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# **Institutional Reform Design: A New Chapter of Economics<sup>1</sup>**

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## **Abstract**

In this paper I argue that the Theory of Reform may be considered as a comparatively new but intensively forming chapter of Economics. In spite of great variety of concrete reforms, the problem of institutional reforming admits general formulation and general approaches of solving it.

I discuss some important steps in the development of the Theory of Reform, and then describe its state-of-the art. Since the theory is new, its architecture is not set completely. In the final part of the paper, I will present my own visions of this architecture.

It is a typical case in the practice of reforms, when a reformer, who seeks to build an institution with desired properties, discovers that its immediate implementation is impossible because of resource, technological, cultural, political or institutional constraints. In this case, one has to construct a sequence of interim institutions which, for each moment of time, satisfy the existing constraints, and, in the end, provide the implementation of the desired institution. I describe some methods and constructions that can be used to create sequences of interim institutions; illustrations are extracted from the reform experience of China, Russia, and other countries.

**Keywords:** shock therapy and gradualism, institutional trajectories, interim institutions, dysfunctions, institutional trap, transaction and transformation costs, norm fixing mechanisms, promising trajectories, manual for reformers

JEL Classification: D02, E02, P5, O1, H75, L85

## **1. Introduction**

During all human history, people suggested and conducted reforms. In modern times, particularly in 20<sup>th</sup> century, reforms turned out to be the main form of institutional changes. The experience clearly demonstrated that the art of making reform is crucial for the success of economic development. However, a general theory of reform has developed very slowly, and only about 20 years ago, a jump took place in the number of works in this area. To accelerate the progress, one has to understand tendencies and difficulties. Moreover, this is important for understanding development of economics as a whole, since the new theory synthesizes

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<sup>1</sup> This is a development of my Keynote Lecture “Institutional Reform Design” at the 16th Annual Conference of the European Society for the History of Economic Thought (St. Petersburg, Russia, May 17-19, 2012).

achievements of a broad spectrum of different economic disciplines, and therefore it gets a chance to be in a center of modern economics.

In this paper the term “institution” means a rule or a system of rules, formal or informal ones, which influence behavior of economic and social agents, their interactions and decision making processes.

Institutions are changing. One may consider the changes as a spontaneous process which takes place due to small stochastic disturbances and “natural selection” of the best variations (Alchian, 1950). Douglass North suggested some other explanations of the “natural” institutional development including technical progress and change of prices.

However, at the micro level, seemingly spontaneous movements are making by people; in every particular case, this is a concrete person or a group of them who seek to improve (in a sense) existing institutions. When the changes are conducted by governing bodies of economic or social units – a firm, a region or a country – we name them “reforms”.

It is worth to mention that the Latin verb “reform” originally meant “to return to the former state” (re-form)<sup>2</sup>. In a traditional society, a reformer had to find the roots of changes that he has suggested, in the past experience. This was not so foolish taking into account that the consequences of institutional changes were too difficult to predict. Today we know this very well, even better than our predecessors, due to rich experience of large scale unsuccessful reforms, which resulted in huge welfare losses of big regions and the whole world. This experience requires development of better methodology of institutional reforming.

Thus, a draft formulation of the main problem is as follows. A reformer wishes to transform existing institutions<sup>3</sup> into *institutions with desirable properties*. Usually there are many possibilities to reach this goal. One has to find an optimal or at least an acceptable option.

We know how many people tried to reorganize the world. The idea, that a methodology of reform conducting should be developed, turned out to be very difficult. I will try to discuss some important steps in the development of the Theory of Reform, and then describe its state-of-the-art. Since the theory is new, its architecture is not set completely. In the final part of the paper, I will present my own visions of this architecture.

## **2. Some old discussions: from Edmund Burke to Karl Popper**

Discussions of different economic and social reforms are quite common for religious philosophers, including adherents of Bible or Talmud; for social philosophers and economists, including Plato, Aristotle, Kant, Hegel, Proudhon, Marks, Schumpeter and many others; for

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<sup>2</sup> This meaning of the word "la re'forme" is fixed in the dictionary of the French Academy, 1694 (Ljubzhin, 2005).

<sup>3</sup> In what follows we do not make difference between “an institution” and “a system of institutions”.

constructors of ideal states like Thomas More and Campanella. In modern times, different political parties took different social and economic doctrines as fundamentals of their programs. Marxists and liberals, social democrats and anarchists, national democrats and national socialists – all of them have their particular views on what the best social order is, and all were subjected to slashing criticism of each other as well as of independent social thinkers. Critique of the socialistic views by Mises and Hyek is the best examples.

Some of the doctrines turned out to be subjects of real experimentations. Mankind went through hundreds of reforms, including great revolutions, attempts of building socialistic societies and economic miracles. Having all this in mind, one has to be surprised by the fact that in 1990s, when about 30 socialist countries started their transition to the market, we knew almost nothing about how to conduct reforms.

In this paper, I do not try to consider hundreds of works in which concrete reforms were discussed and studied. I will concentrate on a few most important contributions that have touched upon general methodology of reforming and were inherently connected with the discussions of 1990s, when the Theory of Reform has arisen.

Gerard Rolland has written in his book devoted to transition: "No preestablished theory of transition existed before the fall of the Berlin Wall. The ratio of theory to policy papers in transition economics has nevertheless been surprisingly low." (Roland, 2007, p. 2). Moreover, the earlier investigations were forgotten or ignored at all. The exceptions were papers by Murrell (1992a,b), which contain references on Edmund Burke and Karl Popper. They discussed the problem, which turned out to be central point of the debates in 1990s: the choice between shock therapy and gradualism.

Edmund Burke, a statesman and political philosopher, who lived in England of the times of the Great French Revolution, pointed out the costs of reforms. In his "Reflections on the Revolution in France", 1790, he wrote:

"France, when she let loose the reins of regal authority.... has extended through all ranks of life.... all the unhappy corruptions that usually were the disease of wealth and power."

Today we know very well that intensification of corruption is a quite usual result of radical reforms. It was observed in USA at the beginning of 19<sup>th</sup> century when voting requirements were drastically softened; it was observed also at the end of the 20<sup>th</sup> century in transition economies after shock therapy.

Burke underlined that destroying production and decreasing wealth of French people were the results of wrong reforms:

“The fresh ruins of France, which shock our feelings wherever we can turn our eyes, are not the devastation of civil war; they are the sad but instructive monuments of rash and ignorant counsel in time of profound peace.”

He was probably the first who named reforming as a science, and warned of the impossibility of simple solutions.

“The science of constructing a commonwealth, or renovating it, or reforming it, is, like every other experimental science, not to be taught a priori.”

“When I hear the simplicity of contrivance aimed at and boasted of in any new political constitutions, I am at no loss to decide that the artificers are grossly ignorant of their trade or totally negligent of their duty.” (Burke, 1790).

After more than one and a half century, Karl Popper in his “Open society and its Enemies” (first published in 1945) continued to theorize on the issues of reforming. He made a difference between Utopian and piecemeal social engineering. In the modern term, Utopian engineering means shock therapy. A Utopian engineer defines an Ideal State and searches for a direct way to build it. However, “social life is so complicated that few men or none at all, could judge a blueprint for social engineering on the grand scale; whether it be practicable; whether it would result in a real improvement; what kind of suffering it may involve; and what may be the means for its realization.” This method “if really tried, may easily lead to an intolerable increase in human suffering”, and “to the use of violence in place of reason” (Popper, 1962).

Against Utopian engineering, Popper offered exactly the same arguments, which were raised against shock therapy in the discussion of 90s. Due to uncertainty, a reformer has to move using experiments, trial and error method, having in mind possibilities of corrections of reforms and even reversal of reforms without big costs. This is possible under the piecemeal approach, but not under the Utopian one. There is an important condition for the reform success: one has to avoid people resistance and to gain their support. The simplest way to solve this problem is permanent piecemeal improvement of the people wealth.

Another important point raised by Popper: he asserted that radical approach requires dictatorship. This is not exactly true as examples of the East European transitions demonstrate. Nevertheless, the question of the best government structure for conducting reform is very important and unsolved up to now.

### **3. Jan Tinbergen’s Theory of Economic policy**

Discussions of institutional architecture as well as suggestions of its improvements are traditional in economic literature. However, Jan Tinbergen was probably the first who has considered Reform Design as a self- contained chapter of Economics.

In his fundamental book “On the Theory of Economic Policy”, 1952, he laid down the foundations of the theory of planning as the best policy choice. A fundament of planning theory was developed earlier by F. Ramsey, W. Leontief, G. Feldman, L. Kantorovich, R. Frish, T. Koopmans and others. However, all general models, developed by Tinbergen’s predecessors, have defined optimal (or rational) centralized plans; they did not take into account, at least in general formulation, the possibilities and constraints of choosing policy parameters consistent with existing market conditions.

Tinbergen started with observation that, quite often, politicians formulate inconsistent targets, want “too much”. He suggested to construct models, which describe connections among desirable targets, exogenous variables and instruments - parameters, which can be chosen by policymaker. If the instruments can be determined from a model as some functions of targets and observed exogenous variables then the system of targets is consistent and may be realized. The next step includes optimal choice of the system of targets, using a social utility function.

As a rule, the results of calculations cannot be directly implemented; one has to consider them only as a hint on the possible efficient decisions. In the two last chapters of the book, Tinbergen underlined difficulties of economic policy implementation, particular when he wrote on the policy directed to institutional changes (“qualitative policy”). He pointed out the importance of what we call now political constraints: “...sound policy has to satisfy certain *principles* set by or accepted by the majority of parliament...” Other important factors of successful policy implementation are social norms and “the whole complex of *psychological* factors known as “confidence” as well as “the *costs* of realization” which arise for example when a policy measure “hits a large number of people” (p. 75). Short Tinbergen’s comments on obstacles to reform look quite up to date. He talked on uncertainty and lack of our knowledge, on psychological and cultural factors. “...we know very little about what a man does if private property is changed into public property...” (p. 72)<sup>4</sup>. “Personal or institutional *inertia* and the tendency to maintain the existent are other frequent factors which often impede the execution of a rational policy.” (P. 76). The officials aversion to the complexity “seems to represent another factor...”(p. 77).

Two Tinbergen’s remarks in the end of the book seem to have started new research directions. He mentioned that negotiations between supporters of an economic policy and oppositions are often necessary to realize it. Later on, this topic turned out to be the subject of numerous investigations, using game theory methods. He also wrote “about organization of economic policy as distinct from its contents” and raised the question of the efficiency of expert meetings

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<sup>4</sup> One might add “and vice versa”. If we made enough efforts to know more about it, the transition to the market in 1990s could occur much less costly.

(pp. 77-78). The future development of the Foresight and similar methods is an attempt to answer this question.

Four years after publication of the Tinbergen's book, H. Theil wrote:

"...the theory of economic policy, was first analyzed by J. Tinbergen a few years ago (On the Theory of Economic Policy, Amsterdam, 1952), and the influence of his work in this field grew so rapidly that at present quite a few economists-and not only econometricians-are thinking in terms of his concepts." (Theil, 1956).

Theil underlined some difficulties such as uncertainty and absence of clear boundaries between targets and instruments.

The Tinbergen's book of 1952 was devoted mainly to so called quantitative policy. Later on Tinbergen tried to elaborate his ideas, presented in two last chapters of this book (see Tinbergen (1954, 1956, 1959). We will focus on the paper "The Theory of the Optimum Regime", 1959, that summarized his main results in the theory of "qualitative" policy, that is institutional reform.

In this paper Tinbergen has formulated simple model to discuss the choice of the tax system, optimal size of the public sector, the degrees of centralization in administration and in production, the optimal system of exchange, of social insurance and social control. He concluded by two statements about the optimal regime. "The first is that *the optimum regime* (that is optimal system of institutions- V.P.)... *is different under different circumstances.*" (P.299). For example, the optimum size of the public sector depends on the strengths of externality effects and increasing returns effect. The degree of centralization in production should depend on the optimum size of enterprises and on population density.

"The second general statement is that *as a rule the optimum regime will not be some form of extreme.*" (P.300). For example, "it is very improbable" that complete centralization or complete decentralization is optimal.

Tinbergen's conclusions were very important in the context of mostly ideological discussions, taken place in 50s.

I would mention, however, that Tinbergen did not succeed to prove the usefulness of formal modeling for institutional design. At one hand, the paper doesn't contain strict results concerning the optimal structure of institutional systems, there are just hints. At the other hand, most of conclusions could be received without any formal model. There is one exception, however. It follows from the model, that the optimal tax system should include lump – sum taxes only. Tinbergen noticed that this strange result is a consequence of simplification: his model doesn't take into account the costs of determining and collecting taxes. In fact this discrepancy between the model recommendation and reality reveals more general shortcomings of his models: they

don't take into account reactions of the economic agents on the reform as well as the costs connected with these reactions.

#### **4. The First Manual for Reformers: Washington Consensus**

The task to build a general theory of reform turns out to be very difficult. This is, I think, the cause why, during 30 years after Tinbergen publications, there were no serious attempts to create such a theory. The theory of central planning was significantly developed by Kantorovich, Koopmans, Johansen, Malinvaud, and their followers. Naturally, problems of calculation complexity, and the transmission of information have arisen. As a response decentralized many-level planning algorithms were worked out by Danzig and Wolf, Kornai and Liptak, Malinvaud, and many others. Stochasticity and uncertainty were taken into account as well. The next step was development of the principal-agent models and creation of the theory of mechanism design and contract theory. Lucas critique promoted the radical transformation of Macroeconomics: models became being formulated in the terms of agents behavior. Comparative economics, growth and development, endogenous growth theory became standard courses in economic programs. The new political economy emerged, that took into account political mechanisms of macroeconomic decision making. In parallel, new institutional economics and neo-institutional economics were developed due to O. Williamson and D. North. Theories of rent seeking behavior, tax avoidance, lobbying and corruption were developed as well. There appeared new chapters of economics, devoted to different concrete types of economic policy: optimal taxation, anti-inflation programs, exchange rate and interest rate policy, and so on. Experience of many reforms was described. However, all these advances did not result in creation of a general theory of reform. Reform advising turned out to be a profession, which was based on expert opinions rather than economic science.

The prevailing expert opinion drastically changed in 70th. After the World War II, planning and industrial policy were important instruments of economic miracles in East Asia and Europe. Central planning looked also as an appropriate means of development for Soviet Union. However, after 20 years of fast growth, successful catching up economies solved their problems, created modern markets and did not need in government interventions in the previous formats. The same time many other developing countries, which tried to use central planning and badly arranged industrial policy, have failed. This was a signal for the most international experts to accept the doctrine of 'market fundamentalism' (Stiglitz's term) that recommended minimizing the government role in developing economies.

This looks very strange now, having in mind that many chapters of modern economics underlined the nontrivial role of the government for economic development. Nevertheless, this was a fact. John Williamson, an international expert, who has formulated the doctrine in the most



clear form as Washington consensus, has written: “For much of the postwar period most development economists and most developing countries assumed that catching up with the developed countries required a markedly different set of policies from the market-oriented and relatively open approach that the latter had cultivated. Experience – particularly in East Asia – has suggested that this is wrong, and that the key to successful development is to emulate the policies preached (if not always practiced) by the developed countries.”(Williamson, 1994, p.12).

Making reference on the theory of rent seeking and government failure, he continued: “This body of theory has yielded lots of policy prescriptions, all of them aimed at minimizing the role of government so as to curtail the damage done by policymakers seeking to maximize what has sometimes been termed a “social illfare function”. (Williamson, 1994, p.14).

Washington consensus was firstly announced by J. Williamson in 1989 in his talk at a conference devoted to the policy reform in Latin America economies. His paper was titled as “What Washington Means by Police Reform” (Williamson, 1990). He tried to formulate recommendations, which reflected the opinion of most experts from IMF, WB, USA congress and government. He succeeded. His text was used as a manual in many developing countries including 28 transition economies.

M. Naim, an editor of Foreign Policy Magazine, has explained why it happened: ” Because, at the time, it filled an ideological vacuum and it was relatively simple for politicians to understand and use in speeches. It also gave ministers a practical action plan with specific goals; it had the endorsement of prestigious institutions and individuals and, last but not least, it had the ring of money. The adoption of the Washington Consensus, it was promised (and expected), would bring tons of foreign money. The IMF and the World Bank would open their coffers.” (Naim, 1999).

Washington Consensus is a list of ten recommendations which seem to be, at the first glance, obvious and indisputable. The recommendations concern very important areas: tax reform, privatization of state enterprises, liberalization of interest rate, foreign trade, etc. (Williamson, 1994, pp. 27-28).

At some points Washington Consensus recognizes the necessity of gradual approach. But most recommendations are formulated without any reservations. Adepts of this manual made its content even more primitive. They insisted on the quick changes, the shock therapy, based on Liberalization, Privatization, and Deregulation. In fact, Washington Consensus was used earlier, 10 years before it has been formulated, in Latin – American countries. In 90s it turns out to be the main plan of reforms in East-European countries and former republics of the Soviet Union.

The results of its implementation were disappointing. During 80<sup>th</sup> Latino-American region experienced the fall of GDP about 0.8% per year. In 90s, the average growth rate was only 0.5%. Much worse situation was observed in the region of former socialist countries (East Europe and CIS): during 90s they lost in average about 30% of their GDP. It was a very strong challenge to the academic society of economists.

### **5. Dani Rodrik's and Joseph Stiglitz's Critiques**

In his paper of 1996, Rodrik suggested a survey of most important hypothesis and results about policy reform, which were received up to 1996, and formulate problems for future research (Rodrik, 1996). He pointed out that South Korea and Taiwan, the East Asian miracle countries, followed only about five of the ten recommendations of Washington Consensus. In the periods of fast growth, they did not liberalize their import regime, did not conduct privatization or deregulation and "heavily interfered in the investment decisions of private enterprises." (P.18). The same time, some Latin American countries implemented the Washington Consensus very diligently but experienced even lower growth rates than before.

Joseph Stiglitz, Senior Vice-President of the World Bank and future Nobel Prize winner, was one of the first who directly appeal to the change of the consensus (Stiglitz, 1997). Basing on his previous research (see references in Stiglitz, 1998), he argued that (P.30). In accordance to Stiglitz, the main shortcoming of the Washington consensus is ignoring the role of government in creation of the robust financial system, supporting competitive environment and investing into human capital and technology transfers. Stiglitz underlined that competitive environment requires state regulation, that fair competition is not guaranteed by free trade and privatization, and that industrial policy is necessary for successful development. To avoid wrong policy reform, a new Post-Washington consensus has to be formulated. Later on in his book (Stiglitz, 2002), Stiglitz was much sharper: he compared shock therapy, that has been promoted by Washington Consensus, with "the Bolshevik approach to market reform". This approach, he mentioned, ignores initial structure of society and also does not take into account rent seeking behavior as a response to reforming.

Despite its failure, Williamson initiative was important as the first attempt to create a manual for reformers.

Did the Post Washington Consensus become a new consensus among experts? Stiglitz discussed this question in his paper titled as "The Post Washington Consensus consensus," 2004. He mentioned that numerous attempts to correct the Washington Consensus using some additional recommendations (creating the Washington consensus plus), were unsuccessful. This concerns also the recommendation "to go beyond projects and policies to institutions, including

*public institutions*, and their governance.” Because “the questions should have been, what can we do to improve the efficiency of *both* markets and the government, what is the right balance between the market and government, and how should that balance change over time, as markets improve and the competencies of governments change.” (p. 9)

Stiglitz has enumerated several elements of a post-Washington consensus. “The first is that a successful development strategy cannot be arrived at simply within the confines of Washington. It will have to involve those in the developing world in an important and meaningful way.

The second is that one size fits all policies are doomed to failure. Policies that work in one country may not work in others. ...there remains the question, to what extent can the policies which worked so well there be *transferred* to other countries.

A third is that there are some areas in which economic science has not yet provided .... sufficiently strong theory, or empirical evidence, to result in a broad consensus about what countries should do.” (P.12)

Thus the Stiglitz’s answer on the question about new consensus was negative.

However there were developed some other directions of research to deal with reform problems.

## **6. Gerard Roland: a theory of gradualism**

In 1990s there were two central points of discussions. The first one concerns the role of government and hence the problems of regulation, size of public sector, social and industrial policy, etc. The second one was the choice of sequence and speed of reforms. The debates between supporters of shock therapy and gradualists broke out with a bang from the very beginning of 1990s. Gerard Roland with his coauthors made important contributions into this problem.

A formal approach to it may be described as follows ( Dewatripont , Roland, 1995; Roland, 2000).

Consider two complementary reforms with uncertain outcomes. The complementarity means that the gain from conducting two reforms is larger than the sum of gains from each isolated reform. In this context shock therapy, or big bang, means that one conducts both reforms simultaneously. After that, the outcome turns out to be known. If the outcome is negative, then the reforms may be reversed; the final decision depends on the difference between losses from preservation of reforms and the cost of their reversal.

The gradual approach means that the reforms are conducting sequentially, one after another. The outcome of the first reform, conducted alone, may be even negative. However, at the first step, one gets additional information about the outcome of two reforms. This additional

information helps to choose between two possibilities: realizing the second reform or reversing the first one.

This model gives a possibility to compare shock therapy and gradualism. Gradualism is more preferable if uncertainty is bigger, if the first step is more informative, and if the reversal cost of two reforms is higher (in comparison to just one of them). In the framework of this model one can also choose the best sequence of reforms. Recommendations, extracted from the model, are quite plausible: the choice of the first step reform depends on some combination of their informativeness and levels of their outcomes. The model shows how to calculate this combination.

In a dynamic Ramsey-type model, developed jointly with Castanheira, Roland compares big bang and gradual privatization reforms (Castanheira and Roland, 2000; Roland, 2000). The authors assumed that privatization requires diverting some part of resources from production sector. The model demonstrates that, as a rule, gradualism is better than big bang.

In his book of 2000, Roland summarized researches on transition that were done in 90s.

### **7. Trainn Eggertsson: Imperfect institutions as Limits of Reform**

In his “Imperfect institutions” Eggertsson tried to summarize numerous contributions of the New Institutional Economics to understand obstacles for reforms. He argues that “social technologies and physical technologies complement each other”, and that “problems with applying new social technologies are the critical barrier to growth in poor countries”. Successful introduction of new social technologies is complicated “because preexisting institutional arrangements often undermine the effort” (Eggertsson, 2005, pp.25-26). Eggertsson pointed out two causes of the political rationality of imperfect institutions. First, due to uncertainty and short time horizons, rulers may “have an incentive to plunder the wealth of their nations” instead of creating good institutions. Second, some authoritarians tend to reward a small group of their supporters and do not care on secure property rights and growth-promoting infrastructure. Even if autocrats try to create a strong economy, they are not usually able to support sustained growth. Eggertsson noted that “a theory of institutional reform ideally should instruct reformers about how to constrain autocratic rulers” (p.71). We don’t know how to do that, however. Moreover, at one hand, there are examples of growth-oriented autocrats. At the other hand, democracy doesn’t guarantee growth-oriented policy.

Important constraints to reforms are inefficient social norms (Tinbergen’s argument). The question is how to change them. One can find some recommendations in the Posner’s theory of the Cooperation-Defection Differential. Another important problem, discussed by Eggertsson, is how to escape poverty trap. He analyzed several possible mechanisms including sudden

economic crises and new social models that may change behavior of economic agents and result in a more efficient social equilibrium.

### **8. Some other developments: getting rid of illusions**

During last two decades, there were done numerous researches devoted to concrete reforms and to different phenomena observed in reforming. Because of space limitation, I will mention just small sample of them. In particular, I would like to stress important changes that happened with our “standard policy prescriptions” due to reform experience. Let us start with price stabilization reform. It was studied in many works. Some prescriptions were summarized in Bruno (1993). It turned out, however, that the standard stabilization programs were not effective in the institutional arrangement of some transition countries where banking system transferred money very slowly and, the same time, direct connections among trading partners (producers and consumers) were developed. Under these conditions attempts to fight inflation by restrictions of money supply led to arrears and barter crises, and creation of arrears and barter traps (see the next section). These unexpected results shook our confidence in the universality of macroeconomic relations.

Significant number of researches has studied different privatization schemes. Before the experience of transition, the firm belief prevailed, that privatization results in higher production efficiency. However, it has been shown in Estrin et al (2009) that the effect of privatization in transition economies was mixed. This paper generalized the results of 35 empirical researches. Authors concluded: “...the performance effect of privatization to domestic owners ...has varied across regions. The effect has been ...positive in CEE; it has been nil or even negative in Russia and the rest of the CIS.” “The important policy implication is that privatization per se does not guarantee improved performance, at least not in the short- to medium-run”. (P. 29).

A number of factors caused this outcome. Among them, institutional and cultural constraints to privatization were important. In Russia and other CIS countries privatization did not lead to replacement of managers, and most of the firms’ shares turned out in the hands of labor collectives. Low pensions and unemployment benefits in some countries and high unemployment in others resulted in strong resistance of labor collectives to restructuring (Blanchard, 1997).

Talking on cultural constrains, one has to note that effective owners were absent in transition countries, and managers had no experience of operating at the free market. Moreover, they considered preservation of their collectives as one of their main goals (Linz, 1998), and did not want to dismiss ineffective workers. Therefore, instead restructuring and, in fact, instead profit maximizing behavior, another unexpected phenomenon was observed in Russia: great labor hoarding (Blanchard, Commander, Coricelly, 1995).

The significance of culture and the ambivalent role of democratization for the reform success were underlined in many papers (see, for example, Hillman, Ursprung (2000), Hodgson (2006), Polterovich, Popov (2007)).

Before transition most economists had believed that financing enterprises thru private banks should lead to hardening budget constraints, and, therefore, should increase the efficiency of former planned economies. However, the experience did not support this belief. An explanation of this phenomenon was done in Berglof, Roland (1995).

Among other illusions that led to dramatic mistakes in transition strategies, one should point out undervaluation of the government role, in particular, industrial and social policies as well as the importance of planning; disregard of the costs of reforms; attempts to transplant the most advanced institutions. Probably the most important mistake was the belief in advantage of shock therapy. About this mistake, Janos Kornai has written in his memoirs: “Most of the western advisers who influenced the governments undergoing post social transition favored the strategy of accelerated privatization.” “Most experts ten to fifteen years later agree, in hindsight, that the gradualists were right.” (Kornai, 2006, p.354-355).

## **9. “A practical approach to growth strategies” by Dani Rodrik**

In his book of 2007, Rodrik has made important contribution into the theory of reform design: he has developed a piecemeal methodology that has been called “practical approach to growth strategies” (Rodrik, 2007). The initial point is that reforms are necessary not by themselves but to accelerate growth. Therefore one has to identify “the most binding constraints on economic activity and hence the set of policies” that are the most welfare promoting (p. 57). This is the first step of the Rodrik’s methodology of growth strategy finding, the step is called “growth diagnostics”<sup>5</sup>. The first step in the diagnostic analysis is to figure out which of the following three constraints is the most important obstacle for growth: A) high cost of financing economic activity, B) low social return to economic activity, C) low private appropriability of the social return. The choice can be made by analyzing economic indicators of a country. For example, if the constraint A is a problem, then real interest rate and the current account deficit have to be high as well as the number of efficient but underfinanced investment projects. By contrast, if B is the most important constraint, then interest rates should be low, the current account should be surplus, and capital outflow should be observed. Appropriability problem can be observed due to unwillingness of the private sector to realize socially efficient investment projects; this is a signal of big gap between social and private efficiency.

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<sup>5</sup> The growth diagnostics was originally developed in Hausmann, Velasco, and Rodrik (2005).

After identification of the most binding constraint, one has to look at the deeper roots of it. For example, low social returns can be due to poor human capital or bad infrastructure. Choosing between these two, one has to detect again the main causes, why the most strongly binding factor is not proper. Thus, we go through the tree of factors from the most abstract to the most concrete ones, determining the most influential concrete barrier to growth ( Rodrik, 2007, pp.89-90).

The second step of the Rodrik methodology is the policy design. At this step, one has to choose policies or institutions which eliminate the most binding constraint that was determined at the first step. Rodrik underlines that, at this step, straightforward solution (price liberalization, abolishment of subsidies, etc.) usually doesn't work. A reformer has to find second-best institutions that can work in the imperfect real environment. As examples, he makes references on the two-track pricing system and township and village enterprises - institutions that played decisive role in the Chinese price liberalization and privatization processes. Below I will discuss these institutions in greater detail.

The binding constraints are changing overtime. Therefore the reformer has to permanently switch from one institution reform to another. To realize this process, supporting sustainable growth, the third step is necessary. Rodrik called it as Institutionalizing Reform. In fact, this is the task of conducting reforms in quite usual sense: strengthening the rule of law, fighting corruption, improving democratic institutions, etc. Besides, Rodrik suggests principles of design and institutional arrangements for industrial policy, including coordination and deliberation councils, development banks and special development agencies.

I have several comments to this very impressive methodology. First, if the number of our instruments is less than the number of binding constraints, then the most binding constraint may not exist. In this case, the Rodrik's first step does not work, and the problem of finding piecemeal improving policy is more complicated.

Second, Rodrik considers the dynamic problem of building modern institution and finding catching-up strategies as a sequence of static problems. This is a development of Karl Popper's piecemeal approach. Whereas, this could be a reasonable approximate method for some cases, a general formulation is necessary to make better one-step choices. Third, the first step, (the growth diagnostics) is shortsighted, and does not take into account the costs of institutional reforms of the second step. Another point is that mistaken diagnostics has to be corrected at the second step. Both arguments mean that the first and the second steps should not be separated. This is related also to the third step, at which a general mechanism of catching up development has to be created. In the next section, I will describe more general frameworks for finding catching up strategies and demonstrate that a methodology of institutional transplantations might play a decisive role for developing countries.

## **10. Architecture of the Theory of Reform: a general formulation and elements of methodology**

### **10a. General reformer's problem: a formulation**

Above, I presented a short and very incomplete survey of what I call the Theory of Reform or the Institutional Reform Design. The term “reform” may be defined as a purposeful change of existing institutions or prevailing policies, a change, which is planned and conducted by some social agents. I have concentrated on the economic changes and on the government as a reformer, and I have considered the Theory of Reform as a chapter of economics. The subject of this chapter is defined very clearly. However, the problems that have been investigated, and the methodologies that have been used in numerous researches seem to be very heterogeneous.

In this section, I suggest a general formulation of the Institutional Reform Design problem and introduce a system of concepts that gives a possibility to outline main problems of the Reform Design in general terms as well as generalize some important results, mentioned in the previous sections. In what follows, I will base on a number of my own works (Polterovich, 1999, 2001, 2005, 2007, 2008, 2012), most of them were not translated into English.

I define the reformer's problem as follows: one has to design an *efficient* sequence of *interim* institutions so that this sequence links an *initial* institution with a *final desirable institution*, and each transformation of one interim institution into next one is *feasible*. This means that, for an agent, which is leaving an institution A for B, the transformation cost of the transition has to be less than the present value of difference between transaction costs of using A and B.

I borrow the concept “sequence of institutions” (institutional trajectory) from North (1990). Some other concepts, which used in this definition, need to be explained. The final desirable institution is the goal of the reformer. It is not necessarily described in detail. For example, “a market with free prices”, or “a system of private enterprises” may be considered as goals. Correspondingly, “a market with centrally determined prices”, or “a system of state owned enterprises” are examples of initial institutions. Usually, direct transition from initial to final institution is impossible or too costly due to cultural, political, institutional, technological, or resource constraints. Therefore, interim institutions are necessary. Each interim institution should function under existing constraints<sup>6</sup>. The constraints are changing, and the changes create

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<sup>6</sup> The concept of interim institution was introduced in Polterovich (2001). A similar term “transition institution” may be found in Qian (2001). A little bit different meaning has the concept of second best institution which was introduced in Rodrik (2007, 2008).



possibilities of transition from one interim institution to another one. Thus, a feasible trajectory arises; it leads from initial to final institution.

The changes of constraints may be spontaneous, so that the reformer may just wait for a possibility to make a next step. However, it is much more effective to design interim institutions, which soften existing constraints.

Usually, every interim institution has a set of installed control parameters so that the reformer can use these parameters and some additional information to transform one interim institution into the next one. A class of interim institutions and a set of control and observed parameters both define institutional space where different trajectories may be chosen.

A trajectory is characterized by its results, for example, by the corresponding present value of the costs flow, which is required for realization of the trajectory. The reformer has to find “an efficient” feasible trajectory. There is a temptation to talk about optimal trajectory among all feasible trajectories. I would prefer to avoid this requirement since the set of feasible trajectories is usually not well defined. In fact, the design of this set is included into the task of the reformer.

In the case of Chinese dual track privatization, each interim institution was characterized by the set of centrally planned parameters including prices and production targets. Remind that all above-target production was allowed to be sold at the free market. Controlling targets and observing the share of above-target production, the government was able to slow, or to accelerate (by assignment of low targets) transition. In China, this process continued 15 years, and came to the end when the share of free market production reached 95%. Then all the targets were abandoned.

In this example, interim institutions softened cultural constraints: lack of knowledge of marketing and lack of skill to interact with market partners. Lack of market infrastructure, including a set of intermediaries, was another institutional constraint that had to be softened. And, probably, one of the most important constraints to the reform was the danger of high inflation. At the initial stages of the dual track system, firms were not forced to buy raw materials by higher market prices, since the plan provided them with necessary resources. Therefore, inflationary expectations, which usually are the moving force of inflation, have not jumped, and inflation remained low.

Note, that the shock therapy is a special case of trajectories: it contains just one step – immediate introduction of final institution. Sometimes, it can be feasible and even efficient. It is important, however, that the decision should be not a result of a prior belief but a consequence of an investigation.

Due to incomplete knowledge and uncertainty, the reformer sometimes makes mistakes. They may lead to high *transformation costs, disfunctions* of the introduced institutions and to formation of imperfect institutions due to *institutional traps*.

### **10b. Sources of transformation costs**

One has to distinguish between transaction costs and transformation costs. If an agent uses an institution, she bears some costs, so there is a flow of the transaction costs. The transformation costs are required if an agent switches from one institution to another one. The society bears social transformation costs, and the private agents, which are switching from an old institution to the new one, bear private transformation costs. A transition is feasible if it respects existing constraints and if the present value of the transaction costs for the old institution is larger than the sum of the transformation costs and the present value of the transaction costs for the new institution. It is very desirable to construct trajectories by such a way to provide permanent reduction of the agents' transaction costs. This forms positive institutional expectations and weakens the resistance to reform (recall Popper's recommendations).

It is important to understand the sources of the transformation costs. I would mention four main sources (Polterovich, 1999)

1. Diversion of resources from traditional directions of investments (production, infrastructure, etc.; see Castanheira, Roland, 1995).
2. Disorganization.

Disorganization can take place because of two causes. First, destruction of an old institution frequently happens earlier than the new institution can reveal its efficiency. For example, quick privatization breaks connections among firms, consumers and suppliers, but not all of them can find new partners quickly enough (Blanchard, Kremer, 1996). Second, after a reform, the system moves to a new equilibrium. The adjustment process may be costly because of discoordination of the agents' decisions.

### **3. Intensification of redistributive processes to the detriment of production.**

Shadow activity, lobbying, corruption, criminal activity all are examples of the redistributive processes. The intensification occurs since any reform changes existing constraints; this releases the transition rent (Gelb, Hillman, Ursprung, 1996), creating new possibilities of rent seeking.

### **4. Incompatibility of new institutions with old institutional arrangements, and formation of inefficient institutions.**

Understanding of the sources of the reform costs is a necessarily prerequisite to study inefficient institutions, their types and their formation. These problems were already touched

upon in Section 7, where we discussed Eggertsson's book of 2005. In the next two sections, I consider them in greater detail.

### **10c. Dysfunctions of economic institutions**

Incompatibility of new institutions with old ones can lead to different dysfunctions: atrophy, rejection of the transplant; metamorphosis, activation of alternative institutions and/or institutional conflict (Polterovich, 2001).

Let us consider some examples. In July of 1992, the arrear crisis took place in Russia; all enterprises were in debt to each other. A bankruptcy law was introduced but did not work: everybody could be accused therefore nobody wanted to be a claimer. It was the atrophy of the new institution.

After some time, however, criminal groups began to use this law: they choose comparatively good firms, bought some part of their debts, bribed judges, bankrupted the firms and captured them. This was unexpected misuse of the institution, its metamorphosis.

In 1990, the progressive income tax was introduced in USSR for the first time. Seven tax rates were set; the maximal one was equal to 60%. The scale of the tax has changed several times during 1990s. The problem was that a typical Russian citizen did not consider tax payments as his/her duty and never fulfilled tax declaration. As a result, a new bad institution has activated: shadow wage payment (without bookkeeping) has spread. In 2001 progressive income tax has been rejected at all, and flat tax has been introduced.

I say about institutional conflict if an institution is using in accordance to its assigning goals, but its functioning is inefficient due to existing social norms or other prevailing institutions.

I already mentioned that privatized firms have been inefficient in Russia and other CIS countries; one of the causes was that managers have aimed to keep collectives of their firms rather than to maximize profit (Linz (1998)). This is an example of the institutional conflict.

The examples above demonstrate that the reformer should recognize that incorrect decisions can lead to dysfunctions, and should try to avoid them.

### **10d. Institutional trap<sup>7</sup>**

Wrong reformer's decision may lead to institutional trap; this is an important mechanism of formation of bad institutions.

Institutional trap is a locally stable but yet inefficient equilibrium in a system where agents choose a norm of behavior (an institution) among several options. It is usually implied that multiplicity of equilibria prevails in the system and, under the same exogenous conditions, there

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<sup>7</sup> This section is a modernized and shortened version of Polterovich (2008) that is based on Polterovich (1999, 2001a, 2005).

exists another equilibrium, which is Pareto-improving or is better for the society in accordance to another accepted criterion.

The concept of institutional trap is closely related to the notion of underdevelopment trap, and also to notion of lock-in used by Arthur (1988) and North (1990); they showed that inefficient technical or institutional development can be self-supporting. In fact, concrete examples of institutional traps were studied in a number of papers (see Ickes, Ryterman, (1992), Tirole (1996), Bicchieri and Rovelli (1995), Jonson, Kaufman, Shleifer (1997), Uribe (1997)). In Polterovich (1999, 2007, 2008) a general scheme for the formation of an institutional trap was described; it was underlined that, frequently, traps are the results of incorrect reform policy. In particular, it was shown that such different phenomena as barter, mutual arrears, tax evasion, and corruption, all observed in transition countries in 1990s, were intensified and supported due to this mechanism.

Similar to efficient norms, institutional traps may be stable due to some stabilizing mechanisms, such as coordination, learning, linkage, and lobbying effects as well as cultural inertia.

The main type of stabilizing mechanism is based on the coordination effect. According to this effect, the more consistently a norm is observed in a society, the greater are the costs incurred by each individual deviating from it. For example, the coordination effect takes place if a personal probability to be punished for a rule-breaking activity decreases with the number of people involved in the activity. In this respect, institutional traps belong to a broader class of coordination failures (Howitt (2003), see also Matsuyama (2005) where related concept of poverty traps is discussed).

An individual or a small group of people loses if it deviates from an institutional trap. However, the simultaneous adoption by all agents of an alternative norm may be Pareto improving under the same exogenous conditions. Thus the lack of coordination is an important cause of the institutional trap stability.

The transaction costs of a norm's observance decrease due to learning effect since the agents learn to operate more efficiently. If the payment of taxes is considered as a norm within a society, the taxpaying technology improves. If, on the contrary, tax evasion is a norm, the relevant techniques develop. A decrease of the transaction costs fixes the norm.

With time, an established norm finds itself linked with a multitude of other rules, and becomes part of a system of other norms. Therefore, non-observance of this norm would trigger a chain of other transformations and, consequently, lead to higher

transformation costs. By increasing transformation costs, the linkage effect, too, contributes to a norm's fixation.

Lobbing effect arises when an institute seems to be beneficial for a small but influential group of people who resist to its change. This effect is a base for the partial reform trap, described in Hellman (1998).

There is yet another norm-fixing mechanism, cultural inertia, which denotes agents' reluctance to review those behavioral stereotypes that have already proven viable. Inertia effects may be supported by a formal or informal system of punishments and awards for past behavior. For example, a person with a good reputation tries to save it by following the respectable norms of conduct.

Consider a system with multiplicity of equilibria, and let an efficient norm prevail. Under a strong perturbation, the equilibrium may lose its stability or disappear so that the system moves to an alternative locally stable equilibrium, a potential institutional trap. After the disturbing factor is removed the system remains in the new equilibrium which is inefficient now. This is the so-called hysteresis (ratchet) effect that is a form of a system's dependence on its former path of development (path dependence).

To illustrate introduced concepts, consider barter trap as an example.

In economies with advanced banking systems the share of barter is rather modest even when inflation is high. But after price liberalization in 1992, Russia proved to be ripe for barter. With the banking system still unformed, money transfers within Moscow could take up to two weeks, and beyond the capital, over a month. Many firms soon found that barter transaction costs were lower than those for monetary exchange. Moreover, the transformation costs of a shift to barter looked acceptable, given to the old-time direct links between supplier and consumer that had been typical for the centrally-planned economy. The larger the number of firms choosing barter, the lower the barter transaction costs for a fixed barter volume since it was easier to find partners (coordination effect). In those conditions, as the share of barter exchanges increased, even more companies became involved.

Later the transaction costs of barter exchanges continued to decrease due to the learning effect: companies learned to design elaborate chains of barter exchanges. The newly established norm gave birth to a new institute of barter exchange intermediaries and proved to be an efficient instrument of tax evasion (linkage effect).

By 1997, inflation in Russia had gone down dramatically, and monetary exchange technology had notably improved. Barter practices, however, were not dropped altogether. Barter-driven behavior was supported by the coordination effect; it has been fixed through

learning, linkage, and cultural inertia. Any agent deciding to break out of the barter system would be exposed to inevitable transformation costs. She would be forced to sever long-established connections, to look for new partners, and to be ready to come face to face with the tax-collecting authorities. The barter intermediaries, who would lose their main sources of income if barter practices were eliminated, form a potential group of pressure for perpetuation of the relevant norm. What we see here is the hysteresis effect mentioned above.

To getting out of institutional trap, one has to reach at least one of the following goals: a) to increase transaction costs of the prevalent inefficient norm; b) to decrease transaction costs of an alternative efficient norm; c) to bring down transformation costs of the transition to an efficient norm. The stabilizing mechanisms have to be influenced for these purposes.

There are a number of measures, which may be taken by a government to get an economy out of institutional traps. Among them: high penalty for deviating behavior, development of reputation mechanisms (Tirole (1996), and amnesty. Each of them has its own limitation and costs (see Polterovich, 2005, 2008).

If the rate of economic growth substantially increases due to improvements of technology, term of trade or clever industrial policy, then part of agents may decide to increase their investment into production rather than into rent seeking. This supports growth and creates new incentives for the next cohort of agents to switch their efforts from rent seeking to production. As a result an institutional trap may disappear. Growth diminishes the transaction costs of “good behavior” and facilitates improvement of institutions. This conclusion was corroborated by econometric calculations (Chong, Calderon, 2000).

Sometimes systemic crises turn out to be helpful<sup>8</sup> to get an economy out of institutional traps.

A crisis drastically changes system parameters and even destroys supporting mechanisms so that an economy may find itself outside of the attraction area of the inefficient norm. The evolution of the barter trap in Russia serves as a remarkable illustration of this statement.

The barter trap was broken in 1998 due to systemic financial crisis. Real exchange rate devaluation amounted to about two times. Import dropped drastically; in 1999 it was 56% of the 1997 level. Demand for domestic goods increased, and the economy started to grow. The crisis totally destroyed government Drazen, Grilli (1993) bond market that diverted money flows from production purposes. Enterprises started to earn money and used it for investments. Their real balances increased. The share of barter in industrial sales fell dramatically. In 2002 it was about 10%. The barter trap disappeared including a complicated system of barter intermediators.

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<sup>8</sup> The idea that a systemic crisis may be advantageous was put on and studied in a number of papers (see Drazen, Grilli (1993)).

### **10e. Promising trajectories: towards a new manual for reformers**

In the two previous sections, I considered the inefficient institutions. To prevent their formation, the reformer should know this part of the theory. However, the main reformer problem is to design efficient sequence of interim institutions. In general case, the theory could work out just general recommendations about what should be done and how to avoid standard mistakes.

It follows from the previous discussion, that the reformer should design a set of feasible institutional trajectories and should choose most efficient one. The efficiency and compatibility mean that the trajectory 1) is compatible with resource and technological constraints at each step; 2) takes into account general level and particularities of civil culture and human capital; 3) takes into account existing political process of decision making, hence, possibilities of modifications and even of the refuse of reformer's suggestions; 4) takes into account static and dynamic complementarities of institutions; 5) takes into account other institutional constraints, and ensures softening of all constraints; 6) includes effective measures for control of redistributive activities; 7) forms and keeps positive institutional expectation of people, the belief to the advantage of the reform; 8) provides (in order to reach 7)) at least partial compensation to main population groups, which could suffer from the reform; 9) is coordinated with the government policy of growth promotion. I call a reform trajectory as promising if it fulfills all these requirements (Polterovich, 2007).

The concept of promising trajectory presents just general framework of reform. The reformer can get much more recommendations from the theories and case studies of concrete reforms such as price stabilization, privatization, etc.

Unfortunately, the theory can't give concrete recommendations how to design interim institutions in general case: every interim institution is an invention, and nobody knows algorithms how to develop new ideas.

However, there is a quite broad class of situations for which more concrete recommendations can be worked out. I mean reforms based on institutional transplantation.

### **10f. Transplantation of economic institutions**

Transplantation<sup>9</sup> is the most important mechanism of the institutional change in developing countries. It turns out, however, that developed countries intensively used transplantation as well.

In Polterovich (2001), the following four hypotheses about transplantation were formulated.

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<sup>9</sup> In the literature "import of institutions" and "imitation of institutions" are used as synonymous of the term "transplantation of institutions". Transplantation of institutions was studied in Berkowitz, Pistor, Richard (1999, 2003).

1. Creation of a new institution is a rare event. Institutional development is going on, mainly, due to transplantation.
2. In its development, each institution goes from primitive to more advanced stages. If one tries to jump over some stages, using transplantation of more advanced institutions, then the probability of dysfunction increases.
3. If the transplantation is successful, then the development of the institution is faster in the recipient country than in the donor country.
4. There exists a structural analogy of development: in different countries, the transplants evolve similarly, passing the same stages.

We tried to check these hypotheses studying the development of mortgage systems and transplantations of different mortgage institutions (Polterovich, Starkov, 2007). We have found that two branches of mortgage institutions were developing in parallel in the second half of 18<sup>th</sup> century. The first branch served for lower and middle classes, and the second one served for elite. The initial institution of the first branch was the terminating building society that is called also as the rotating savings and credit association. Really, it has been some kind of a cooperative. Its members pooled their resources to build houses for them alternately. A member, who got a house, paid for the credit to the society; the house acted as collateral.

In Europe, the first building society was found in England, in 1775. Initially, the building societies terminated their activity after all their members were served. In 1840s a more advanced institution, the permanent building society arisen, it took new members permanently. They were transplanted to Germany and developed into Contractual Savings for Housing (building and loan association, Bausparkasse). In 1952, the Germany government started to pay a premium for savings to the depositors of Bausparkasse.

The most important distinctive feature of the Contractual Savings for Housing is that they extend credit to their members only after fulfilling their plans of saving. Therefore, these institutions are suitable for countries with imperfect loan and savings culture, when many people do not have any credit history. When the cultural level turns out to be high enough, building and loan associations lose their significance and transform into specialized banks, where savings and credit operations are disconnected.

The second branch of mortgage institutions – savings and mortgage banks - served for higher classes. The first savings bank was founded in Germany in 1768; the first mortgage bank arisen in France in 1852. The next stage of development was the creation of mortgage agencies and emergence of the secondary mortgage markets in USA.

We studied data on 125 cases of transplantation of mortgage institutions; the cases took place in 53 countries during 230 years. The data support hypotheses formulated above. This study



revealed the importance of understanding of the institutional evolution. If we understand why and how a stage transforms into the next one, it helps us very much to choose a rational strategy of transplantation<sup>10</sup>. The study also revealed how frequent reformers of developing countries make costly mistakes in transplantation strategies.

## **11. Constructing interim institutions**

Interim institutions have to be invented. There is no hope of finding universal algorithm how to do that. There are, however, at least two heuristic methods of constructing interim institutions (Polterovich, 2012).

### **11.1. Method of forcing out**

One may organize “competition” between a desirable institution and the old one, so that agents have a choice between them. Their coexistence creates an interim institution (an interim institutional environment). However, due to purposeful or “natural” changes of some systemic parameters, the old institution is partially or completely forcing out by the new one. For example, increasing the pension age (a very painful reform) may be reached by giving to pensioners the right of choosing the moment of retirement if the pension size increases significantly with the age of retirement. Another example is building and loan association (Bausparcasse) mentioned above. Initially this interim institution won the competition with more advanced hypothec entries, but later, when the culture of borrowing was improved (mainly due to people participation in the Bausparcassen), it was almost forced out.

### **11.2. Mixing**

This means formation of a “mixture” of an old and a new institutions in some “proportion”. The “proportion” is defined by some parameters that create a “line” of interim institutions.

Price liberalization in China was based on the mixture of planned and market systems; parameters of the plan defined the line. Trying to transit from pay-as-you go to fully funded pension systems, many countries introduced their mixture; they intend to reach the result by changing coefficients of contributions to the corresponding pension funds.

Transplanting institutions, one has to use a theory of development of similar institutional system in advanced countries. Any such a theory reveals connections between an institution and cultural and technological conditions. Understanding these conditions helps to decide what has to be transplanted at the start.

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<sup>10</sup> One has to choose a stage that took place in the past of the country- donor when its institutions were similar to the present institutions of the country- recipient ; “preparedness” of the recipient to the transplantation is important (Berkowitz, Pistor, Richard, 1999, 2003).

Institutional experimentation is another powerful approach of finding appropriate interim institution. As a rule, this is “real” experimentation: experiments are conducted in a set of enterprises, sectors or regions (see Roland, 2000; Gertler, Boyce, 2001; Ravallion, 2009).

Chinese foreign trade liberalization (1989-1994) is a good example of broad use of experimental approach. The reform goal was reached by expanding sequence of special economic zones with slightly different rules.

## **12. Conclusions**

In this paper I tried to demonstrate that the Theory of Reform may be considered as a chapter of Economics; its main subject is a methodology of designing sequences of interim institutions which respect and, the same time, soften existing constraints. A sequence has to link the initial institution with the final, desirable one. Every transition from an institution A to the next institution B has to be feasible. This means that, for an agent, which is leaving A for B, the transformation cost of the transition has to be less than the present value of difference between transaction costs of using A and B. I tried to show that the theory may inform reformers about typical mistakes which repeat in the time and the space so often, and also to avoid and correct the mistakes. Classification of institutional disfunctions, the theories of institutional trap and transplantation of institutions, methods of constructing interim institutions and understanding general requirements to promising trajectories have to serve for these purposes and increase chances for good reform outcome.

In the second decade of 21th century, we have powerful instruments to develop the Theory of Reform, which could be implemented in the practice and would help to accelerate economic development. This theory can use many achievements of modern institutional analysis, as well as updated macro- and microeconomic disciplines. New chapters of economics such as evolutionary economics, new political economy, the theory of rent-seeking behavior, new economic geography, law and economics play particularly important role. Today we have a broad spectrum of institutional indicators, prepared by different agencies on a regular basis, and numerous case studies, which are well documented and partially analyzed. The huge data base is being studied by means of well developed econometric methods. We have good chances to create helpful manuals for reformers. Besides that, we should understand what kind of infrastructure is necessary to conduct reforms successfully (Tinbergen’s problem!). I think that each country should have a network of state and private firms, which specialize in the designing of reforms for different sectors of the economy and social subsystems. Institutions for broad discussions of the reform projects and for their selection have to be developed. Most important reforms should be results of interactions among representatives of government, business,

universities and research institutes as well as civil society. This would give us a chance to improve the world.

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