the more final goods and services it can produce. Having said that, economists are often quick to note that while natural resources may easily increase aggregate output; it is not necessary for an economy to be abundant in natural resources to produce goods. There are many examples, such as Japan, which manage to make a very large amount of final goods and services per person despite having relatively few natural resources.

In line with Keynes who noted three attributes, which all durable assets possess in different degrees, one can effectively argue that these three attributes are also attributes of capital without dependence on its character, i.e. whether it is physical, human capital or natural resources. According to Keynes these are: (1) expected quasi-rents or money value of output, net of running expenses, which can be obtained by assisting some process of production or supplying services to consumer, (2) the carrying costs (including wastage) of the asset over the period of time and (3) the

liquidity premium which arises from the power of disposal of the asset during the period of time.

If one is to stabilize or to increase the aggregate output one needs to command the above state variables (i.e., capital and labor). At any given time one can effectively command over the amount of two of the inputs physical and human capital, though even this is a long and difficult process as well. One way to do this is through the channel of accumulation. The process of accumulation of capital itself is called investment. In capitalist economies much attention is focused on investment activities conducted by business units, but investment can also be undertaken by government and nonprofit organizations. Regarding the transition economies much attention is concentrated on foreign direct investment, the reason behind that is the assumption on the insufficiency of funds in transition economies as well as the possibility of the technological diffusion process coming together with Foreign Direct Investment (FDI). Here we feel the need to remind that physical and human capitals have the property to deplete with time. Thus one can discriminate between two types of investment activities:

- Replacement investment
- Principal investment

Replacement investment stands for the activity of replacing non-functional or obsolete capital. In contradiction principal investment stands for the activity of acquiring new capital.

The conceptions of investment in economic theories should now be investigated. In general one can realize that there are four types of different theories originated in different economic thoughts: (1) theories considering the effects of investment on other macroeconomic variables, (2) theories regarding the determinants of investment, (3) theories on the sources of variations in the level of investment and (4) theories analyzing the effects and the desirability of autonomous public investment. We will not go into the differences among the neoclassical, neo-Keynesian, new classical and new Keynesian theories. Differences within each school would make this a formidable task. But at the same time the common denominator of them is the acceptance of the neoclassical theory of finance and investment, while bringing into market imperfections. And one can realize that market imperfections are not considered serious enough to warrant abandoning the basic theory.

1.2 Neoclassical Approach to Investment

Neoclassical theory provides a simple and appealing explanation for how investment is determined. The assumptions here are certain knowledge of the future and perfectly competitive markets for products. The growth in output is determined in the capital market by the interest rate that equates the demand for and supply of savings. The demand is investment, and on micro level each person's investment equates the marginal rate of return on investment with the interest rate. The marginal rate of return is a decreasing function of investment, so that investment falls as interest rate rises. A person's supply of saving is determined by preferences between

current and future consumption, and the output not consumed currently is saved for future consumption by means of investment. Under the assumption that the price effect of interest rate dominates its income effect, the supply of savings is an increasing function of the interest rate. With investment declining and saving rising as the interest rate rises, there is some interest rate that equates both. If investment demand is smaller than saving at full-employment level of income, the analysis requires that excess of funds in the credit market will depress interest rate and thus induce increase in investment demand (as well as possible reduction in the amount of savings due to the decrease in the profits of savers) until intended investment and saving are equal to each other. Hence, with output determined in the labor market, there is some interest rate that makes investment absorb the output not consumed currently. This is the micro foundation for the Neoclassical Theory of Investment.

A necessary condition for the capital market to function in this way is certainty about the future. Each person is then able to lend or borrow the amount, no matter how large it may be, that equates the marginal rate of return on investment with the interest rate. Each person makes this investment decision, because it maximizes wealth. Real people maximize utility and not wealth, but with the future certain, wealth and utility maximization result in the same investment decision. At the same time we can see approaches stating that the demand for investment cannot be derived from the demand for the capital as it was argued by Haavelmo (1960). In his work Haavelmo (1960) says, “We should reject the naïve reasoning that there is a demand schedule for investment, which could be derived from a classical scheme of producers’ behavior in maximizing profit”. He continues with stressing the fact that a

demand for a finite addition of capital can lead to almost any rate of investment, from zero to infinity. As an important point characterizing the general approach accepted by neoclassical stream of economic thought one can emphasize the Fisher Separation Theorem, stating that: (1) the firm's investment decision is independent of the preferences of the owner, manager and (2) the investment decision is independent of the financing decision. Finally, we feel the need to spell out the idea known as acceleration principle. Many scholars have misunderstood this principle. It is actually not a theory of investment; rather it is alternative theory of the desired level of capital stock. One can identify that for this principle to become a theory some hypothesis regarding the speed of adjustment is needed. However one can argue that the acceleration principle indicates one of the driving forces in the dynamics of investment.

1.3 Keynesian Approach to Investment

For Keynes and his macroeconomic model that grew out of the experience of the great depression a change took place on the welfare implications of a given rate of investment. Its role as growth factor was depressed and its importance regarding the employment level began to be underlined. This change in view is, of course understandable. Why should one be concerned with the creation of more production capacity when so many developed economies could not even manage to put existing productive resources to work? Actually, one could argue that increasing the production capacity by the means of capital accumulation, i.e. investment would counteract the effects of investment itself as an employment factor. In the classical

models, more current production of capital means less current production of consumption goods and services, the reverse holds as well, i.e. more current consumption must mean less current investment and thus less consumption in future. However Keynes managed to recognize that in an economy with high amount of unemployed resources more current investment need not bring less consumption. Expenditures for additional investment may represent additional income and this income through the multiplier effect will be spent on increased consumption. In its turn more consumption may bring more investment as producers see a need for additional capital to increase the output of consumption goods and services. In his General Theory, John Maynard Keynes proposed an investment function of the sort $I = I_0 + I(r)$ where the relationship between investment and interest rate was of a rather naive form. Firms were presumed to "rank" various investment projects depending on their "internal rate of return" and thereafter, faced with a given rate of interest chose those projects whose internal rate of return exceeded the rate of interest. With an infinite number of projects available, this amounted to arguing that firms would invest until their marginal efficiency of investment was equal to the rate of interest. At the same time however we feel the need to underline the Keynes's view on the characteristics of economic system here. These are (1) the multiplier is not very large, (2) the investment schedule is not very elastic with respect to a change in expectations or the interest rate, (3) the money-wage rate is not very sensitive to changes in the level of employment, and (4) the changes in investment tend to react on the marginal efficiency of capital in such a way as to counteract the initial impulse. So despite all these important findings and novelties, one can argue that actually Keynes had no distinctive theory of investment. Without a satisfactory

alternative to the neoclassical theory of investment, all that Keynes could do was to recognize that investment (and consequently income) fluctuates arbitrary over a wide range in the short run, is subject to secular stagnation in the long run and that there are costs of investment as well as benefits. He therefore recommended that the government budget should be used to counter these tendencies. According to Keynes (1936) if investment demand is less than saving at the current level of income, producers will not be able to sell all that they produce. Thus there would be an accumulation of undesired inventories of finished goods, which can be understood as unintended investment in inventories, which on its turn would lead to the reduction in the production. Reduced production means less income and hence less consumption and saving. So, in the situation where investment demand is less than savings an economy will experience a reduction in output and income until investment and saving are brought to equality. Insufficiency of investment demand is identified with depression and recession and tendencies toward unemployment. Similarly excess in the level of investment demand can create inflationary pressures, calling for the policies that would restrict investment. But finally point out that Keynes left us a question about the consequence uncertainty and risk-aversion for saving and investment, which on its turn would give an inspiration to the following generations of economists.

In the neo-Keynesian field one can see works of Brainard and Tobin (1968) and Tobin (1969) based on Keynes ideas of marginal efficiency of investment and the relationship between financial markets and investment/production decisions. They developed “q-theory” which sees investment as a function of the specific ratio

q, the market value of the capital to its replacement cost. With proper adjustments for tax considerations investment will take place when the value of q is greater than unity, meaning that the cost of additional capital is less than the market evaluation of the present value of returns of capital. Conversely, when q is less than unity the present value of the cost of acquiring of new capital is higher than the present value of the benefits of capital. Generally, the greater the q the greater should be the rate of investment. However, one can observe difficulties related with estimation and observation of q-values. Among suggested explanations of the difficulties one can find the fact that market values of firms may relate to much more than tangible capital generally included in business investment, and the fact that there is a failure to distinguish marginal and average values of new capital versus the acquisition costs of existing firms (Chirinko, 1986).

The presence of uncertainty and risk aversion has gone unrecognized in neoclassical and in Keynesian models. There were some efforts to introduce risk and risk aversion into the macro models; among these the most notable is the work by Tobin (1982). In his work Tobin expanded the model by incorporating a broad range of financial assets and institutions other than banks. Nonetheless it is possible to conclude that “macroeconomics has lacked an explicit theory showing how risks affect investment and cash-holding decisions and what Tobin did is to integrate a simple version of the capital asset pricing model into a rather conventional rational expectations model to study the macro effects of risks”(Sweeny, 1987).

Tobin (1982) examined how the level of inflation, the risk premium in the cost of capital interacts within the constraints of a neoclassical macro model. The only departure from the basic model (Neoclassical Theory of Investment) is the addition of a risk premium to the risk-free rate. The theoretical basis for ignoring uncertainty and risk aversion is the neoclassical theory of finance and investment with its roots in Modigliani and Miller. In this regard one can remember the work of Michal Kalecki (1937), who proposed the principle of increasing risk. He proposed that the more firms invest, the greater their indebtedness and thus the greater the potential loss if their projects fail. Thus, assessments of "profitability" become more and more conservative as firms take on larger and larger debt needed to finance greater and greater investment. At the same time one can recognize Gertler (1988) stating that the neoclassical theory of finance "provided researchers with a rigorous justification for abstracting from the complications induced by financial considerations".

1.4 Post-Keynesian Approach to Investment

Post-Keynesians in the line with Keynes recognize the 'fallacy' of the pre-Keynesian writers and mainstream economists that the act of saving (i.e., the decision to abstain from consumption out of the current income) is the demand to sustain value in producible capital goods. This (post-Keynesian) stream of economic thought refers to Keynes' idea that, an act of saving does not necessitate the purchase of any producible capital goods either today or in future. Contrary, the desire to save out of present income can be interpreted as a "desire to transfer command over

unspecified resources to the indefinite and uncertain future” (Davidson, 1994). Post-Keynesian theorists stress the importance of investment for business cycles. As major reasons for the existence of business cycles post-Keynesians define the oscillations in the level of confidence of entrepreneurs and in the level of investment. In numerous articles and books Minsky (1975, 1982, and 1986) has argued that in an environment of Keynesian uncertainty, expectations will be subject to endogenous cyclical instability and, as a result, investment will be cyclically unstable as well. As it was shown by Hyman P. Minsky (1977) the oscillations in the level of investment are closely related with the fact that financial institutions are not ready to establish financial relations with entrepreneurs. In his theory, the risk of the lender is the probability of the loan to become a bad loan, and a risk of borrower is the probability of becoming unable to support contractual obligations. At the same time both of these risks are functions of leverage. The higher the ratio of externally financed investments the higher the risks, and the lower the probability of acquiring of new debt thus the lower the level of following investments. Or stated in other manner, one could expect that the terms of credit will worsen when the demand for credit by any borrower is increased. This happens due to the fact that both the lender’s and borrower’s risks increase when indebtedness increases and one then faces the situation when the lender’s fate depends on that of the borrower. Here we once more turn our face to Kalecki’s principle of increasing risk, which is based on the notion of borrower and lender’s risks. This principle would suggest a positively-sloped supply curve of credit for any given agent (however this does not necessarily imply that market supply curve of credit is positively-sloped), which does not rely on the principle of decreasing returns in the production of capital, that bother so many post-

Keynesians. Delli Gatti D., Gallegati M and Gardini L proceeded further and made use of famous Tobin's q to explain investment level. As a result Delli Gatti D., Gallegati M and Gardini L's (1990) investment function took the following form: $I_t = aV_t + bIF_t$, where I_t -current investments, V_t -market value of firm, IF_t – internal funds, a and b –parameters explaining risks and propensity to invest. Along with the rejection of neoclassical tractate of uncertainty post-Keynesians stress the fact that there is a great possibility of incomplete and asymmetric information, and this is the case for managers of different firms as well as for the managers and stockholders of the same firm. Moreover as argued by Crotty (1990) there are serious reasons to think that owners and managers have qualitatively different objective functions and different planning horizon. Continuing with this idea the problem of irreversible investment is discussed. Particularly, post-Keynesians recognize the fact that when investment is irreversible and the future is unknowable, irreversible mistakes of serious magnitude are possible, and this is what creates the "legacy of the past" (Minsky, 1982, p.63), which on its turn creates constraints for current investment and for managerial autonomy. Thus, investment becomes necessary and dangerous at the same time. So, to summarize, the investment for post-Keynesians is a function of: (1) determinants of relation between expected profits and capital stock (adoption of Tobin's q), (2) determinants between expected safety and capital stock (irreversible investment and possible mistakes of serious magnitude) and (3) managerial preferences between safety and growth (qualitatively different objective functions of managers and owners).

1.5 Reasoning of the Study

In the real world one continuously faces situations where same investment projects are accepted in one region and yet rejected in another, or accepted by one company and rejected by another. One can identify two different approaches to deal with future embedded decisions; one of them is to rely on statistical calculations whereas the other is to rely on expert evaluation. Sometimes the first approach proves to be beneficial, at other times the other. We look for answers to the following questions: Why is there a difference between approaches to the future? Why are same projects sometimes accepted and other times rejected? How is the decision-making process structured? What are the real world examples and which theory fits the situation best? In this study we search for such answers.

None of the above approaches to investment discuss the economy in transition specifically and the general approach of the mainstream economists is to treat it as a special case of the general situation. At the same time one can effectively argue that 'general theory' is true under certain assumptions. These assumptions describe certain parameters that are present in at least certain parts of the real world. Parameters define outcomes of the systems through their property to define the way the elements of the system interact. It is because of the presence of such parameters that similar systems produce different results, and same action in resembling systems can produce different results. That is why if one is to study an economy in transition then the first task is at least to reconsider assumptions directly or indirectly accepted by the mainstream. Thus, one can claim that the 'general theory' is actually the

‘specific theory’ and we either need a ‘more’ general theory or a more specific theory to deal with problems of the economies in transition.

These parameters can be called ‘institutions’ and then one can effectively argue that institutions define the specific dynamic behavior of the system. Normally the issue of institutions is skipped in studies; however we feel the need to first understand the concept of ‘institutions’, develop a sound approach and then to incorporate it into the study. Next task would be to redefine an economy in transition by using the institutional approach as done in Chapter II. In doing this, one should not forget the fact that investment decisions and thus investment are embedded in the future. This is due to the fact that the time of realization of costs and benefits of an investment project are in the yet undefined future. This fact opens a new direction in our study, and leads us directly to the concept of ‘uncertainty’. It is no coincidence that another point to be addressed here is the probability environment of the real world.

Having defined the economy in transition from the institutional viewpoint and having defined the probability environment of the system one should consider the mechanism that shapes investment decisions. As already seen in Chapter I, most authors stress the importance of cost-benefit analysis. This is true, but it is only partially true. One should not only define the analysis performed and be content with it but also address the very basis of this analysis. This point is discussed in Chapter III. First we deal with the notions of profit and capacity utilization because they provide the data for analysis performed during the decision-making process. Then we

switch our attention to the decision-making framework. This is represented by psychological attitude towards the investment prospects and by the structure of decision-making processes in companies. Finally, we bring together the knowledge of the institutional arrangement of the economy in transition with the knowledge of probability environment, and knowledge of decision-making framework. Having combined all of these, we then define the concept of ‘investment climate parameters’, and spell out specific investment climate parameters and their effects over the investment expenditure level and structure.

In Chapter IV we turn our attention to the case of Russia; a model for the economy in transition. We scrutinize the approaches deployed during the course of Russian reforms. Then we explore the Russian case in such a way that the results of this investigation would be used as input data for testing the investment climate parameters hypothesis. We test this hypothesis in a rather unconventional way though; we do so by re-interpreting some well-known phenomena in a new light.

CHAPTER 2

INSTITUTIONS AND THEIR ROLE IN AN ECONOMIC SYSTEM

Certainty we cannot achieve in human affairs, and it is for this reason that, to make the best of what knowledge we have, we must adhere to rules.

Friedrich A. Hayek, *Competition as a Discovery Procedure*, 1960

Modern economy is a complex, evolving system whose effectiveness as well as the direction, quality and many other characteristics depend on rules, which constrain and shape human behavior. Human behavior and interaction issues are central to understanding, analyzing and possibly predicting economic, political and social systems. Rules that constrain human behavior and thus human interaction are called institutions. Davidson (1994) in his work recognized the characteristics of real world economies as Uncertainty, Covenants, Institutions, Commerce, Finance and Trust, and to him these are the Seven Wonders on which the Modern World is based. Institutions are the humanly devised constraints that shape human interaction (North, 1990, p.3). By defining institutions in this way we consequently enable institutions to structure incentives and the opportunity set in human exchange, whether political, social or economic, or if to use game theoretical jargon we would say that institutions define and limit the set of choices of individuals. Through the structuring of opportunity set, institutions affect the performance and the path of development (here development is conceived in terms of absolute value, which can take meanings of

both progress and regress) of economic, political and social systems. That is the reason for saying that the differential performance of economies over time is deeply affected by the institutions. The mainstream economics has assumed that institutions are exogenously given. “At best it has treated them (institutions) as a complication of economic models” (Kasper, 1998, p. 3). But it can be easily seen that mainstream economics had repeatedly failed to explain or predict real-world phenomena in recent years and the best example of such failure are the post-Soviet economies of Eastern Europe. One is able to recognize that currently fashionable mainstream models do not take into account the issue of underlying incentive structure, underlying institutional arrangement. The standard approach is to treat institutional arrangement as if it were the same (or approaching in the limit) as in certain environments, particularly in environments described by mainstream authors.

2.1 Probability Environment in Economic Systems

Each of us when faced with an economic, political or social decision is to calculate costs and benefits of that decision, but at the same time these variables, i.e. costs and benefits, are embedded in the future. Future in its turn makes us face the problem of uncertainty, or stated in other words, the situation where agent is not able to predict with a probability of one the exact realizations of the variables. At the time of decision-making an economic agent has to decide about the characteristics of the environment, whether it is (1) an objective probability environment (2) a subjective probability environment, or (3) an uncertainty environment. For the sake of convenience let's define these environments in details.

An objective probability environment: In this case an economic agent believes that there is computable real objective probability distribution, which governs the past, present and future. Rationality then will require the analysis of past relative frequencies of outcomes to calculate a statistically reliable analysis of future prospects. This is actually the environment where the REH is embedded.

A subjective probability environment: In this case an economic agent believes that he can totally enumerate all possible future outcomes in terms of subjective probabilities. In this situation, there is no necessary requirement that the short-run subjective probabilities are to coincide with long-run objective probabilities. However in the long-run, the subjective probability environment collapses into the Rational Expectations Hypothesis (REH) analysis of the objective probability analysis.

An uncertainty environment: In this case an economic agent believes that during the span of time between decision-making process and the payoffs unforeseeable changes can occur, meaning that no reliable information can be obtained by analyzing past and current data.

In the sense of the discussion above we now turn to the discussion of ergodic versus non-ergodic processes in economic, political and social systems. All stochastic processes yield time series data; these in their turn allow the construction of averages, particularly the mean or standard deviation. These averages constitute our empirical knowledge about past and current relationships. Time averages are

calculated from time-series data, i.e. observations that relate to a period of calendar time, while space averages are computed from cross-sectional data, i.e. observations that relate to a given point in time across realizations. Davidson (1992) notes that we are dealing with an ergodic stochastic process if (a) for infinite realizations the time and space averages coincide or (b) for finite realizations the time and space averages converge (with a probability of one) as the number of observations increases. This means that space or time averages calculated from past realizations collapse onto the objective probability distribution that totally enumerates all (past, present and future) realizations and that these time and space averages form reliable estimates of future events (Davidson, 1992, p.90). However while the concept of ergodicity is generally understood in the sense of stochastic processes, in a wider sense it implies as Davidson (1996, pp. 480-481) points out, “the presumption of a programmed system where the past, present, and future reality are predetermined whether the system is stochastic or not”. One can then effectively recognize that if the economic process is ergodic then it means that the notion of time becomes unimportant to a great extent. Actually Samuelson (1969) introduced ergodic hypothesis in order to remove a concern for path dependence and history. However this assumption then depresses the notion of choice to the minimum as well. Following the hypothesis of Samuelson (1969) then one can state that outcomes are pre-programmed in the long run and independent of the choices made by the agents. This in its turn will make any attempt to assign uniqueness and importance to agents and history fallacious. So, to summarize, one can say that, ergodicity demands replicability, which means time-independence of processes. This (time-independence) however gives no place for ‘crucial decisions’, because the existence of crucial decisions will destroy the

environment in which they were made. Or it can be stated in another way, in the world where the innovations, which are actually crucial decisions, are present there is no place for ergodicity (replicability). At the same time one can realize the support for the view of the world as being non-ergodic in nature in the complexity approach. Complexity incorporates the assumption that the effects have causes, but it predicts that number of interest can only be predicted, at best, subject to a standard deviation unbounded with increasing time, a non-ergodic phenomenon. However this does not mean that everything is possible. Here one should point out that, if world accepts novelty then it also displays continuity and despite the fact of continuously changing world there is enough continuity to allow some space for induction and identification of rules, or stated differently there is a room for decreasing of uncertainty. Then, agents in the real world feel the need to practically introduce structures (to convert unstructured problem to structured) on which to base decisions, and with the help of which to decrease the uncertainty. And particularly those structures are the institutions, which by definition define and limit the set of choices.

2.2 The Concept of Institutions

These institutions typically socialize (or externalize, or internalize) uncertainty. One can immediately give examples of such institutions (1) forward contracts and (2) stock exchange. Forward contracts reduce uncertainty which investor faces during the attempts of determination of future benefits. However, at the same time forward contracts increase uncertainty for the buyer. The same is true for stock exchange. The uncertainty that the investor faces is reduced by

implementing this institution. At the same time, given the state of asymmetric information, the uncertainty the buyer faces is increased. So institutions normally socialize (or externalize, or internalize) uncertainty rather than eliminate them. Decreased uncertainty for one group would typically mean increased uncertainty for another one. From now on decreasing uncertainty would mean its transformation to another form, i.e. socializing, externalizing, or internalizing it. Thus one can effectively state that institutions reduce uncertainty by introducing structure into every-day life. At the same time one should identify side effects introduced by creating institutional structure, which provides safety to investors. Firstly, one can identify the incentives to conduct more and more risky operations (investments). To use Minsky's (1977) notation the ratio of speculative and ponzi investors increases. This is due to the fact that now there are institutional safety nets, which are enough to guarantee safety for even riskiest initiatives. This then implies a more fragile environment. Secondly, less informed and capable individuals now participate in the investment processes. These agents are usually more unstable in their expectations, thus they can be manipulated and exhibit the so-called mob-behavior, which amplifies any disequilibrium that may arise. Actually investment is always volatile but mob-behavior can aggravate this volatility. One can refer to Kindleberg's (1978) work for a very interesting historical description of mob-behavior in financial markets. The result is that by designing and implementing the institutions with a task of decreasing uncertainty, promoting investment and thus with the tasks of increasing stability and enhancing growth of the economy one may end up by also increasing its volatility. And this is not a paradox, rather it is a logical consequence, a logically required trade-off, in the real world there are no unmixed blessings. As Carvalho

(1992) stresses the whole point here is to allow enterprise (investor) to prevail over casino and at the same time to make it remain forever alert for unexpected changes.

For the constraints to successfully rule the game, they should possess some degree of resistance to change, and to be at least predictable. That is why institutions always bring with them cost of change, and those costs are of considerable amount. On the other hand institutions can be treated as public goods, thus this is just another reason for them to embody some sort of resistance to change. The reasoning behind this is to ensure returns to the agents participating (and by doing so devoting their resources to this process) in constructing institutions.

Institutions include any kind of constraint that agents impose on themselves to structure interaction and by doing so to decrease uncertainty. These constraints include both prohibitive and partially permissive constraints. These are both what the agents are prohibited from doing and under what special conditions agents are permitted to get involved in certain activities. Institutions can be (1) formal and (2) informal.

Informal constraints (institutions) include (1) norms of behavior, (2) extensions, modifications of formal constraints, and (3) internally enforced norms of conduct; thus effecting economic activities at the micro level. In all societies starting with the most 'primitive' one and ending with the most 'advanced', people impose constraints upon each other to give a structure and by doing so to facilitate their relations with one another. Given the uncertainty environment and limited

computational and analytical abilities informal constraints are the prerequisite for the very existence and success of interaction. With the possibility of socially undesired outcomes, as those described in famous prisoners' dilemma informal constraints provide a basis for the possibility of obtaining outcome that will be at least as socially desired as that obtained in an institutions free environment. The crucial importance of informal institutions for us stems from the fact that they alter the behavior and choices of a group of people. One should then design a model that would be capable of predicting choices in the context of trade-off between wealth and other values. There are examples that a commitment to communism can make agents sacrifice. At the same time some experimental economists provide evidence that individuals do not always free-ride (Frank, 1988). Considering the facts stated above one can conclude that the behavior becomes a function of institutions, even at the informal level. The emergence and persistence of informal institutions are due to their ability to solve coordination problems. In the uncertain environment, given limited computational abilities and possibility of asymmetric information and other imperfections, informal constraints provide a structure that solves these problems. "These are rules that have never been consciously designed and that it is in everyone's interest to keep" (Sugden, 1986, p.54). Informal constraints can realize those investment decisions, which are not possible under wealth maximizing behavior. Among possible examples are those investments with very low (or none at all) quasi-rents and very high initial and maintenance costs, but which are crucial (or believed to be important) for society. Examples are cultural centers, educational centers etc, or even an independence war. Stated in another manner, it is simply impossible to make sense of history, economies, and societies without recognizing

the central role that subjective preference, shaped by informal constraints, play. Ideas, ideologies play a central role in shaping history, economies, and societies. “The long-run implication of the cultural processing of information that underlies informal constraints is that it plays an important role in the incremental way by which institutions evolve and hence is a source of path-dependence”(North, 1990, p.44). This fits well with the implication of non-ergodicity assumption, which is that economical, political systems are path-dependent. Given these, one can effectively state that informal constraints are among the reasons lying behind the continuity of systems, be they economic, political, or cultural. Astounding examples can be given: survival of Japanese culture following the U.S. occupation after World War II, survival of Jews despite endless changes in the environment they were in, and the Russian Revolution, representing probably most complete and fast transformation of society. At the same time, the very existence of informal constraints takes our attention to another point, the axiom of reals. One should take into account that simply wealth maximizing behavior and behavior taking informal constraints into account would probably produce different results, thus while modeling one should incorporate considerations of informal institutions as well. Axioms of reals, stating that utility is derived from the consumption of real goods and services is at least not completely appropriate in the presence of informal constraints. Thus results, analysis and following suggestions would represent divergence, possibly unbounded, with the reality. Same actions applied to different societies produce different results, and the source behind this divergence is informal constraints.

Formal institutions include (1) political constraints, (2) social constraints (judicial), (3) economic constraints, and (4) contracts. Given limited computational, analytical abilities and scarcity of time the efficient way to deal with these problems is to apply a hierarchy on constraints. Hierarchy here is the system in which status and authority are ranked vertically, with higher ranks having the right to command and order the lower ranks. In such a top-down system, order is imposed from above. Hierarchies of formal institutions tend to consist in essence of rules at three different levels: (1) constitutions, (2) statute law, and (3) regulations. Constitutions are often abstract; they tend to override more specific institutions if contradictions arise, these institutions are of strategic importance. More specific constraints (statue laws, by-laws) explain particular meanings; these institutions are of tactical importance. Regulations in their turn channel day-by-day activities, these institutions are of operational importance. Such hierarchies make it easier for individuals to understand and to deal with constraints. Another important point here is consistency. Hierarchies help in maintaining consistency, due to the power of high-level constraints to override low-level constraints, thus given time constraints this property help agents to comprehend constraints and to orient themselves within the environment. Another problem stems from computational and analytical limits of agents. Constraints without hierarchy, especially if they are numerous, are difficult to comprehend this then disorientate agents and create disorder. The difference between formal and informal institutions is one of degree. As one moves from less to more complex society, one can realize increasing specialization and division of labor, at the same time one would realize then the process of formalization of constraints. This is due to the fact that increase in the rate of return from the formalization of constraints in the

environment with increasing complexity takes place. Formal constraints can complement and increase the effectiveness of informal constraints. And they may be enacted to revise, modify, or replace informal constraints. Typically formal constraints are designed with altering costs involved. And usually costs of altering rules are ranked in accordance with hierarchy. High-level rules are usually more difficult (costly) to alter, and low-level rules are usually easier to alter. At the same time diversity of interests will define the relative bargaining power of parties and costs of altering rules. The more numerous interests are the less likely that the simple majority will define the direction of change. Formal institutions should also be taken into account when one is to consider and analyze systems. Immediate results of consideration of formal institutions can be seen in following example. Formal rules can prohibit participating of foreign capital in some investing activities, for example investing in strategic sectors of economy. Then whatever the result of classical analysis is, the amount of FDI would be zero. Important point of discussion here is the direction of causality, i.e. whether the political rules lead to economic or vice versa. One can recognize that there is a close interaction between political, social and economic rules, however the point we defend here is that; political rules lead to economic rules, though the causality may actually run both ways. Political view defines the desired outcome in the presence of several possibilities. Given the uncertainty, and limited computational and analytical abilities, economic analysis usually leads to several possible outcomes (equilibria). That is why political constraints lead to economic ones. Thus given the priority of political constraints, the political system will define the framework for economic development and will crucially affect the overall effectiveness and efficiency of the economy. Then one

should incorporate considerations of formal institutions into one's analysis of economic system; otherwise results obtained would tend to diverge from reality. At the same time underline the point that nothing has so far been said about efficiency as a consequence of constraints. Constraints are only devices that are designed to deal with complexity, and their efficiency is another point. However, efficiency of institutions is the key to the system's performance. Any system is characterized by a set of institutions, but only those with efficient institutions are successful. Then given the priority of political rules, the efficiency of the political realm is the cornerstone for the efficiency of social and economic systems. Finally, we underline the fact that the degree to which formal institutions have unique relationships to performance is limited. Or stated in another manner, it is a mixture of formal and informal institutions as well as some other factors that define the choice set and results in outcomes. Therefore, looking at formal institutions exclusively can give an inadequate and misleading notion about the relationship between formal institutions and performance. However, we often see this 'fallacy'; political body trying to import certain formal institutions, without considering another aspects, namely the informal institutions. This is the short foundation of the concept of institutional complementarity. In other words institutions are interrelated and interdependent, thus outcomes, casual effects, etc. are the function of the specific mix of institutions, and any attempt to treat some institutions independently would lead one to misleading results.

The set of institutions (formal and informal) in a society defines the economic outcomes and the economic performance. So, one can say that economy's

performance and functioning are functions of the current institutional arrangement. Thus, one should take these institutional arrangements into consideration while modeling, and interpreting the results of model. Then, one can define the institutional matrix, which is to enter all economic (and political, and social) equations. Institutional matrix defines an institutional arrangement in a given economy. It has two sub matrices, informal and formal one, namely. Informal sub matrix defines the set of informal constraints, whereas the formal sub matrix defines the set of formal constraints. An element in any given institutional matrix defines any particular constraint, then. Thus an economic system is described by the institutional matrix. Any attempt to deal with the analysis, modeling or interpreting an economic system without considering, or considering the institutional matrix only partially, would lead to wrong, misleading and inappropriate conclusions and actions. The consequences of the existence of institutional matrix can be summarized as follows. (1) Economic (political, and social) systems are specific to a particular institutional arrangement, in other words are defined by the institutional matrix. Institutional matrix however varies both through time and across the countries. Systems are institution specific and in many cases highly sensitive to altered institutional constraints. (2) Agent's behavior is a function of agent's cognition and other informal constraints. That is why behavioral models are to be constructed more carefully. Behaviors of agents in turn affect agents' decisions and through this channel affect outcomes. (3) Institutional matrix defines the role and importance of ideas and ideologies. At the same time one can argue that as a consequence of the very existence of institutional matrix, ideas, ideologies as well as real goods and services matter. Ideas and ideologies as very important elements of the institutional matrix, play important role

in shaping the subjective mental constructs of agents, and through this channel affect the decision-making process and thus economic performance and outcomes. (4) Due to the property of defining the opportunity set, institutional matrix affects transformation and transaction costs.

2.3 Cognition and Transaction Costs

Decision-making process is a function of the institutional matrix's element, namely cognition. At the same time understanding of the decision-making process is crucial for understanding the micro foundations of human behavior and agents' economic actions. If we want to get some insights into the decision-making process, we must acquire some basic principles of cognition. First of all given the uncertainty and limited computational abilities, agents cope with information by classifying it into a manageable number of mental categories. Mental category represents some kind of information container, which highlights the differences between information placed in different categories and blurs differences within information placed in the same category. However here we feel the need to underline the fact that neither the number and classes of mental categories nor the criteria of placement of information are given once and for all. Besides, generally, mental categories have fuzzy boundaries, and same person may use different mental categories in different situations. The next important concept is the mental model. Mental model provides agent with links from the set of possible causes to the set of possible effects. Thus a mental model provides an agent with some kind of orientation map, helpful in decision-making process, telling what is 'normal' to expect in a particular situation.

Mental model thus represents a web connecting mental categories and defining the information flow between them. Mental categories and mental models should not be viewed as independent entities however. Rather mental categories are constructed in order to fit a particular mental model and a mental model is designed in such a way that will simplify causal links between mental categories. Unlike the mental categories however, mental models do not change very often and very fast. As most of the elements of informal institutional sub matrix, mental models are normally resistant to change. Changes of the mental model correspond to fundamental environmental and strategic changes; such changes take place only when important novelties occur. In the light of current discussion two further important points are to be discussed in a more detailed manner. These are the state of overconfidence and the state of risk aversion. Overconfidence arises when an agent possesses a mental model that draws him a rosy future. Overconfidence then means that when a decision setting involves some uncertainty about the outcomes, the decision-maker tends to treat the situation as one of promising success. Important investments including novelties, for instance, are usually outcomes of the state of overconfidence of investor. State of overconfidence highlights the positive differences of a particular project, and it is exactly these differences that make difference between failure and success. Moreover, experiments have shown that firms are not less prone to overconfidence than single agents are. Risk aversion is the reverse situation. It highlights the negative differences of particular project and forces agents to behave in a much more cautious and conservative way.

Institutional matrix affects the economic system through the channel of transaction costs as well. Institutional matrix defines the magnitude of those costs and their allocation among economic agents. At the same time one has to remember that the very fact of existence of transaction costs affects economic activities, decisions, i.e. all aspects of the economic system. With their introduction into economic analysis production costs, for example, becomes the sum of traditionally accepted costs and transaction costs. The same is true for investment. Thus, for instance, a previously accepted project can become unacceptable. The costliness of information, the fact, which has gone unrecognized in fashionable approaches, is the key to the costs of transacting. Cost of transacting consists of: (1) costs of measuring the valuable attributes of goods, services, etc. (2) costs of protecting rights, policing and enforcing agreements. Wallis and North (1986) found out that as much as 45% of US Gross Domestic Product (GDP) was devoted to transacting, and that a century earlier this amount was approximately 25%. Thus they conclude that the resources consumed in transaction are of serious magnitude and growing as the complexity of economic system increases.

Commodities, services, investment projects have numerous valuable attributes and the level of attributes differs from one to another specimen. Given specialization, division of labor and technological progress attributes tend to diverge more and more. At the same time one gets utility from the attributes of goods, services, etc. consumed. However the more diversified and sophisticated the goods and services (projects, etc.) are the more difficult and thus costly it becomes to fully understand and measure those attributes. Similarly the more volatile and complex the

environment the more difficult it becomes to assess the possible future profitability of an investment project (here profitability is a valuable attribute of the investment project). In modern, complex economies the measurement of the levels of attributes is too costly (or sometimes impossible, thus one should speak of approximation) to be comprehensive or fully accurate.

Besides, one can identify a problem of asymmetry of information. That is the situation where one party is more informed about attributes than another. Asymmetry of information then creates agency problems. Agency costs arising from asymmetric information raise the costs of external finance and therefore discourage investment, for example. In addition, the presence of asymmetry of information can lead investors to expend resources monitoring the firm's (firm they are investing in) activities; thus increasing measurement costs. To generalize one can state: (1) if the attributes are constant and known, measurement costs are of little importance, (2) if the attributes are variable, but predictable measurement costs have considerable impact on economic analysis, but this impact is of a magnitude importance, and (3) if attributes are variable and not (fully) predictable, then measurement cost have a tremendous effect on analysis. Then given the uncertainty and limited computational abilities, investment decisions (specifically in the long-term) are highly affected by the presence of measurement costs. Now we turn our attention to enforcement costs. Measurement costs plus enforcement costs together determine the costs of transacting. Enforcement is essential for the continuity of the economic system, however one cannot take it for granted. Enforcement is not a problem, only in those exceptional situations when it is in the interests of both parties to adhere to

agreement. However, in the real world there are usually rooms for opportunism, cheating, etc.; this is best described by so-called free rider and principal agent problems. Thus given the uncertainty and incomplete information, considerable resources are devoted to enforcement. Enforcement costs are the cornerstone of division of labor and specialization. In this respect the role of formal institutions is difficult to underestimate. One can observe increasing returns from the formalization of institutions as the economic system becomes more and more complex. It is not that informal institutions do not matter; they do, however returns on opportunism, cheating, etc. also rise in complex societies. Another point is that deviation from agreements or commitments is possible as a result of better intentions; among the examples of such situations one can identify dynamically inconsistent policies of governments. Given the presence of transaction costs, the greater the specialization, number and diversity of valuable attributes (i.e. the more complex the economic system) the more attention must be given to constructing and maintaining reliable institutions that allow agents to engage in complex contracts with satisfactory level of uncertainty about attributes and with minimum uncertainty about if the terms of contract can be realized.

2.4 Economy in Transition Redefined

The definition of an economy in transition taking the above framework into consideration should be given now. Economy in transition comes out as a result of some discontinuous change in social, political, and economic systems. This discontinuous change seems to us as a kind of political novelty. Transition then

means distorting the old institutional matrix and a trial to install a new one. Usually transition means quit a fast abolishing of previous formal institutions. However, it is not possible to create and install all needed new elements of institutional matrix overnight. The process of designing, creating and installing new institutions in the place of older ones takes time. Thus the economy in transition is usually characterized by the phenomenon called institutional vacuum. Institutional vacuum is the state of affairs, when old elements of institutional matrix are destroyed, but new ones are not yet in place. It does not mean a situation where institutions do not exist. Rather it implies a situation where a transition from one set of institutions to another is under way. There is no normal complementarity of institutions or the kind of harmony and fit characteristic of them during normal times. It is usually the formal institutions that become the target of intended wholesale shift. The old set takes a devastating blow before the new set is put firmly in place. In this situation informal institutions, which are more flexible than formal ones, fill the institutional matrix for the time being. This is done in order to ensure the very survival of economic agents in the turmoil. Being more flexible and self-supporting, informal institutions ensure continuity (at least some kind of) and survival of economic agents. However, let us remember that informal institutions typically cannot support complex economic activities. At the same time the abolishing of certain elements of the institutional matrix could give rise to transaction costs. This is due to the institutional vacuum. Elements of institutional matrix that previously were responsible for decreasing those costs are either distorted or abolished now, thus we directly identify the increase in transaction costs. Once more, one should pay the attention to the fact that; informal institutions are resistant to change. This in turn could cause problems related with the

concept of institutional complementarity. In other words abolishing old formal institutions and placing new ones instead will not assure the desired outcome. Furthermore, lack of complementarity may disable positive results of changes and even bring dynamic confrontation of different institutions, which can bring about a lock-in, which is difficult to predict in advance. Taking into account the presence of an institutional vacuum of different degrees and problems of institutional complementarity combined together with the revolutionary (novelty) characteristics of transition; transition would imply increased systemic uncertainty. In stable (systems not in transition) systems institutions have the role of decreasing uncertainty, thus in the environment where some elements of institutional matrix were destroyed and new ones had not yet been created systemic uncertainty would certainly increase. Besides problems of institutional complementarity can give rise to some dynamic confrontation, which by definition then would imply further uncertainty. Increased uncertainty would in turn imply the further increase in the returns on opportunism, cheating, speculating, etc. All these together then more imply the increase in measurement and enforcement costs. Moreover, in the environment of economy in transition agents would have to devote resources to acquiring, understanding and analyzing information regarding the new setup. These costs are called the novelty costs. So, transaction costs in an economy in transition would include novelty costs as well. As it was pointed out earlier in this work transition process presents some kind of novelty for the inhabitants of the system. In this regard one should remember the inability of mental models to capture novelties. Thus agents of the system in transition would fall back on given old routines and habits, which were more or less adequate for the old situation, but usually inadequate

with respect to the new setup. Mental models do not change very often, but when they do, this happens because very important novelties appear. However this adjustment takes time. Thus especially at the beginning of the process one would face the very important problem of the inadequacy of mental models. This in turn will cause other different and important problems. For instance, the problem of signaling, agents with inadequate mental model would not understand and interpret in desired way the signals coming from markets, government etc. Thus one will face a problem of reconsidering conventional policies, their implications etc. At the same time the inadequacy of mental models would generally lead to worse performance of economic agents. Besides, with the passage of time, agents would become aware of the inadequacy of their mental models. These then would force agents to switch their state of mind from the state of overconfidence to the state of risk aversion. This is equally true for non-national agents as well. Non-national agents would also perceive the inadequacy of their mental models with respects to the environment of the particular economic system. This would also cause them to switch to the position of risk aversion.

To summarize, economy in transition is a result of some kind of political novelty, resulting in distorting (abolishing) certain elements of institutional matrix and is characterized as: (1) institutional vacuum, (2) lack of institutional complementarity, (3) increased systemic uncertainty, (4) inadequacy of mental models with important implications, (4) prevailing of the state of risk aversion among agents (national and non-national), and (5) increased transaction costs.

CHAPTER 3

INVESTMENT CLIMATE PARAMETERS

The institutional framework of a social system is a basic element of its economic dynamics

Michal Kalecki, *Theories of Growth in Different Social Systems*, 1970, p. 311.

3.1 Investment in Institutional Matrix

Institutional matrix shapes any system, social, economic, or political. It defines the opportunity set and thus defines the outcomes of the economic system. At the same time an important feature of institutional matrix is to be underlined here. Institutional matrix is not exogenous to the system but it is rather endogenous. This is another difficulty that one would face while dealing with the institutional matrix. It is a complex, evolving system of shaping the unstructured environment, which is developed, established and maintained by the designers, that in their turn are part of the same economic, and socio-political system. The keyword here is endogenous. Institutional matrix is designed (shaped), established and maintained by the inhabitants of the system. The logical consequence of this, is the devotion of resources to those activities. This in fact can be seen throughout the world and across time. Parliaments are one example, they are directly related with the formal

sub matrix of the institutional matrix. Substantial resources constitute budgets of these institutions. Political parties, movements, unions etc. are all among similar examples. Television channels, radios can be seen as structures effecting the informal sub matrix and the devotion of resources to designing, establishing and maintaining of elements of institutional matrix could be seen in these examples as well. The fact of devoting of resources to such needs of institutional matrix is also recognized by many scholars. North (1991) states that it is costly to change institutions. So, actually it is only a matter of fact to recognize that investment in institutional matrix is possible. Devoting resources to formation (maintaining etc.) of institutional matrix is certainly investment. Institutional matrix shapes the world around and thus affects the whole economic system and all economic activities. Thus institutional matrix is crucial for productive activities as well. Given these, it follows that the devotion of resources to the formation of the institutional matrix is investment spending, not consumption.

As it was discussed in previous chapter institutional matrix typically has some change costs embodied. These costs are higher for the constraints with a higher place in hierarchy and lower for the constraints with lower place in hierarchy. This is mainly because of two reasons: (1) to protect rights of creators, since once institutions are created they become public goods and (2) to ensure some degree of reliability of institutions, and thus to decrease the level of perceived uncertainty. First type of costs, is a kind of fixed costs. If one is to change any element of the institutional matrix (and this agent is not already active in the field of institutional change, i.e. is not related to any existing political force), then without dependence on

the type and degree of change he would be asked to carry out these costs. This is in fact in investment spirit, where usually investment projects have some fixed costs embedded. Examples of these costs can be seen in daily life, for example an agent can be asked to create a political force firstly. At the same time once one incurred these costs, then depending on the degree of change there are variable costs, which are due to the need to overcome the resistance to change, embodied in the institutional matrix in question. Variable costs vary with number and position (in the hierarchy) of elements that are to be changed.

Therefore, to summarize, there are barrier costs (fixed) that are to be incurred prior to any change project and variable costs incurred during the process of change (trial to change) of elements of the institutional matrix. Existence of these costs then provides continuity and reduces the level of perceived uncertainty. Institutional matrix is shaped by political forces. The more powerful and less numerate the forces actively participating in the shaping process the higher would be the barrier and variable costs. Here one can see the analogy with commodity market. The higher the degree of monopolization the higher would be the entry costs and the more difficult it would be to compete after entering. The same situation one can observe in the case of political forces. The more powerful the existing political force, the more an agent would be asked to pay before he has any chance of discussing the altering of elements of the institutional matrix. We summarize by saying that, at any time investment in economic system is the sum of investment in physical capital and investment in the institutional matrix.

3.2 The Notion of Profit and Capacity Utilization

Each investment project means that there would be some costs that are to be incurred and that there would be some profits that are to be gained. Profits in their turn are of two types: (1) tangible profits and (2) intangible profits. Tangible profits include all reals that are to be gained after the realization of project. Examples of tangible profits are inflows of cash from the sales, or reduced cash outflows, etc. Intangible profits in turn include benefits that are difficult to measure in real terms but which are present. Examples of intangible profits are: managerial experience gained, or increases in firm reputation, etc. Role of profits for investment can be grouped in two subtitles: (1) profits mean ability to finance investment and (2) profits is an inducement to invest. (Courvisanos, 1996, p.29) Importance of profits as the mean of financing would be discussed in a more detailed way later on in this chapter. First Kalecki (1933) and then Minsky (1977) recognize the crucial feedback between profits and investment. They state that, investment decisions create the possibility for future profits, at the same time the realization of profits is the fact that enables further investments. But which one is first in the chain of causality? Kalecki and Minsky both share the opinion that investment is a kind of beginning mechanism with profits having crucial feedback on investment activities, thus economic system ending in the situation of profits and investment being deeply interdependent. While considering the role of profits as inducement to invest, Kalecki (1933) relates it to the actual behavior of profits. The rationale behind this is the fact that the behavior of actual level of profit rate can be used as a guide to future profitability of the capital

stocks. In other words, investment is seen as the basis of future profits, thus incremental increase in the profit level acts as a positive feedback stimulating further investment. Bhaduri (1986) summarized this in the investment function dependent on the current profit level, and increment in it. Bhaduri recognizes “systematic contradictory pull” between profit level and increment in profit level in real time. This systematic contradictory pull gives rise to some non-linear feedback mechanism from profit level to investment. Current profit level is important as a mean of financing of costs of current investment projects, at the same time current increment in profit level is crucial inducement factor for new investment, stated in other words profit level is perceived as expectation factor. Therefore, if current profit level is high, but increment is negative (i.e. there is a decrease in profit level) one is to expect a decrease in investment spending. On the other hand with low current profit level, but positive increment one should expect an increase in investment spending. The role of profits as an inducement to invest seems very important to us. This is due to its property to incorporate both tangible and intangible profits. Thus recognizing existence of intangible profits one can actually understand the reason (or at least one of the reasons) behind some investment project. Here the best example is the investment in the institutional matrix. One can reason for example, participation of rich and famous people to the revolutionary movement in Russia. Prospects of a fair social order could bring those people so much intangible profits as to outweigh tangible (high) costs. Here from this example another important aspect (especially deeply discussed in game-theoretical studies) comes out, namely beliefs. Given uncertainty and limited computational abilities, it is the beliefs about future profitability that is crucial factor for investment decision-making. Actually this is due

to the fact that, current institutional matrix can give a chance of estimating tangible profits (costs) with high degree of confidence, but intangible profits (costs) are almost always a matter of belief.

Almost all investment projects require outflow of funds at the initial stage of projects. Not all the firms possess required funds, thus they start to look out for outsourcing. Therefore the analysis of investment activities without considering financial side would be at the least incomplete. Modigliani and Miller (1958) in their study demonstrate the irrelevance of financial structures and policies for investment. The only exception is made for market imperfections and tax considerations. They show that perfect capital markets allow equalization of returns on all financial assets. Thus they proceed, the ownership should not be concerned with financial considerations. On the other hand, one can see works supporting the view of importance of financial considerations. Authors from post-Keynesian and Kaleckian fields are among most known examples. So, Fazzari et al. (1988, p.154-7) present some kind of hierarchy of financing, where the costs of financing are lowest with internal funds, they increase with debt and they are the highest with equity financing. Some other scholars obtain similar results as well.

Kalecki's principle of increasing risk is the theoretical basis of these findings. According to Kalecki, financing of new investment is seen as constrained due to increasing risk. Kalecki identifies the forms of limitation on external funding as follows: (1) entrepreneur's capacity to borrow is limited due to lender's increasing risk, (2) firm's own increasing risk as borrowing increases and (3) concern with the

loss of control over the firm in question. Firstly entrepreneur's capacity to borrow is limited by his equity. This is due to lender's risk. This is the risk faced by lender in the case of bankruptcy of borrower, that is, it is the possibility of being unable to get principal debt back. Thus lending limits are based on leverage, the higher the leverage the higher the interest the firm is asked to pay in order to cover lender's risk. Actually very high level of leverage would mean refusal to lend at any interest rate. Secondly there is a borrower's risk. There are two dangers to borrower: (1) first one is to his wealth in the case of failure of investment project and (2) second one the risk of greater illiquidity, which arises as more funds are tied up in specific project. To protect themselves against these, entrepreneurs set leverage limits. Third limitation is related to the possibility of losing control over firm as a result of issuing shares to the public. Such issuing reduces the proportion of shares of controlling group and share issue risk emerges. At the same time asymmetric information can lead to credit rationing by lenders. This leads to price discrimination based on the severity of information problems. Given all these, then, one can appreciate the role of profits as a source of financing investment and role of the current leverage ratio. This would actually be in line with Kalecki who rejects the notion of a business democracy, in other words the state of affairs where anybody endowed with skills and entrepreneurial activity can obtain funds to start a venture.

Investment in physical capital means alternation of its (capital) level. However dependent on the level of effective demand, corporate strategy one can identify such a notion as capacity utilization. Many scholars discuss the effect of capacity utilization on investment activities. Among them one can recognize Josef

Steindl. Steindl (1952) introduces the concept of planned capacity utilization. Rowthorn describes Steindl approach for the need of planned capacity utilization as the brilliant analogy with the Keynes approach for the need for the liquidity preference. According to Steindl (1976) firms plan a certain level of utilization; this is done in order to ensure the cushion against future expected and unexpected increases (decreases) in quantity demanded. Especially in the market with high degree of monopolization firms would use it to push out competitors if it is not very costly. According to Steindl (1976), when actual excess capacity is below the planned level, attempts are made to get back to planned level. If actual excess capacity is above planned level in the industry, firms postpone investment commitments in order not to exacerbate this situation.

3.3 Susceptibility Notion

Decision-makers' psychological attitude is of crucial importance for an investment project. The importance of the psychological attitude stems from the fact of world being uncertain and from the fact of limited computational abilities. Matthews (1959, p.83) states "changes are to be expected over time... according to the psychological attitudes of those responsible for investment decisions". Thus one can effectively state that the dynamic character of investment is interrelated with decision makers' psychological attitudes to the investment project. In this respect one can appreciate the work of Minsky. Minsky (1977) studies the Ponzi-style behavior, based on Keynes' notion of epistemic instability of human beliefs, which is followed

by financial fragility, thus drawing attention to the fact of cumulative process of expansion and contraction in investment decision-making.

As it was outlined previously, main psychological attitude types are state of overconfidence and state of risk-averseness. Both them are closely related with the psychological phenomenon known as susceptibility. Susceptibility refers to the psychological tension felt by the decision maker in relation to his/her fragile confidence about a particular investment decision, given the level of investment already committed (Courvisanos, 1996, p.116). Courvisanos (1996) states that decision-makers are sensitive to the level of confidence held for expectation from investment decisions. Confidence is based on degrees of beliefs. Any threat to those beliefs would create a psychological tension (susceptibility) on the decision-maker. With the level of confidence eroding, tension escalates.

Another important point to be underlined here is that the decision-maker's level of confidence is increasingly fragile with the level of investment increasing. Theoretical basis behind this property is the principle of increasing risk. Thus one can effectively identify the interdependence between susceptibility and investment. At any level of investment activity, positive increment in investment increases susceptibility level, and negative increment in investment decreases susceptibility level. On the other hand, building up of the tensions with investment level increasing (i.e. the situation with positive increment in investment level), and their break-down with investment level decreasing gives rise to the concept of susceptibility cycles. At some span of time level of susceptibility rises, then at a certain point, it starts to

decline down to a certain level, where turn once more occurs and level of susceptibility starts to increase once more. Then the state of ‘absolute’ overconfidence is the lower-turning point and the state of ‘absolute’ risk-averseness is the upper-turning point. Existence of turning points is defined by the fact that decision-maker has psychological limits on the level of susceptibility. At the upper-turning point limit is reached (that is why we call this point the point of absolute risk-averseness) and decision-maker feels that he has no more capacity to absorb tension. At the lower-turning point a lower limit is reached, in other words decision-maker feels that nothing can make his position worse (that is why we call this point the point of absolute over-confidence) and decision-maker feels the capacity to absorb increasing tension. These limits are determined by the interaction of institutional matrix and the decision-makers’ cognition.

Therefore susceptibility cycles vary with the institutional matrix. At the same time it is important to underline the asymmetry between susceptibility reactions to changes in expansion and contraction phases. Increasing susceptibility endogenously defines the upper-turning point, whereas the lower-turning point is defined by the cognition of decision-maker, i.e. his readiness to take over more risk at the current level of susceptibility. Expansion phase in the susceptibility cycle refers to the situation where the decision-maker is ready to take more and more risk, this is due to the fact that his mental model draws him rosy pictures about future prospects of investment projects. Therefore one can effectively argue that the expansion phase in the susceptibility cycle is the phase with the state of overconfidence as the prevailing characteristic of the state of mind. On the other hand, contraction phase refers to the situation where the decision-maker is not ready to absorb further risk, furthermore he

feels the need for continuous decrease in the level of susceptibility, this is due to his mental model drawing him bad prospects of possible and current investment projects. Therefore, given similar reasons as in the case of expansion state, the contraction phase in susceptibility cycle refers to the state of risk-averseness. We close the discussion of susceptibility by stating the fact that susceptibility is subject to exogenous shocks. Exogenous effects can switch state of mind of decision-maker from the overconfidence phase to risk-averseness phase.

3.4 Decision-making Framework of Investment Activities

A less important point in the assessment of investment process is decision-making framework. Bromiley (1986) studies decision-making framework of investment processes. According to Bromiley there are two stages of the investment process: (1) aggregate planning stage and (2) project approval and implementation stage. Aggregate planning stage is related with strategic management, whereas the second stage, i.e. the project approval and implementation stage, is related with detailed operations analysis and particularly with the financial side of project, that is why the second stage is usually referred to as the financial stage. During the aggregate planning stage investment project is to be integrated with the overall strategic management process. In this phase, executives consider investment project from the perspective of delivering better services, creating new products, etc., and thus achieving long-term market dominance. During the second stage, i.e. during project approval and implementation stage, executives investigate the project from the passive side as opposed to the analysis of project from the active side in the first

stage. They look for the possibility of future profits (tangible) with constraints coming from financial side of the project. Information then is interchanged between the two, but framework determines a different interpretation of data. Almost always there are tradeoffs between strategic and financial considerations, in other words 'risky' position of one set is opposed by the 'conservative' approach of another set. Thomsen gives the example, of the penetration of Japanese automotive sector into the US market. Penetration was not based on any good return perspective, but rather on long-term marketing strategy. Actually, strategic position usually takes into account and puts more weight on the possible future intangible profits, whereas the financial approach is usually concerned with tangible profits (costs). Therefore, the decision-makers are in a position to examine both approaches and to decide the one they are to accept. Here the level of susceptibility and its phase comes into the play. If decision-makers are in the overconfidence phase, then risky strategy would be followed with consequent increase in the susceptibility. If however decision-maker is in the phase of risk-averseness the conservative strategy is to be followed or even the postponement of investment project could be a result. So the resolution of two frameworks differs over time. Same investment project can be resolved differently in different temporal contexts depending on the level and the phase of susceptibility.

3.5 Investment Climate and Investment Climate Parameters

Each specific environment creates a climate of investment, which allows clear appreciation of how different investment project assessments are settled (Courvisanos, 1996, p.193). Determinants of investment enter the investment

function, but only their qualitative effects are more or less defined. Actual structure of investment function at any point in time at aggregate level (i.e. assessment of investment projects) is defined by the investment climate present in the economic system. Given the investment climate, the susceptibility cycle is the behavioral mechanism driving the investment. Thus one can effectively state that investment climate is the secular framework within which the susceptibility cycle operates. Or put in another way, the investment climate defines the level and phase of susceptibility. Investment climate directly affects the decision-making process (through its effect on the susceptibility), thus allowing some projects to be accepted at some point in time and to be rejected at another. Understanding the investment climate permits an appreciation of how the magnitudes of determinants can achieve a certain level of investment activity. For example, if investment climate supports conservative approach then the high leverage ratio would be a barrier for the investment project, however if it supports risky strategies then the high leverage ratio is not likely to be a kind of barrier for the acceptances of the investment project. Investment climate in turn is defined by investment climate parameters. Current values of investment climate parameters then define the relative importance of determinants with respect to each other and their required minimum and maximum values. Determinants of investment are variables observed at micro that is at firm level. In contradiction investment climate parameters are usually macro variables, i.e. those observed at the macro level.

Investment climate parameters are not unique for all economic systems, or put differently, their relative importance with respect to each other differs from

system to system and from time to time. One can conclude that a parameter's importance can vary between outmost important and almost not important at all. Thus if we accept those parameters with exceptionally low importance level as irrelevant, then one would conclude that investment climate parameters vary with economic, social and political systems. In any economic system, it is the institutional matrix and cognition of agents, which define the investment climate parameters, or put in another manner, place weight to different parameters. Given any investment project, decision-maker's cognition firstly examines the institutional arrangement it is in. Usually, decision-maker conducts analysis, which tells him current opportunities, and threats coming from the current institutional arrangement. Then this information combined together with constraints (elements of institutional matrix) defines the investment climate parameter. For example, in the economic system with developed financial institutions interest rate is an important investment climate parameter, since it represents the opportunity cost of non-used capital. However, in the economic system with undeveloped financial institutions, interest rate can say little about the opportunity cost of non-used capital, thus interest rate becomes an unimportant factor effecting investment activities. Given these, for the successful study of investment activities, one firstly should carefully analyze institutional arrangement and cognition of economic agents, and then using this information one should define the investment climate parameters and only then start to analyze the actual level and the prospective level of investment spending.

At any point in time it is the political force that shapes, i.e. defines the change path of the institutional matrix. There is more than one political force at a time.

Normally a political force has declared a more or less persistent view on the elements of institutional matrix, in other words, it has a certain view on the issue of what our world should be and this view is not changed very often and quickly. But even assuming relative certainty of view of political force, given the abundance of political forces in a system an economic agent can once more lose the feeling of certainty. This effect is even more profound in the case of considerable support for more than one political force, especially with opposite perception of world and thus different views on the suitable state of the institutional matrix. So, we call a system politically unstable, if there is more than one political force with considerable and comparable support among agents.

Consider an economy in transition. Usually transition starts as a result of the activity of a political force with considerable support among economic agents. At the same time, there are other political forces with diametrically opposite view on the way of organization of the institutional matrix. So, one can speak about the set of political forces supporting transition towards some target and another set opposing this transition. Given all these we have an economic system with substantially increased level of perceived uncertainty. This is due to the fact of instability (uncertainty about future shape) of the institutional matrix. This situation implies that the barrier costs one faces while dealing with investment in institutional matrix are decreased. This stem from the fact of institutional matrix being destabilized, thus initially embedded costs of change decrease. This is due to the fact that the beginning part of change (i.e. destabilization) has already been carried out. At the same time, given increased level of perceived uncertainty combined with destabilization of

institutional matrix, economic agents start to perceive their mental models as being more and more inadequate. This in turn leads to change in the level of confidence, i.e. the state of mind of agents switch from the state of overconfidence to the state of risk-aversion, or the degree of risk-averseness increases (susceptibility level increases, and agents enter the contraction phase). Political instability meaning the destabilization of institutional matrix would imply increase in transaction costs, in other words due to the instability of the institutional matrix, the costs of measurement and costs of enforcement increase considerably with the old institutional arrangement destabilized but the new one not yet put in the place. At the same time instability of institutional matrix implies the possibility of unfavorable change in the elements of institutional matrix. Facing this situation economic agents have to decide how to cope with this kind of uncertainty. Transaction costs increase considerably, barrier costs on the way of investment to institutional matrix decrease, level of perceived uncertainty about future prospects of economic, social and political system increased and at the same time there is a possibility of unfavorable change in the institutional arrangement. Due to increased transaction costs combined with general increase in the level of perceived uncertainty, profitability prospects of investments in capital seem to be not good. At the same time, due to increased uncertainty caused by instability of institutional matrix (as well as by institutional vacuum) agents face costs even in the do-nothing situation. Thus economic agents have to decide whether to cope with or to tame this uncertainty. Then given the prospects of unfavorable change in the institutional matrix, and the fact of decrease in barrier costs agents have incentives to invest in institutional matrix. At the same time, it (investment in institutional matrix.) is a must as well. In order to survive in

the period of institutional vacuum agents have to fill that vacuum, which implies investment in the institutional matrix. On the other hand, given the possibility of unfavorable change and increased transaction costs, there are incentives to decrease investment in capital. Thus, one can effectively argue that the first and most important investment climate parameter is the level of political instability. Higher political instability puts more weight on intangible profits, less on tangible, less on capacity utilization and more on financial considerations. Thus, with increase in political instability it is normal to expect higher level of investment in institutional matrix and lower level of investment in capital.

Transition period is characterized by institutional vacuum and transition aims at institutional matrix rearrangement. As it was argued previously economic agents try to fill the institutional vacuum in order to provide their very survival. At the same time, aimed change in the institutional matrix can be perceived as a threat or an opportunity by different groups of agents. Monopolies through their ability to effect markets and thus the well-being of agents, usually, have relatively more bargaining power when compared with ordinary economic agents. Thus with same level of investment in institutional matrix, given their superior position (with respect to bargain power), the effect from their investment is expected to be higher than in the case of ordinary economic agents. At the same time, given the possibility of threat, monopoly would exercise its power in order not to end in this arrangement. Just the reverse is true as well. Given the possibility of 'good' change, monopoly would exercise its power in order to end in this favorable arrangement. Therefore, in the economy in transition, given the threat to survival, and the possibility of unfavorable

(favorable) change monopolies would invest in institutional matrix more than in any other period. Given the limited resources that can be invested, this would mean less investment in physical capital. If this is so, then the degree of monopolization is another investment climate parameter. The higher the degree of monopolization in economy the higher would be the investment level in institutional matrix and the lower would be the investment in capital.

Increased level of perceived uncertainty induces economic agents to look beyond the borders of home country in order to provide a degree of safety for their wealth. This is actually observed in the real world and described by well-known phenomena: (1) capital flight and (2) currency substitution. At the same time, increased transaction costs mean decrease in the level of economic activity. This is due to the fact that under the new conditions, not all of the activities that were feasible before are feasible now. This then brings the decrease in the level of disposable income. In this situation, i.e. in the situation of decrease in the level of disposable income combined with capital flight and currency substitution, one is able to see a (probably drastic) decrease in the level of consumption spending of households. This in turn would imply a decrease in the possibility of future profitability. This situation is amplified by the state of increased systemic uncertainty. Given these, almost no one is able to predict levels of future profitability and to make some structured financial analysis. The only parameter which can be changed by command means and thus can be incorporated into calculation with high degree of confidence is government spending. Therefore, in the economy in transition government spending plays an especially important role, and becomes an

important investment climate parameter. The higher the level of government spending, the higher the possibility of future profitability, the higher would be the investment in capital.

As a conclusion, each specific environment creates a climate, which allows clear appreciation of how different investment project assessments are settled. Investment climate parameters are defined by the interaction of current institutional matrix and cognition, these parameters then form investment climate and investment climate, due to its property of being a secular framework for the susceptibility cycles, defines the resolution of tradeoffs arising from different approaches towards the determinants of investment. Investment climate parameters in transition economy, given its specific institutional arrangement, are: (1) level of political instability, (2) degree of monopolization and (3) level of government spending and its dynamics.

CHAPTER 4

TRANSITION EXPERIENCE OF RUSSIA

The Country Assistance Evaluation for Russia, covering the period from 1992 to 2001, showed disappointing but improving results for the World Bank's activities in Russian Federation. Although OED (Operations Evaluation Department) rated the outcome of World Bank assistance to Russia as unsatisfactory during 1992-98, with only a modest impact on institutional development, for the period 1998-01 it rated the outcome satisfactory and institutional development impact substantial

Gianni Zanini, *Assisting Russia's Transition: An Unprecedented Challenge*, 2002

Probably one of the most important events of the last century is the dissolution of the Soviet Union and transition of the former Soviet Republics from planned to market economy. Together with the developments on political front, there was a considerable boost in the number of scholars, political players etc. interested in the problems of the economy in transition. The most popular approach supported by mainstream economics could be best characterized by the so-called Washington Consensus, which stresses three pillars of successful transformation. Sometimes these three pillars described in Washington Consensus are complemented with four other 'major tasks'.

4.1 Mainstream Approach and Its Implementation in Russia

Washington Consensus asserts that, for the sake of successful transformation one needs: (1) stabilization, (2) liberalization and (3) privatization to be implemented. Stabilization stands for creating a credible currency and maintaining it through appropriate fiscal and monetary policies. In its turn, liberalization stands for the deregulation (abandoning of regulating practices) of prices, economic activity and foreign trade. Finally what privatization stands for is putting state property into private hands. What the defenders of such policies quote is the following. Liberalization of prices is the most important step in moving from a supply-constrained centrally planned economy to demand-constrained market economy, since it is a crucial feature of market system and one that usually leads to macroeconomic imbalances. To balance such imbalances one needs stabilization. Privatization is claimed to be necessary to improve performance at the business level.

To be fair, however, one needs to underline the fact that defenders of this fashionable mainstream approach sometimes stress the importance of four other factors. On the other hand, one can realize that these four other factors are generally either not mentioned, or are given very low importance. These four factors occasionally pronounced by the mainstream followers are: (1) creation of suitable social safety nets, financial institutions, and legal accounting and statistical systems, (2) regulation of market economy to correct for market failures, (3) alternation of the structure of production, trade and investment in accordance with market signals and (4) adaptation of firms, individuals and civil bureaucracies to the new environment.

One can easily see that especially in the first years of transition in Russia, authorities followed the recommendations of the Washington Consensus. Only starting with the years of the Primakov government and continuing into Putin's period one can realize changes in the economic policies put into effect by the Russian government.

In October 1991 President Yeltsin revealed a 'bold' plan of action to move Russia's economy from centrally planned to market-oriented one. *De facto* the successor of USSR, Russia was *de jure* announced to be so in mid 1992. The first democratic government was formed at the end of 1991. This government considered the freeing of prices as a prerequisite for reforms. Following this thought November and December were made famous by a package of legislative acts significantly diminishing state control of prices. A fundamental step in domestic liberalization was taken on 2 January 1992. One should underline the point that this operation could not be completed due to the pressure coming from different lobbies; the Gaidar (prime-minister of RF) and his team were unable to liberalize prices on a wide range of consumers goods and some industrial inputs. The next stage begins on March 1992. In this period some prices that were still under control were liberalized and some administrative pricing decisions were moved from central to local levels. Latter affected prices of consumer goods and transportation charges. Third stage of domestic liberalization was initiated by Yeltsin's decree, particularly, by the decree on State Controls of Prices of Some Energy Resources (18 September 1992). This decree abolished ceilings (to price margins) on the prices of oil and natural gas.

However the new Prime Minister Victor Chernomyrdin who was put in the government because of the pressure coming from parliament and whose origin is the oil sector of economy, tried to return to price controls. Decree issued on 31 December 1992 introduced the percentage ceilings on the rate of return for many producers of goods, which were named and listed as being essential. There were reactions against this decree, particularly from Deputy Prime Ministers Boris Fedorov and Anatolii Cubais. This resulted in a new decree issued on 18 January 1993, which abolished the limits on profit levels for non-monopolist producers and reduced the number of monopolistic producers whose independence in price setting was restricted. Coal prices were liberalized in June 1993. It is worth saying that the price of bread was still under control, however this last stronghold fell in December 1993. Finally the domestic liberalization marathon was finished at the end of 1993 when all margins imposed on the prices of monopolistic enterprises were abolished.

On the external liberalization front one can see first changes on 15 November 1992. On that date the presidential decree on the Liberalization of Foreign Economic Activity in the Territory of RSFSR (Russian Soviet Federal Socialist Republic) was introduced. With this decree all enterprises were allowed to purchase foreign currencies, and the same decree allowed ordinary Russian citizens to execute operations with foreign currency. However this decree did not abolish export controls, and as a result export quotas for seventeen broad categories of goods were maintained. According to different estimates these categories constituted about 66% of total exports in 1992 (Rossiiskie Vesti, October 1, 2001). Partial liberalization retained multiple exchange rates of the ruble. On 1 July 1992, the second stage of

external liberalization began. At this stage a uniform market rate of ruble was introduced. During 1993 and 1994 the number of types of goods subject to export quotas declined and the differences between domestic and world prices were narrowed. Centralized import practices were abolished on 1 January 1994.

The government of Russia failed to conduct any strong macroeconomic policy at the beginning of transition. Because of several reasons such as the need to provide subsidies, tax exemptions and subsidize credits, Russian government had problems with balancing fiscal accounts. This situation lasted until the year 2000, when firstly in its transition history Russia was able to obtain fiscal profit of more than 2% of GDP. Gaidar team was successful in balancing the central budget for the first four months of 1992, but latter it lost control over expenditures and revenues. Boris Fedorov tried to discipline fiscal policy, but had little success. Following governments tried to do it as well, but all of them failed. This continued until the August crisis of 1998. Then firstly initiated by Primakov government and then continued by Putin's government, efforts were made to discipline and make more effective the economic policy. Focus of government's policy in the recent years was on the: (1) budget surplus, (2) moderate inflation, (3) reduction in the national debt, (4) reduced tax and interest rates, (5) rising currency reserves. Indeed the Central Bank of Russia started to report the amount of reserves on a weekly basis, so, reserves in 1997 were 17.2 billion \$, 12.2 billion \$ in 1998, 12.5 billion \$ in 1999 (RIA, June 29, 2003). Then one can realize the sharp increase in the amount of reserves. The level of reserves was 27.95 billion \$ in 2000, 36.6 billion \$ in 2001, and 47.7 billion \$ in 2002 (RIA, June 29, 2003). In the March 2003 it was announced

that the level of reserves is 54.9 billion \$ (RIA, June 29, 2003). Since the 1998 crisis inflation was declining steadily from 84% in 1998 to 36.5% in 1999 and finally to 15.1% in 2002 (Interfax, February 12, 2003). Unemployment rate fell to 7.6 % in 2002 from 11.9% in 1998. National debt fell to 41% of GDP in 2002 (Troika Dialog, February 19, 2003). All these indicate that the policies pursued by president Putin and governments (starting with the Primakov government) are more predictable, dynamic and transparent now than ever before. These in their turn imply the decrease in the level of perceived systemic uncertainty and decrease in the level of susceptibility of investors.

Russia achieved significant quantitative results in the privatization sphere in the first years of transition and continued with aggressive privatization policy latter on as well. Russian government started and proceeded with an ambitious privatization program. This program included: (1) Small-scaled privatization of stores, repair shops and small enterprises that previously belonged to state. (2) Mass corporatization of most of medium and large-scale enterprises. (3) Distribution of privatization vouchers (10000 rubles each) for all citizens of Russian Federation. (4) Following the voucherization the large privatization of enterprises started. During this stage, priority with respect to privatization was given to the staff of previously corporatized enterprises. On 1 July 1994 voucher privatization was replaced by traditional type of privatization, i.e. sale of shares for cash. Agricultural privatization was authorized by special decree at the end of 1993, however the development of private sector in agriculture was halted again in 1994. This process was reactivated in late 2002 with the adoption of the new Land Code, which allowed private ownership

and sale operations with land. Thus one can realize the fact that Russia faced unprecedented denationalization both in magnitude and in time-scale.

4.2 Quantitative Results of Transition in Russia

As a result of some sort of political innovation, Russia started its economic transition in 1991. The brief chronological history is given above, but what are the realizations of this process? The GDP of Russia, the successor of USSR, declined continuously until 1997, when for the first time in its post-Soviet history a moderate growth of 0.9% was recorded. However, following this optimistic year a 1998 crisis followed. GDP decreased by 14.5% in 1992, 8.7% in 1993, 12.7% in 1994 and so on (IMF, May 2003). This amounted to a situation where the drop in GDP by the end of century was about 43%. This in its turn is a far steeper fall than what was recorded during the Great Depression of 1929 in the US. Real disposable income followed the GDP in its falling trend and contracted by 41% in 1992, 14% in 1993; summing up to an accumulative fall of approximately 35% by 1997 (IMF, May 2003). Industrial and agricultural output declined by as much as 18.8% and 9.0% in 1992, with a continuous decline until 1997 and a fall in 1998 (IMF, May 2003). Cumulative decline was about 50% and 40% in industrial and agricultural outputs respectively (IMF, May 2003).

Situation started to change after the 1998 crisis; GDP grew by 5.4%, 9.00%, 5.0% and 4.3% in 1999, 2000, 2001 and 2002 respectively (IMF, May 2003). Goskomstat (State Agency for Statistics of Russia) reported a GDP growth of 7% in

the first half of 2002 calculated on a year-to-year base. Industrial and agricultural output quantities also showed the signs of recovery, so, industrial output grew by 12.0%, 11.9%, 4.9% and 8.7% in 1999, 2000, 2001 and 2002 respectively (IMF, May 2003). For the agricultural sector these numbers are 2.9%, 3.0%, 6.8% and 2.0% respectively (IMF, May 2003). There are several reasons of this recovery that are normally listed. One of them is favorable external conditions (according to Illarionov, the economic advisor of President Putin, the index of external favorability continuously increased from 65 in 1998 to 103 in 2000 and to 153 in 2003) (Interfax, March 15, 2003). Another one is the import substitution effect that followed the ruble depreciation in 1998. At the same time one should recognize that in first years of transition, Russia run central government budget deficit. This situation changed in 2000 only, when the central government budget profit was realized. Similar results were observed in 2001 and 2002 as well. Considering these improvements in Russian economy, ratings agency S&P upgraded Russia's long-term national currency rating by two notches to BB+ (ITAR-TASS, April 26, 2003). At the beginning of 2003, Chicago Stock Exchange returned to trading in ruble exchange rate futures in respond to heightened interest among foreign investors in the Russian financial markets and economy as whole.

Capital investment dropped by some 80 percent during first years of transition (1991-1997). This situation was reversed in 1999. Investment in capital rose by 5.3%, 7.4%, 8.7% and 2.6% in 1999, 2000, 2001, and 2002 respectively (IMF, May 2003). Investment in capital represented about 18% (54 billion \$) of GDP in 2002 (IMF, May 2003). However according to IMF this amount is still very low to

underpin high and sustained level of growth. The required ratio is calculated to be 30% of GDP (IMF, March 20, 2003). On the other hand, according to Illarionov, Russia started to suffer from over needed investment rate. To Illarionov the same situation is seen in Japan, where the investment rate is calculated to be 30% of GDP, but in the USA he says this number is 17% of GDP (Moscow Times, September 30, 2002). Food industry increased its share in the structure of capital investment. Power industry in turn showed the decline in the share, and other industry sectors mainly defended their position in the structure of capital investment. At the same time, according to a study of 1997-2001 conducted by the Higher School of Economics (Moscow), the number of enterprises with positive accumulated net capital rose to 30% in 1999 from 14.1% and 22.7 % in 1997 and 1998 respectively and continued to stay at that level throughout 2000-2001 period (Troika Dialog, April 20, 2002).

Numbers indicating the results of first seven years of transition in Russia reflect the negative outcomes of the reforms that were implemented in Russia after 1991. Continuous decline in GDP, real disposable income and thus in living standards, inflation, growing income inequalities and unemployment all contribute to the characteristics of first seven years of transition. Since the August 1998 crisis, social and economic situation in Russia forced authorities to start movement in a new direction with economic reforms. It became obvious that the non-consensual implementation of directives of Washington Consensus is no longer possible, due to their discredited perception in society. On the other hand there is no illusion among Russian leadership about the possibility of a return to the former command economy. Given these, the current path of reforms includes not only economic but also political

and social vectors. Nowadays the path of reforms is directed towards overcoming anarchy and illegality, strengthening the legal foundations of business activity etc.

4.3 Transition as Seen from the Perspective of Institutional Arrangement

As it was discussed previously, institutional matrix defines the outcomes and performance of any economic, political and social system. It is due to the differences of institutional matrix that many state activities that have positive and profound effects in one country do not have the same effect in another country. Particular attention must be given to the current institutional arrangement while planning or performing state actions. The ineffectiveness of Russian reforms is mainly due to the inadequate institutional arrangement. Reformists of Russia, at the beginning of 1990s simply ignored the institutional component relying completely on unfounded faith in the beneficial consequences of implementation of action prescribed by the Washington Consensus. However, even if it is possible to change the formal sub-matrix of institutional matrix relatively quickly, this is not the case for the informal sub-matrix. Add to this the fact that the creation of specific laws that are to support the functioning of targeted market economy was very slow and actually only laws with high hierarchy level were created. One can understand then, why the policy of “liberalize everything, turn off the flow of money and put everything in private hands” did not work in Russia. Actually one can see works of different authors, which stress the importance of the institutional matrix for the economy. Among them one can see the work of Rivkina (1998), where she stresses the crucial importance of behavioral and social factors on Russian economic development. She states that, the

economic conduct of enterprises is to a large extent determined by beliefs, values and attitudes of management and employees. Put differently, one can recognize that Rivkina actually stresses the importance of the institutional matrix, particularly its informal part. Starting with the Primakov government one can identify the process of understanding the importance of the institutional arrangement.

With the election of Putin as President of Russia, one can see the beginning of efforts to make the legal system at all levels of its hierarchy more operable and understandable. At the same time one can realize the reactivation of government in the field of informal institution formation. Measures taken in this direction are usually disputable, but at least there are such measures. Among such measures stress can be put on the government's efforts to explain people the need and importance of production and investment activities and particularly investment in capital and in long-run projects. The emphasizing of such issues by the top of Russian political elite undoubtedly is to produce an effect. At the same time starting with the Primakov government and continuing with Putin's presidency much attention is paid to fiscal discipline. Special Tax Police agency was created and became actively operational at this time. As a result authorities reported a significant increase in the collection of taxes. Another example of appreciation of institutional issues can be seen from the increase in the number of different doctrines, programs and similar documents published and announced. These start with the Defence Doctrine and end with Social and Economic Policy Program 2000-2010, known as the Gref Program.

The Gref Program demonstrates an understanding of threats currently facing the country and offers a development strategy based on a series of social and economic reforms intended to create a market economy, governed by a democratic political system. The Program was widely endorsed by the business community in Russia, and refers to the task of improving the investment climate as one of the most important issues facing today's Russia. Another important program that is to be implemented is the E-Russia Program. This program aims at creating a network between all governmental structures in Russia, once this is achieved many different services given by governmental agencies will be available online. Furthermore, a massive database that is to contain information about economic agents is to be created. These measures would increase the transparency of the Russian economy, reduce transaction costs and speed-up operations.

Last four years were also characterized by the increase in the forms of cooperation between the business community and government. Meetings between senior officials and the Russian Association of Industrialists and Entrepreneurs, the Foreign Investment Advisory Council and other organizations representing the business community became usual events.

In March 2001 one-stop state agency for foreign investors was established (ITAR-TASS, March 23, 2001). Its sole aim is to attract FDI by reducing bureaucratic procedures and search time and effort. Given all these, it is quite obvious that the more recent Russian governments have finally realized the importance of institutional matrix for economic performance.

4.4 Political History of Transition in Russia

As discussed in the previous chapter, political stability is an important investment climate parameter for the economy in transition. With the possibility of reversing the reforms, entrepreneurs would either invest in institutional matrix or look for different ways of saving their wealth. Therefore, one needs a closer look at the political situation in order to understand the investment climate in the country under consideration.

History of Russia during the post-Soviet 1990s has not been smooth from the political perspective as well. President Yeltsin gained power in absolute terms in August 1991 after the unsuccessful trial of some Soviet authorities to take power into their hands. Russian Parliament firstly supported moves of Yeltsin in almost every issue. However, starting in 1992 tensions between parliament and Vice-President on one side and Yeltsin on the other side began to rise. Political turmoil continued through 1992 and 1993. In October 1993 tension resulted in open confrontation and Yeltsin managed to overcome difficulties and went out of this situation as the winner. After October 1993 he dismissed the Parliament and fixed the date for general elections (December 1993) and started the marathon for the adoption of a new constitution. As a result new constitution was accepted after the plebiscite held in 1993. The results of elections, nevertheless, came out to be quite disappointing. LDPR (Liberal Democratic Party of Russia) with its charismatic leader Vladimir Zhirinovskii became the winner of elections with 23% of party list votes. The second

biggest party became the pro-presidential Russia's Choice (15% of votes) and surprisingly the third biggest party was the CPRF (12% of votes) (Communist Party of Russian Federation). So, once more Yeltsin could not manage to have a pro-presidential parliament. Political tensions continued to build up throughout the period and approached their maximum by the middle of 1995. This year was marked as the year of general elections. The peak in the level of political tensions was reached in 1996, that is, the year of the presidential election.

One can observe huge political instability not only at the central level but also at regional level. Starting with the dissolution of the Soviet Union former autonomous republics started to demand more and more independence from the central government. This became to be known as the "parade of sovereignties". Many republics openly confronted with central authorities over different issues, starting with fiscal and monetary policy issues and continuing into political ones. This then found its expression in Yeltsin's famous dictum: "Take as much independence as you can carry". However, there were not only political problems, but also purely economic ones related with or originating from this situation. The fiscal federalism, for example, became a matter under consideration. Regional governments demanded more and more tax revenues to be left within the regions. Yeltsin tried to resolve problems that arose from this situation by signing agreements regulating and defining the spheres of central and regional authorities responsibilities and power.

In this period one can see the enormous increase in the number of political parties. This was accompanied by the fact that each government created a new party before elections, whose primary goals were to represent government interests in that parliament. Usually such parties had no chance and were not programmed for long-run political activities. Another important feature of this period is that almost all large-scale economic agents either had 'pocket-parties' or supported some of the present political force. This then indicates the large amount of resources that were invested in the institutional matrix. We only need to associate this with the fact of substantial decrease in the level of capital investment to get the full picture about the gravity of the situation. Officials reported that political stability was achieved after Yeltsin's reelection, as the President of Russia and that from then on there would be an improvement in all aspects of life. And year 1997 really became the year when the GDP grew for the first time in its post-Soviet history. However the year 1998 put an abrupt end to all hopes for the better. Political tension started to rise once more. GDP decreased by almost 5% in 1998 and ruble depreciated by more than 4 times.

The appointment of Vladimir Putin as Prime Minister heralded a new era in Russian history. His popularity rose very quickly, this was partially due to his role and reaction to the conflict in the break-up the Republic of Chechnya. On 31 December 1999 Yeltsin announced that he released himself from the presidency and appointed Prime Minister Putin to be the Acting President until the elections that were to be held in March 2000. Putin was elected as the President of Russia in March 1992 without need of a second round of elections. Most of Putin's first year in office was devoted to strengthening the power vertical. He divided the country into 7

regions and appointed a Presidential Representative to each of them, by doing so he managed to considerably reduce the influence of regional leaders. Then he initiated the process of unification of legislation in the Russian Federation. By the late summer of 2000 his program of administrative reform had already resulted in amendments of laws defining the legislative and executive powers of the federal subjects and the introduction of a new law reconstituting the Federal Council. The program and laws supporting it provide the following important elements to the President: (1) the removal of governors and heads of regional legislative bodies from the Federation Council, (2) the powers of the President to dismiss governors who repeatedly violate the federal laws and (3) the reassignment of regional representatives of the federal government entrusted with monitoring compliance with federal law to seven supra-regional districts. Besides all regional laws, regulations, etc that do not conform to the federal laws are to be changed, this is the ongoing process now.

Finally, the biggest opposition party, the CPRF, lost all of its committee chairmanships in Russian Parliament (Duma) in late 1992. Thus the parliament of Russian Federation became totally controllable by the President. Because of favorable economic conditions and other factors President Putin now enjoys an approval rate as high as 83% (Rossiiskie Vesti, May 10, 2003). Therefore one can speak of a period of political stabilization in Russia. Starting in 2001 much market-oriented legislation has been passed. Among passed laws and regulations the most important ones are: Land Code, Labor Code, and Civil Code. Following laws are expected to be accepted in 2003: The Law on Currency Regulation and Currency

Control, The Customs Code, The Nationalization Law, Laws on banking sector reform, The Law on Civil Service, Laws on local government reform and the segregation of power among various levels of state authorities.

4.5 Privatization Neglecting Institutional Arrangement and Its Effect on Investment

Denationalization started in early 1990s and has continued up to present. It now seems to be irreversible. Starting the privatization process reformists believed that people who are now the owners of their enterprises would work, and manage them more effectively and efficiently. It was believed that once staff becomes the owner of enterprise it would exercise optimal policy (optimal from the point of view economic development). In other words, staff was expected to invest in physical capital, R&D etc. However, as it was indicated earlier in this chapter, authorities had neglected the existence and importance of the institutional arrangement to a great extent. At a closer look, one faces big problems related with privatization in Russia. First of all, authorities were unable or reluctant to see that because of the institutional arrangement characteristic of the Soviet Union, the behavior of entrepreneurs was vastly anti-systemic and rent-seeking. Thus given the relative resistance of informal institutions to change, it is normal for such a behavior to continue in new Russia as well. Thus the intent of designers of privatization to quickly obtain investment funds, which were to act as a counterbalance to the tendencies of excessive share dispersion were proven to be based on wrong beliefs. Many of such funds had a strong speculative character. The most famous example is the biggest and countrywide known and operated “MMM” fund. It functioned as a financial pyramid; thus such

practices were heavily discredited. State authorities were forced to introduce The Security and Exchange Commission in the beginning of 1995 in order to prevent the repetition of similar organizations (similar to “MMM”, the financial pyramid). Secondly authorities failed to recognize the fact of resistance to change of informal sub-matrix and the inability of mental models to capture the novelties characteristic of yet another new episode of the privatization program.

As a result of mass privatization, both small and large enterprises became the property of the insiders. The owning of enterprises by insiders in its turn led to disastrous results, profits were channeled not to investment or R&D, but to wages, benefits etc. Given the fact that Russian enterprises use retained earnings as a source of investment the effect of such privatization could be understood as more grave. Finally, there was not yet in sight a complete switch to a different institutional framework even at the level of the formal sub-matrix. This then ended in the situation where the privatized enterprises still functioned under soft budget constraints. This in its turn increased the likelihood of appearance of strong rent-seeking groups, which are to benefit from this situation. The institutional arrangement of the Soviet system permitted people to fail to fulfill contractual obligations. As a result a wave of non-payments covered the country. Thus the institutional failure of early reforms manifested itself once more in the mass barterization of the Russian economy. According to different sources more than three quarters of all economic transactions took place without money by the end of 1998 (Troika Dialog, Decemeber 15, 1998).

4.6 Investment Climate Parameters: Exemplification from Russia

As it was discussed in previous chapter investment climate parameters are: (1) degree of political instability, (2) degree of monopolization and (3) level and dynamics of government spending. These are to be discussed in this section.

Political history of transition period in Russia can be divided into two sub-periods: (1) 1990-98 period and (2) 1998 and onwards. During 1990-98 political tensions were high and almost continuously increasing. Many political parties sought to destabilize and then shape the institutional matrix in accordance with their goals and vision of Russia's future. Starting with 1998 speed of rise of political instability started to slowdown and then after presidential elections of 2000 political instability started to decrease.

Soviet economy was highly monopolized. Every city, town, etc. had its own supplier of consumer goods. On a larger scale we see a similar situation, with the only difference that larger scale production was highly specialized and thus market was once more monopolized. After the dissolution of USSR another reason for monopolization came into being due to either the absence of distribution channels or the know-how to organize it as such. Distribution channels present in Soviet times were either destroyed or disturbed. Besides, there were not enough experience and funds to setup new ones. All these led to the situation where the economy was highly monopolized. Only towards the end of the century did this situation start to change.

This was partially due to the need, i.e. there was no choice other than to change this situation and partially due to the penetration of foreign companies to Russian market. However this is true for consumer products and services sectors only, if one is to consider heavy industry and natural monopolies sectors one would see the reverse situation. Overall, however, the degree of monopolization decreased towards the year 2000.

Following the dissolution of USSR, a sharp decrease in the GDP of Russia was observed. Because the government adhered to the Washington Consensus conditions, the combined effect of these two factors led to the decrease in government spending. Decrease in GDP decreased the possibility of such spending and the adoption of Washington Consensus in its turn asserted a policy of decrease. Thus situation in Russia in early 1990s was described by decrease in government spending and decreasing dynamics of such spending. Following the unsuccessful results of reforms held in early 1990s the necessity of such spending became obvious, however, the possibility of it was constrained by financial considerations. Starting with 1998 external and internal conditions became more favorable and one can realize a tendency of increase in government spending.

According to the theoretical elaboration pursued in the previous chapter, facts listed above work in the same direction, that is why in order to be able to analyze the situation what one needs to do is to sum up effects only. Considering this section, one must be able to observe the following attributes of the Russian example: (1) Investment in capital should show decreasing tendency in 1990-98 and increasing

tendency in as of 1998. (2) One should be able to see substantial investment in the institutional matrix during 1990-98, on the other hand amount invested as such should be lower as of 1998 when compared with the previous period. (3) Number of economic agents involved in investment in the institutional matrix should be high and increasing in 1990-98 and should be decreasing thereafter. These conclusions are surmised in the light of arguments put forward in the previous sections of this chapter. Investment in capital decreased in 1990-98 and increased afterwards. Number of firms with net positive accumulated capital increased as of 1998. Number of politically active agents was very large during 1990-98 but then continuously decreased. Examples of investment in institutional matrix and information about its magnitude will be presented in the subsequent sections.

4.7 An Example of Investment in Institutional Matrix: Banking Sector

Banking sector is known to be vital for the functioning of a market economy; banks are one of the most important institutions that are to be created. The banking sector provides credit to enterprises and entrepreneurs, converts savings of people to investment etc. Creation of banking sector requires investment, but especially in Russia one can identify the fact that this investment was the investment in the institutional matrix. During the build-up of the banking sector in Russia in the first years of transition, institutional aspect, particularly time-span needed to complete institutional rearrangement was overlooked. There were mainly technical problems, which caused serious distortions in banking transactions from time to time. This was the result of an attempt to build up a system as quickly as possible and without

serious consideration of the institutional arrangement. The number of banks grew at a very high speed in Russia, so their number in 1992 was more than 1500, and by 1994 this number reached the peak of more than 2500 banks (Moscow Times, September 21, 2002). However, at a closer look, one can realize that the word ‘bank’ is in some ways misleading with regard to these institutions. Normally they worked as a kind of external financial department in the interest of the enterprises that founded them, and thus they were called ‘pocket-banks’. During the first years of the transition until 1995, Central Bank of Russia (CBR) played an important role by providing state-owned enterprises and collective farms with cheap credits. These credits usually had interests rates far below the inflation level and even so, were rarely repaid to CBR as well. That is why approximately 80% of newly formed banks were actually founded. The rationale behind the foundation was to get access to cheap, low-interest (or even negative interest) credits from the CBR. This was partly due to rent-seeking behavior of managers and partly due to the needs to overcome financial difficulties that arose after the suspension of direct credit distribution. After introducing a tighter and more stable monetary policy in 1995, the practice of such loans stopped. However, even nowadays banks could earn up to 180% on an annual basis from government bonds (Moscow Times, September 21, 2002). Thus once more one faces a situation where banks are created not with the role of financial intermediation in mind, but as an instrument serving the founders’ rent-seeking activities.

Given all these, one can recognize that the *raison d’être* of banks is investment in the institutional matrix, and given the institutional arrangement of Russia in transition one can effectively argue that the main reason behind this

investment is rent seeking. Nowadays CBR as a supervisory body attempts to introduce more strict rules and regulations for the banking sector. Together with strengthening constraints, CBR enforces rules by withdrawing banking licenses. Following the 1998 crisis several banks were closed and the total number of banks declined to 1200 in 2002 (Troika Dialog, January 15, 2002). Some of the survivors started to undergo the process for qualitative change as well, but the current situation is still far from satisfactory.

4.8 An Example of Investment in Institutional Matrix: Mass Media

Now we turn our attention to another example of investment in institutional matrix, particularly investment in mass media. Enormous increase in the amount of resources invested in mass media can be observed, whereas at the same time a decrease in the resources invested in physical capital is obvious. Starting with the opening of the Soviet Union and continuing with the transition period, an increase in the number of printed and non-printed mass media institutions was observed. Soviet institutional arrangement created an environment where people were to believe private sector's information more easily when compared with official, public sector's information. Besides, same institutional arrangement made people very sensitive to various adversarial actions. Given these, many entrepreneurs saw the possibility of profits from investing in mass media. Some of them desired pure economic profits, those for example coming from advertising publications, but there were other groups whose primary interest was to affect the institutional matrix by means of mass media

and by doing so to seize for themselves economic benefits as well. One can realize the importance of mass media institutions by investigating the years 1995-1996 and 1998-2001. 1995-96 was a period of general parliamentary and presidential elections. Mass media was highly involved in propaganda and created the favorable environment for the re-election of Yeltsin as President of the Russian Federation. 1998-2001 was the period of confrontation between authorities and some media patrons. Media patrons, best known among them Berezovskii and Gusinskii, were reported to have enormous level of profits and to be in the top list of the richest people in Russia. Combined with the relative political instability of 1991-2000 one can realize that huge amount of resources were invested in mass media, or stated differently, in the institutional matrix. This investment was aimed at affecting the informal sub-matrix of the institutional matrix.

4.9 An Example of Investment in Institutional Matrix: Mafia

One can observe another type of investment in institutional matrix that actually was aimed at filling the institutional matrix, particularly at providing enforcement functions. It was stated that the previously transition period is typically associated with the phenomenon named as an institutional vacuum. In other words it is the situation when some old institutions were abolished already but new ones were not yet put in place. Economic agents have to take some measures in order to survive in the situation of institutional vacuum. We can see several examples of such measures in Russia: (1) creation and persistence of mafia type networks. Starting with the beginning of the transition period one can observe a notable increase in the

number of illegal units and in the number of mafia networks. In the absence of appropriate state actions, particularly directed towards the enforcement of contracts etc., economic agents and entrepreneurs started to look for a possible solution of this problem. As already mentioned above, due to Soviet institutional arrangement the behavior of entrepreneurs at the beginning of 1990s can be characterized as anti-systemic and rent-seeking, thus the mental model of the early transition period entrepreneurs permitted them to participate in illegal actions. Actually the fact of institutional vacuum forced them to be involved in such activities. Mafia networks took production and trade facilities and actions under 'protection', and by doing so provided the enforcement role in the system (INDEM, 2002). Thus one can effectively argue that the creation and persistence of a mafia network in Russia is a result of investment in the institutional matrix. This investment partially filled the vacuum, and thus actually helped the survival of economic agents.

To conclude, the institutional matrix is vital for the functioning and performance of any system. Its neglect can lead to various disastrous results. Investment in capital decreases and investment in the institutional matrix increases together with political instability. In order to survive in the situation of institutional vacuum economic agents tend to fill that vacuum; in the absence of state policy in that field, illegal structures can arise and fill it. Mass media is a powerful tool affecting informal sub matrix, and entrepreneurs who manage to recognize this fact have incentives to invest in the institutional matrix in order to service their rent-seeking desires. Only by recognizing the importance of the institutional matrix and

by carrying the reforms accordingly can a state be successful in its desire to achieve better economic performance.

CHAPTER 5

CONCLUSION

It is well taken that human beings continuously produce and consume. The aggregate production function is the relationship between final goods and services produced and inputs used. One of the possible causes for increase in aggregate output is the increase in the quantity of inputs: (1) capital, and (2) natural resources. At any time one can effectively command over capital only, whereas natural resources are given. Way to do this (to control capital) is through the channel of accumulation and the process of accumulation is works by means of investment.

Neoclassical theory provides a simple and hence appealing explanation of how investment is determined. As this theory states, a person's supply of saving is determined by preferences between current and future consumption and the output not consumed is saved for future consumption by means of investment. Keynes made more stress on unemployment issue rather than on growth, however Keynes failed to develop a distinct approach from the neoclassical theory of investment. Post-Keynesian authors stress the importance of investment for business cycles and the major reason for this is said to be the oscillations in the level of confidence of the entrepreneurs. At close consideration, one can identify the fact that all these theories are true under certain assumptions. These assumptions in their turn are quite numerous; starting with the perfect market assumption and ending with certain

behavioral models. These assumptions, or more precisely the neglect of these assumptions is the reason lying behind the failure of mainstream approach to deal with the problems of Eastern Europe in the 1990s. One can call a set of assumptions an institutional matrix, which defines the opportunity set and thus the plausible outcomes in an economic system.

We have seen that outcomes and dynamics of economic, political and social systems are defined by certain parameters (rules). Assumptions actually describe those parameters. Parameters (rules) in their turn are the institutions and the set of parameters is the institutional matrix. Therefore, if one is to model and analyze any system, one is to understand institutional matrix first.

Investment decisions are embedded in future due to the fact that the costs and benefits of an investment project are embedded in the future. We have demonstrated that there is a question that comes with this issue. How do we understand future, as an objective or subjective probability environment or as an uncertainty environment? In this thesis it is shown that the future is uncertain. Human beings seek the way to reduce perceived uncertainty and they do socialize it by using or introducing institutions. One must understand that institutions only socialize uncertainty, they do not reduce it, and this fact is shown in thesis. This is actually another reason why institutions should be carefully considered. Institutional matrix consists of two sub-matrices: (1) formal sub-matrix and (2) informal sub-matrix. A major point stressed in this thesis is that for correct analysis one should consider both sub-matrices, otherwise the neglect of one of the parts of the institutional matrix can lead to

disappointing and misleading results. Informal sub-matrix is more flexible, but unlike the formal one it cannot support long-term relationships.

Any decision-making process is a function of cognition, this is why in order to be able to analyze and understand how decision-making works we had to understand first how cognition operates. Cognition works with the help of mental models and mental categories, the presence of which eliminates the possibility of perfect knowledge and rational expectation. At the same time, these notions were extensively used in the theories mentioned above. Besides, models are very inert and this fact creates real problems, especially for the times of change. Problems such as prevalence of a state of risk-aversion and understanding the inadequacy of mental models are among such issues. Having pointed out all these, we attempted at a re-definition of an economy in transition. Particularly economy in transition is defined as: (1) situation with institutional vacuum, and (2) lack of institutional complementarity, etc.

We have then considered factors effecting investment and then combined the investment knowledge with the institutional-matrix knowledge. Firstly we recognized the fact that investment in institutional matrix is possible, thus aggregate investment in economy is the sum of investment in capital and investment in the institutional matrix.

Decision about investment is based on a profit-versus-costs analysis as well as capacity utilization considerations. At the same time, the higher the amount of

funds invested the higher is the psychological tension of the project owner. Given the uncertainty and cognition capabilities, this psychological tension becomes important and is called susceptibility. Theoretical basis of this tension is Kalecki's principle of increasing risk. The level of susceptibility affects the decision-making process. Decision-making process in its turn is explained to consist of two stages, which are usually associated with different cadres within the firms. One of these stages is being risky and the other, conservative.

Investment in institutional matrix can be very profitable and given the presence of an institutional vacuum, in transition economies many agents have the chance (low barrier costs) to make such an investment and this chance increases with rising political instability. This is the reason why political instability is the first investment climate parameter. It defines the share of investment in the institutional matrix in total investment expenditure. Economy in transition is characterized by increased level of perceived uncertainty and susceptibility. These facts give rise to another investment climate parameter: level and dynamics of government spending. Moreover, institutional vacuum must be filled in order to provide for the very survival of economic agents. Monopolies can exercise power and fill this vacuum much more easily. Combining this with the fact of increased uncertainty and lack of institutional complementarity, we have singled out the degree of monopolization as yet another investment climate parameter.

To illustrate this framework, we have then turned to the Russian experience. The case of Russia is very important because it shows two different approaches

exercised in successive periods. First one is 1990-98 period and the second one is from 1998 onwards. Lessons of the Russian experience help us prove that the neglect of the institutional issue can come with dramatic costs. By recourse to the Russian case, we have also observed the real effects of the investment climate parameters listed above. Furthermore, we have seen some good examples of investment in the institutional matrix, and concluded that the amount of such investment can be quite high. To put it differently, we have come to realize the economic significance of phenomena that are usually overlooked when scholars approach the study of Russia from within the mainstream perspective and discount them as non-economic factors.

REFERENCES

- Arrow, K.J. 1962. 'Economic Welfare and the Allocation of Resources for Invention', in D.M. Lambertson (ed.), *Economics of Information and Knowledge*, Harmondsworth, Middx: Penguin, 141-160.
- Bhaduri, A. 1986. *Macroeconomics: The Dynamics of Commodity Production*. London: Macmillan.
- Brainard, W.C. and Tobin, J. 1968. 'Pitfalls in financial models-building', *American Economic Review, Papers and Proceedings*, 58, May, 99-122.
- Bromley, P. 1986. *Corporate Capital Investment: A Behavioral Approach*. Cambridge: Cambridge University Press.
- Carvalho, Fernando J.C. 1992. *Mr. Keynes and the Post-Keynesians*. Cheltenham and Brookfield: Edward Elgar Publishing Limited.
- Chirinko, R.S. 1986. 'Business investment and tax policy: a perspective on existing models and empirical results', *National Tax Journal*, 39 (2), June, 137-55.
- Courvisanos, J. 1996. *Investment Cycles in Capitalist Economies: A Kaleckian Behavioral Contribution*. Cheltenham and Brookfield: Edward Elgar.
- Crotty, J.R. 1990. 'Owner-Manager Conflict and Financial Theories of Investment: Minsky', *Journal of Post-Keynesian Economics* 12(4), Summer, 519-42.
- Crotty, J.R. and Goldstein, J.P. 1992. *The Investment Decision of the Post Keynesian Firm: A Suggested Microfoundation for Minsky's Investment Instability Thesis*. The Jerome Levy Economics Institute of Bard College and Bowdoin College. Working Paper No. 79, September.
- Davidson, P. 1994. *Post-Keynesian Macroeconomic Theory*. Cheltenham and Vermont: Edward Elgar Publishing Limited
- Delli, G.F. and Galligati, M. 1990. 'Financial Income Distribution, Institutions, and the Stock Market', *Journal of post-Keynesian Economics*, 356-74.
- Fazzari, S.M., Glenn Hubbard, R. and Petersen, B.C. 1988. 'Financing Constraints and Corporate Investment', *Brookings Papers on Economic Activity*, 1, 141-95.

- Gertler, M. 1988. 'Financial Structure and Aggregate Economic Activity: An Overview', *Journal of Money, Credit and Banking*, 20, August, 559-587.
- Haavelmo, T. 1960. *A Study in the Theory of Investment*. Chicago and London: The University of Chicago Press.
- IMF, IMF press release of March 20, 2002 citing IMF deputy managing director.
- IMF, *IMF Country Report No 03/145*, May 2003.
- INDEM, *A Diagnostics of Corruption in Russia: Sociological Analysis*, 2002.
- Interfax, February 12, 2003, citing Goskomstat.
- Interfax, March 15, 2003.
- ITAR-TASS, March 23, 2001.
- ITAR-TASS, April 26, 2003.
- Kalecki M., 1937 The Principle of Increasing Risk, *Economica*
- Kasper W. and Streit M.E., 1998. *Institutional Economics: social order and public policy*. Cheltenham and Massachusetts: Edward Elgar.
- Keynes, J.M. 1936. *The General Theory of Employment, Interest and Money*. London: Macmillan.
- Kindleberger, C. 1978. *Manias, Panics and Crashes*. New York: Basic Books.
- Matthews, R.C.O. 1959. *The Trade Cycle*. Digswell Place: James Nisbert and Cambridge University Press.
- Minsky, H.P. 1977. 'Financial Instability Hypothesis: An Interpretation of Keynes and An Alternative to "Standard" Theory', *Nebraska Journal of Economics and Business*, 16, Winter, 5-16.
- Modigliani, F. and Miller, M.H. 1958. 'The Cost of Capital, Corporate Finance and the Theory of Investment', *American Economic Review*, 48, 261-97.
- Moscow Times*, September 21, 2002.
- Moscow Times*, September 30, 2002.
- North D.C. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge University Press.
- RIA, CBR, June 29, 2003.

Rossiiskie Vesti, October 1, 2001.

Rossiiskie Vesti, May 10, 2003.

Steindl, J. 1976. Introduction to Reprint of Steindl (1952). New York: Monthly Review Press, ix-xvii.

Steindl, J. 1952. *Maturity and Stagnation in American Capitalism*. Oxford: Basil Blackwell.

Sugden, R. 1986. *The Economics of Rights, Co-operation, and Welfare*. Oxford: Blackwell.

Sweeny, R.J. 1987. 'Some Macro Implications of Risk', *Journal of Money, Credit and Banking*, 19, May, 222-234.

Tobin, J. 1969. 'A general equilibrium approach to monetary theory', *Journal of Money, Credit and Banking* 1(1), February, 15-29.

Tobin, J. 1982. 'Money and Finance in the Macroeconomic Process', *Journal of Money, Credit and Banking*, 14, May, 171-204.

Troika-Dialog, *Russia Market Daily*, December 15, 1998.

Troika-Dialog, *Russia Market Daily*, January 15, 2002.

Troika Dialog, *Russia Market Daily*, April 20, 2002.

Troika Dialog, *Russia Market Daily*, February 19, 2003.

Wallis, John J. and North, Douglass C. 1986. 'Measuring the Transaction Sector in the American economy 1870-1970', in S.L. Engerman and R.E. Gallman (eds.), *Long-Term Factors in American Growth*. Chicago: University of Chicago Press.