

SOCIO-ECONOMIC DEVELOPMENT STRATEGY

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Institutions of Catching-up Development (On the Project of a New Model for Economic Development of Russia)*



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Abstract. The article shows that institutional trajectories of catching-up development in successful countries including similar interim institutions; this similarity is explained by common technological, institutional and cultural limitations which need to be taken into account and overcome. Corporatism, indicative planning, the availability of the “general” development agency with broad mandate, undervalued exchange rate – these and some other mechanisms provide the countries of the “economic miracle” with an opportunity to initiate and maintain rapid economic growth despite the low level of human capital, underdeveloped civic culture and market failures. Institutions of catching-up development contributed to the formation of collaborative relations between the government, business and society. They eased the limitations and were gradually modified, providing a transition to modern democracies with efficient market economy. The conducted analysis helps outline a plan for an institutional reform taking into account Russia’s institutional features. The principles of administrative reform are considered. The author also sets the objective of forming a “hybrid” system of national planning which includes indicative planning

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and program budgeting. A combination of public-private partnership and program financing is proposed for the financing of the planned projects. The author proposes to use Japanese experience of promoting temporary association of companies for the development of modernization projects. The principles of reforming the systems of state property and science management are discussed.

Key words: interim institution, social values, democratization, national planning, assimilation of technology, public-private partnership, project financing.

Introduction

In the last 70 years only a few countries managed to work an “economic miracle” and achieve rapid economic growth of over 7% per year – for 15–30 years. These countries include five Asian “tigers” and Malaysia, Western European countries that were previously lagging behind (Spain, Greece, Ireland), and war-ravaged European economies (France, Germany). Despite radical differences almost all these countries, aiming to build modern market mechanisms, carried out institutional reforms on the uniform principles. More precisely, they formed institutional pathways that contained several similar intermediate institutions¹. The most important of them are indicative planning and the general (federal) agency for development (FAD), the national innovation system focused not so much on the creation of innovations as on borrowing more advanced technology and methods for economic management, and a system for funding large-scale projects. Financial systems in the countries with successful catch-up development had significant common features. In particular, they relied

predominantly on the banking system rather than financial markets; banks had closer ties with the firms that borrowed loans from them, closer than in developed countries; the policy of central banks was synchronized with macroeconomic and industrial policy of the government and, as a rule, aimed to maintain an undervalued real exchange rate of the domestic currency.

This research relies on the hypothesis that the observed similarity of the institutional structure can be explained by the specifics of goals and technological, institutional and cultural barriers in the countries with catch-up growth. Improving the quality of life is a complex multi-criteria task for advanced countries, it requires costly search for innovation; opportunities for planning are very limited here. The quality of life for an economy whose lagging is very significant is closely related to GDP per capita, and the main way to raise it, according to Alexander Gerschenkron, is to borrow technology and practices of economic management. A relative simplicity with which the goal is formulated and the availability of information about major ways to achieve it are factors that predetermine a fundamental possibility of efficient planning and identify other

¹ About the concept of intermediate institution see: V.M. Polterovich (2007).

above-mentioned institutional features of countries that worked “economic miracle”. Below, their experience is considered in light of the hypotheses formulated, and on this basis we outline the principles of institutional reform in Russia given the specifics of the Russian economy, current state of Russian institutions and civic culture.

Two concepts of catch-up growth

In order to understand the controversy about the ways to reform the Russian economy that has been going on for a quarter century, it is advisable to consider two types of institutions – competitive market institutions (CMI) and catch-up growth institutions (CUGI). Institutions of the first type, in my opinion, are those that ensure the high quality of competitive environment: protection of property rights, antitrust regulation, low barriers to entering the market, low levels of corruption, etc. Their effective operation requires the high level of civic culture. Institutions of the second type are intermediate. Their purpose is to provide rapid economic growth in conditions of cultural, institutional and technological limitations typical of developing countries. At the same time they mitigate these limitations, creating conditions for their own modification adapted to new conditions. Thus, CUGI are used as building blocks for constructing an institutional pathway that provides transition to a developed economy with high-quality institutions of the first type.

Among the restrictions that have to be considered and overcome in this process, features of civic culture are the most inertial ones. Paternalism, passivity, disrespect for the law, low level of generalized trust, short horizon for decision-making, fear of risk and uncertainty, and inability to cooperate – these traits are incompatible with competitive market institutions that ensure the efficiency of modern advanced systems. Experience shows that attempts to introduce radical improvements to CMI under these constraints are inefficient. However, this point of view still finds influential supporters in Russia (see, in particular, Akindinova et al., 2016)². Their “recipes” are reduced to privatization of state property and alleviation of the “burden on business” by reducing social spending (establishment of “legitimate institutions for co-financing social benefits with citizens”, p. 32). The authors pin special hopes on the introduction of a defined contribution pension system and on increasing the retirement age, since they consider these mechanisms to be “institutions of long-term money” (p. 24). Here they ignore the experience of dozens of countries that carried out similar reforms and failed. In particular, when a defined contribution system was adopted in Latin American countries, a significant proportion of workers moved to the informal sector (see discussion and references: Polterovich, 2012b).

² A.A. Kudrin supports similar concept (2016). We will return to the discussion of his program in Sections 8 and 14.

The concept of shock treatment for improving market institutions does not take into account the fact that some types of market failures play a particularly important role in developing economies. As a result of a low level of generalized trust, short-horizon decision-making, and fear of risk, firms are reluctant to undertake long-term investments. A short horizon leads to serious errors. Thus, the failed diversification of the Russian economy in the 2000s was largely caused by the fact that the market signals directed investment primarily to the mining sector.

In decision-making, “technological horizon” is of great importance along with time horizon. Sustainable catch-up growth is based on technological advancement. In the simplest cases, mastering new technology in one of the vertices of the production graph does not involve changing technology in adjacent vertices. However, these options seldom lead to a rapid growth in productivity. “Breakthrough” projects usually require simultaneous technological advance in the chain of related industries. In order to circumvent this difficulty, the formation of new or significantly updated sectors often relies on imported materials and equipment, as well as on external demand; import substitution and a shift to domestic supplies occur gradually and with a significant lag. It is possible to accelerate this process and overcome potential difficulties associated with import purchases and limited external demand only with the help of large-scale

projects that are rare even in a developed market environment. Such projects require coordinated efforts of many actors, a high level of mutual trust, sufficiently long horizon for decision-making, and a reliable lending system. In order to implement such projects in developing economies where there are no such prerequisites, it is necessary to create special intermediate institutions that ensure coordination under the auspices of the state.

Forming intermediate institutions is akin to inventing, because it requires taking into account the specifics of a given country. However, when we analyze the experience of successful economies that achieved “economic miracle”, we can see that a certain set of institutions and management methods was used by almost all of them to maintain rapid growth. It is natural to assume that this similarity is due to common technological, institutional and cultural constraints that had to be addressed and handled. One of the goals of the present study is to consider such institutions, this work complements a number of our previous works (see, in particular: Polterovich, 2016).

It is important to note that catch-up growth institutions mitigate cultural constraints in two ways. First, they form the framework for interaction contributing to the development of civic culture. Corresponding examples will be given below. Second, they initiate and support the growth that has a positive impact on civic culture.

Corporatism as an intermediate institution

Attempts to promote democracy in developing countries often cause a drop in production and the return to an authoritarian regime. It is outlined in Inglehart, (2000) that “mass values and attitudes have a decisive influence on the survival of democratic institutions in society” (p. 225). Objecting to an idea that the introduction of democratic institutions in itself leads to the development of democratic values, the author writes about Russians: “Having moved toward democracy in 1991, they did not... start to trust each other more, nor did they become more tolerant, or post-materialists to a greater degree. In general, they moved in an opposite direction” (p. 227).

A crucial question is how to avoid such consequences. In this regard, it is worth noting that modern economic growth under any political regime requires a high level of education and rationality; and raising the well-being inevitably leads to increasing the importance of post-materialistic values and, then, eventually, to the development of democracy (Inglehart, Welzel, 2010, p. 561).

Democratization was successful in the countries which from the very beginning formed a political system corresponding to paternalistic expectations. For instance, in East Asia, consolidating efforts during the process of reforms relied on a “merger” of the state apparatus and business in

the framework of corporatist regimes that gradually transformed from state corporatism to societal corporatism (Unger and Chan, 2015). Corporatism is understood as a system of political and economic decision-making based on the interaction between state and organizations representing interest groups (primarily workers and employers). Comparative systems include a wide range of systems, from Francoist Spain to the Nordic countries and Austria in the post-war years. As a rule, within such regimes, the reforms were initiated by a strong leader (Park Chung-hee in South Korea, Lee Kuan Yew in Singapore, and so on), who managed to create a cohesive team of administrators focused on the tasks of promoting growth, in accordance with one of the principles of “developmental state” formulated by Chalmers Johnson (Johnson, 1999). Other principles of effective governance in catch-up countries noted by Johnson are also borrowed from the experience of successful corporatist regimes: sufficient decentralization, evaluation of performance of officials at all levels of the hierarchy for their achievements in promoting economic growth, and subordination of foreign policy to the tasks of economic development.

The role of the state in the framework of successful corporatist regimes declined gradually, simultaneously with changes in mass culture, so that these regimes transformed into modern democracies.

National planning system and the federal agency for development

In conditions of a poorly developed institutional environment the market itself cannot cope with the task of generating large-scale efficient projects. This is due primarily to a high uncertainty caused by considerable volatility of market situation – fluctuations of prices and exchange rates, lending terms, volatility of demand, and the unpredictable behavior of the state and partners. Distrust is combined with a low level of negotiability rooted not only in these objective circumstances, but also in the flaws of business culture. Another obstacle lies in the lack of information about cutting-edge technology due to the low level of human capital and objective difficulties in obtaining this information.

In the simplest situations the change in technology by one enterprise does not affect subcontractors. However, such development opportunities are quickly exhausted. Accelerated borrowing requires simultaneous change in complementary technology in different parts of production graph. At low levels of generalized trust and in the presence of paternalistic expectations, complementarity is an insurmountable obstacle for the market, but not for planning.

It is no coincidence that almost all the countries that achieved “economic miracle” used indicative planning in one form or another. Not only did it help overcome the above-mentioned market failures, but it also greatly influenced

popular culture. Here is what Pierre Masse, a Frenchman who created indicative planning, wrote: “A plan is worked out through concerted efforts of the representatives of economic and social forces: civil servants, managers (agricultural, industrial, commercial), trade unions and employees. This collaboration provides more coherent forecasts and solutions and creates a sense of unity contributing to the implementation of the plan” (Masse, 1965).

Currently, several successful economies such as Ireland, China, India, Malaysia, and Saudi Arabia have indicative planning systems. Departments responsible for this process usually try to involve business associations and representatives of civil society in it; they initiate public discussions in order to raise the level of trust in the reforms planned, and hence to the respective power institutions. As shown in Horváth (2012), promoting trust speeds up economic growth.

Each of the national planning systems currently existing in various countries represents one or another version of a synthesis of two basic mechanisms: universal and program planning (Polterovich, 2015). The former, usually implemented in the form of indicative planning, aims to achieve accelerated and balanced development of sectors and regions through large-scale investment projects; it requires a hierarchy of specialized planning institutions to be formed. The latter, widely spread in the form of program budgeting, uses

a relatively small number of programs addressing key economic issues to promote development; the programs are designed and implemented by ministries and agencies that also carry out management. National planning in developing countries tends to be of the first type, and in the developed ones – the second type.

In Russia, both types of systems are formed simultaneously, these two processes being unrelated to one other. The elements of indicative planning are actually contained in several legislative acts, the most important of which are Federal Law 115-FZ of July 20, 1995 “On state forecasting and programs for socio-economic development of the Russian Federation” and Federal Law of the Russian Federation No. 172-FZ of June 28, 2014 “On strategic planning in the Russian Federation”. The law introduces elements of rolling planning, points to the need for coordination of plans and forecasts at the federal and regional levels. It also provides for the involvement of citizens, economic entities, trade unions, employers, non-governmental and scientific organizations in the process of strategic planning³. In July 2016, an important amendment (Article 18.1) on the formation of a strategy for scientific and technological development of the Russian Federation was introduced in the law.

Simultaneously with the formation of a universal-type planning system in Russia,

a system for program budgeting was designed. In 2007, budgeting horizon was increased from one to three years. Several documents regulating the elaboration and evaluation of state programs were adopted (Khrustalev et al., 2013, pp. 49-78).

The main objective of national planning is to initiate and select large-scale projects for production modernization with the subsequent control of their implementation. It requires coordinated work of many ministries and departments. Therefore, in almost all successful catch-up economies this work was led by the structure that reported directly to the head of the government: the General Planning Commissariat under the French Government, MITI in Japan, the Council for Planning in Ireland, etc. Ministries’ interests do not coincide, and in the absence of such an agency it is difficult to consolidate efforts necessary to ensure rapid growth under tough administrative competition.

It is necessary for Russia to complete the formation of a mixed national planning system (NPS) that integrates planning and budgeting (and NIS – see below) and includes iterative formation of short-, medium- and long-term plans at the regional and federal levels. It is necessary to abolish excessive documentation, develop a uniform methodology for designing strategies and forecasts of funds distribution among budget items. It is necessary to create a special agency subordinate directly to the Chairman of

³ Find a more detailed analysis in: Polterovich (2015).

the Government. Let us call it the Federal Agency for Development (FAD)⁴. It is possible to use the agencies for development that already exist in most of the regions (regional agencies for development, RAD) and make them regional offices of FAD by reorganizing them in a necessary way. RAD, therefore, will be simultaneously subordinate to FAD and to regional administrations. It is necessary to use a standard apparatus for making forecasts and evaluating plans, which would be based on modern methods of data presentation and calculations (social accounting matrix, computable general equilibrium models, and econometric models).

We emphasize again that our approach is based on a non-standard understanding of a “planning unit”, which we consider to be not a company, but a major project. This will help overcome the “curse of dimensionality”: in a market economy it seems unlikely that it would be possible to establish smooth communication between all, even relatively large, firms. We understand the planning task as a task of assembling a rational dynamic portfolio of projects, consistent with financial constraints and influencing production system parameters. Here one can use ideas developed in the management theory by many projects (see links in Sandru et al., 2015).

⁴ It is worth noting that the Law of 2014 discussed above mentions “a federal executive authority responsible for drafting state policy and legal regulation in the sphere of analysis and forecast of socio-economic development”.

Various forms of state support of the planned projects (see below) should be provided for; as a rule, however, state participation should not be dominant. The percentage of budget funds spent on supporting the plans and designing the planned indicators, as well as the functions of FAD, should be reduced as Russia gets closer to advanced countries in terms of technology.

Apparently, the Russian government has become aware of the need to create a state authority that would engage in project selection and would be independent of the ministries. This is evidenced by the fact that on June 30, 2016 the Presidential Council for Strategic Development and Priority Projects was formed “to promote cooperation between the federal bodies of state power, bodies of state power of subjects of the Russian Federation, bodies of local self-government, non-governmental associations, scientific and other organizations in addressing issues related to strategic development of the Russian Federation and implementation of priority projects” (Decree..., 2016). However, so far, the Council can at best be seen as a first step toward the creation of FAD. The Council does not have its own financial resources to create an institution engaged in systematic work on the initiation, formation and selection of large-scale projects and development of plans on their basis. The majority of tasks that such a structure should deal with have not even been set out. Coordination

issues have been submitted to the level of vice-premiers and key ministers, and there are serious doubts concerning the possibility of settling the disputes efficiently. It is suggested that the first “package” of projects should deal with health, education, housing construction and housing and utilities. As for industrial modernization tasks, they are mentioned only briefly.

The role of the state in the economy and management of state property

Corruption of government officials is one of the most popular arguments in favor of privatization. This argument, however, is untenable for several reasons. First, officials are representatives of the very culture that dominates the society and to which entrepreneurs and managers belong as well. Given the fact that they too can have disrespect for the law and a propensity to misappropriation of the rent, it is not clear why these traits should be less pronounced after privatization. Second, corruption and inefficiency of the government inevitably affect the process of privatization, which provides special opportunities for rent appropriation. Third, state-owned enterprises can serve as an important tool of industrial policy, ensuring the formation of new industries, mastering new technology and management methods. Experience of fast-growing countries confirms these considerations. Thus, high corruption was observed in Korea during the period of

the country’s rapid growth. At that, state investments, including the budget, state-owned enterprises and state-controlled enterprises, accounted for an average of slightly less than 38% of all investment in 1963–1979 (Kim, 1991, Table 3-1). Moreover, the government significantly limited the scope of decision-making for private enterprises. For example, in Korea in 1966, about 40% of all transactions were subject to state price control in one form or another (Kim, 1991, section 3B). Experience shows that the role of the state in the economy should be reduced gradually, in proportion to the accumulation of market competencies and improvement of mass culture. At that, each act of privatization or nationalization should be accompanied by detailed substantiation (Polterovich, 2012a, 2013, 2016).

National innovation systems: efficient borrowing

According to Alexander Gerschenkron, developing countries have a chance to catch up with developed ones with the help of “advantage of backwardness” – an opportunity to borrow technology and economic management methods developed and proved efficient in more advanced countries. However, this opportunity is not implemented automatically, its implementation requires a system of appropriate institutions and sound economic policies (Wong et al., 1999; Kayal, 2008). As already mentioned,

quick borrowing requires simultaneous changes at various points of the production graph. Market agents do not initiate such projects, especially in the context of a short planning horizon and mutual distrust. Their formation is the main task of the national planning system (NPS) and, in particular, of FAD. At this, NPS needs to work closely with NIS, the institutions of which – technology parks, free economic zones, etc. – should be formed to facilitate the borrowing of technology in the first place.

Speaking about the policy of borrowing, one should keep in mind the following processes and tools that help influence a country's absorptive capacity (Polterovich, 2009b):

- regulating the import of new equipment and technology, purchase of licenses and tariff policy;
- regulating foreign direct investment in domestic economy and abroad, and the rules of formation of joint ventures;
 - promotion of outsourcing;
 - mastering new methods of production organization as a result of competition on the world market;
 - cooperation with foreign specialists: training and internships abroad, inviting foreign professors, joint research;
 - prevention of brain drain, encouraging the return of compatriots who have been educated or obtained work experience in the West;
 - participation of the state in the acquisition of patents;

- promoting research on identifying the most efficient ways of borrowing (see Section 7);

- promoting technology diffusion – transfer of technology between Russian companies.

The experience of the countries with the “economic miracle” confirms the critical role of borrowing (see, for example, Odagiri, Gotō, 1996). Their particular importance for developing countries is emphasized in a World Bank study (World Bank, 2008, p. 14). In this regard, the question of foreign direct investment deserves special attention. As shown by numerous studies, their impact on economic growth in a recipient country is ambiguous. This may explain the policy of Japan, which, having launched economic spurt in the mid-1950s, used strict state control of foreign direct investment up to the end of 1960-ies. Thus in 1956–1963, foreign investors pledged to invest in the Japanese economy the profit and revenue from the sale of property in Japan (Odagiri, Gotō, 1996, p. 40).

In order to intensify technological upgrade, the Japanese government supported the establishment of temporary research associations of firms belonging to any one or related industries; the firms teamed up to master new technology, creating common labs or executing different works within a joint project. A significant part of government grants and subsidies were allocated to support research associations (Odagiri, Gotō, 1996, pp. 52-56).

Thanks to this mechanism, borrowed or newly created technology was diffused without additional costs.

Of course, as they were approaching the cutting edge of technological border, all successful countries gradually shifted to an innovative path of development, which, however, does not rule out borrowing (see references: Polterovich, 2009 and contemporary literature review in Benhabib, Perla, Tonetti, 2014).

In the “economic miracle” countries, the strategy of borrowing at a certain point matched with export-promoting policy. This allowed exporters to master new technology without waiting for the emergence of internal demand for relevant products, and to expand domestic sales gradually. Unfortunately, today, due to political constraints this approach cannot be used in full. Therefore, special importance is attached to integrated projects that involve the development of domestic demand for new products and nationwide distribution of experience acquired by companies. Development institutions should be focused on the solution of this problem. High differentiation of Russian firms in terms of technology (Kuznetsov, 2014) provides an opportunity to implement this policy. Successful import substitution is unlikely to be established without integrated projects and active diffusion.

Such a system at the regional level could be based on efficient cooperation in the following chain:

*regional authority – regional agencies for development – business associations – firms*⁵.

Regional agencies for development are widely spread around the world. Nowadays, there are more than 60 of them in Russia, and they function in the majority of regions. About 40% of all industrial enterprises are included in at least one association (Kuznetsov, 2014, p. 77). Thus, there is reason to expect successful implementation of this idea.

Shaping a modern sector for science and enhancing human capital

In order to develop NIS and the planning system, it is necessary to establish a modern sector of science that contains all the necessary intermediate links between fundamental and applied research: academic institutions, research centers at universities, sectoral research institutes, and research departments in large firms. Furthermore, it is necessary to elaborate a large-scale program for enhancing human capital. Like many developing countries, Russia is experiencing an acute shortage of qualified personnel, exacerbated by the brain drain. Meanwhile, the ongoing reforms in education and science not only fail to solve the problem, but make the situation even worse. In its current form, it is yet another naive attempt to transplant American institutions, the attempt that is doomed to fail. In Russian conditions, there is no reason to expect that universities

⁵ See: Polterovich (2011).

will become efficient centers for basic research, thereby replacing the Russian Academy of Sciences, and that at the same time they will become major carriers of research findings to production (one of the reasons is high teaching load). Continuing to pursue this policy will doom any long-term modernization program to failure.

The task for universities is to provide the economy with highly-qualified personnel. In order to design modernization projects it is necessary to establish a network of industry-specific research and design institutes. Such networks exist in Sweden, Norway, Denmark, Finland, and Germany, where “companies usually cooperate with institutes when they need directly applicable knowledge and with universities in order to obtain human resources” (Arnold et al., 2007).

The reform of academic science has come to a standstill. Instead of the promised liberation from economic concerns and bureaucratic work, academic institutions are piled with paperwork and reports. In addition, it turned out that the “two keys” policy could not be implemented because officials want to control science and the Presidium of the Russian Academy of Sciences remains passive. It is necessary to carry out a new reform of RAS which would focus on attracting young professionals, and subordinating the FANO to the new Presidium.

Education reform that has been carried out for more than fifteen years proves

inefficient and costly. One of the most important reasons for its failure lies in the naive ideas about the possibilities of “free market”. The reformers believed that the introduction of payment for education must improve its quality through competition between institutions and more careful selection of educational institutions by students. However, it has been found that an important role in the market of educational services belongs to “conspicuous consumption”: a significant share of high school graduates care more about getting the certificate of higher education from a prestigious university rather than the knowledge they obtain in the course of education. In the 1990s, the market responded to this demand through the emergence of many educational institutions that actually offer diplomas for sale. The ease with which they can be obtained attracted new consumers to this market⁶. A subsequent inefficient equilibrium – an institutional trap – is supported by the principle “money follows the student”, according to which many universities are willing to lower their requirements: they admit weak students and do not expel underachievers. An additional factor in a “bad equilibrium” is an extremely low salary of teachers contributing to the aging of the teaching staff and a slow updating of training programs.

⁶ In 1992 in Russia there were 2.7 million students, and in 2008 – 7.5 million (Klyachko, 2013, p. 34).

The processes described above were accompanied and supported by declining quality of school education due to low salaries of teachers and faulty reforms, primarily, an inept implementation of the unified state exam. The reformers ignored the extensive experience of other countries (see the analysis and references: Polterovich, 2012c), and now have to deal with “unexpected” negative effects for many years. Declining quality of school education clearly demonstrates by the data given by Klyachko (2013, p. 25). The proportions of students whose performance at the unified state exam in the Russian Language and in Mathematics was unsatisfactory increased, respectively, from 7.9 and 20% in 2006 to 11.2 and 23.5% in 2008. In 2009, the authorities had to reduce the pre-determined minimum acceptable performance levels for each mark (from “excellent” to “unsatisfactory”) for both exams.

The education system in Russia needs to be reformed. Of course, it is necessary to continue raising teachers’ salaries and to expand opportunities for pre-school and school education. In addition, it is advisable to include the following suggestions in the agenda.

A. Providing all universities with the right to determine the passing score as a weighted sum of their own exams and the unified state exam. In this case the weighting coefficients should be chosen independently within the restrictions established for each university.

B. Modernization of training programs.

C. Empowerment of teachers (advanced training courses, work trips to the best Russian and foreign educational institutions).

D. Shutting down educational institutions of extremely low quality on the basis of an anonymous examination of their programs and classes.

An important aspect in improving human capital is the adequate reaction of the educational system to changes in the structure of needs. In this regard, it is necessary to establish a system for lifelong learning and continuous monitoring of the labor market (Denisova, 2010).

Exchange rate as a tool of industrial policy and the problem of inflation

Policy of maintaining a low real exchange rate that promotes exports and import substitution was a common practice for successful East-Asian economies in 1960–1990 (Page, 1994, p. 239). Modern China tries to adhere to it as well. Despite its costs and high levels of corruption and lobbying unregulated at the legislative level, the policy proves more efficient than selective methods of industrial policy, such as tariff regulation. The paper (Polterovich, Popov, 2016) provides arguments in favor of this policy in modern Russia. This policy, generally speaking, is contrary to the goal of inflation targeting proclaimed by the Central Bank of Russia. The Central Bank and Alexei Kudrin set a goal of the price increase being not more than 4% per

year. However, this goal is not substantiated and in fact has no sufficient basis.

It is well known that inflation, either too low or very high, is unfavorable for growth. Thus, the relationship between inflation and growth has a threshold character. Numerous studies (see references: Polterovich, 2006; Polterovich, Popov, 2016) show that the threshold is higher for developing countries than for developed ones. The numerical estimates vary, but most authors get a value of about 10% per annum or higher. The majority of successful economies began their rapid growth with double-digit inflation; its subsequent decline was the result of economic growth.

If the task of reducing one-digit inflation is not set out, then the second task – reduction of the budget deficit to 1% – proclaimed by Alexei Kudrin to be the central one loses its meaning. There is no reason to believe that even a greater temporary deficit is incompatible with economic growth. But the reduction of budget expenditures, proposed as the base scenario, can permanently hamper economic growth.

Combining public-private partnerships and project financing

Thorough and comprehensive assessment of projects' efficiency is of particular importance in the planning process. For this purpose, in the framework of FAD it is necessary to assemble a group of professional consultants and develop a unified evaluation methodology, which

ensures comparability of the effects for diverse projects (to the extent possible). It is necessary to establish the standards for independent examination. Using preferential interest rates in project financing is appropriate only provided that efficiency is high. On the other hand, restrictions on the growth of money supply should not be too severe, because one should not hamper the financing of the projects that are efficient a priori.

The financing of planned projects can be accomplished with the help of various schemes, and the role of the state can vary from a 100% coverage of costs to partial guarantees on loans. In our opinion, one of the most attractive schemes is public-private partnership combined with project financing. In the last fifteen years, this model became popular in Western countries, where it is used mostly for infrastructure projects (Yescombe, 2015; Delmon, 2015). However, essentially, nothing prevents its use for production modernization projects. Cooperation between the state and the bank in the assessment and monitoring of a project can significantly reduce the risks, and the basic principle that consists in repaying the loan at the expense of the project profit will make it possible to regulate money supply in the country.

Policy of low inequality

As noted in Page (1994, p. 222), rapidly growing countries of South-East Asia combined rapid sustainable growth with a very low level of inequality. Low inequality

creates conditions for rapid growth in the number of reasons. First, it contributes to social peace, providing *ceteris paribus* a relatively low share of the poor and creating a feeling of justice of the system, and “legitimacy of rules and institutions”. Thus cooperation between the state, business and society is facilitated. Second, lower income differentiation *ceteris paribus* is associated with lower levels of corruption (You, Sanjeev, 2005), which is especially important when civic culture is underdeveloped. Third, low inequality increases the demand for domestic goods, since most affluent consumers are focused on imports. Of course, the inequality must not be too low so as not to inhibit incentives to work.

Role of cooperation and social capital enhancement

“As a concrete example of late development, the case of Japan differs from Western market economies, Communist dictatorships, or new states of the postwar world. The most significant difference is that the government in Japan pursued economic policy in cooperation with the private sector... This model turned out to be the most successful strategy for planned development in history. It is reproduced today in the industrializing countries of East Asia: in Taiwan and South Korea, and also in Singapore and other countries in South and Southeast Asia” (Johnson, 1982). We have noted above that this cooperation was the basis of the idea of “developmental state”

and its institutions such as indicative planning. In different countries it was implemented in the framework of other structures, initially based on paternalism and trust of a small scope with its gradual increase. In this regard, it is necessary to mention institutions such as the system of lifetime employment and the main bank system in Japan and other East Asian countries (Wu , Yao, 2012), municipal enterprises in China, construction and savings banks in postwar Germany and Austria (Polterovich, Starkov, 2007).

An example of “economic miracle” achieved through liberal policy can be found in Ludwig Erhard’s reforms in post-war West Germany. Indeed, Erhard did not use indicative planning; however, the role of the state in the process of transformations initiated by Erhard was not reduced to the formation of competitive market institutions. Suffice it to say that the liberalization of prices began in Germany only in 1948, and until 1952, the government controlled the prices of most important goods – essential commodities, steel, coal etc. In 1948–1960, the government had almost 44% of all net savings. In order to select the most important and effective projects, the Central Capital Market Committee was established, it worked closely with investors, providing loans at the rates twice below market rates for the implementation of selected projects (Stolper, Roskamp, 1979). The success of Erhard’s reform was achieved through gradualist approach

and active redistributive social policy that ensured support of the population.

Major directions of the forthcoming institutional reform in Russia

The analysis carried out in the work leads to the hypothesis that the task of catch-up growth cannot be solved with the use of standard tools of economic regulation alone. It is necessary to restructure the entire system of institutions ensuring the formation and implementation of large-scale modernization projects. The experience of the “economic miracle” countries and the analysis of Russia’s institutional specifics suggests the following main areas of such restructuring⁷.

- Modernization of administrative management: formation of a team of fellow-thinkers in the upper echelons of power (instead of a structure based on the principle of “checks and balances”); inclusion of business and society in the system of management; evaluation of higher administrators’ performance according to their contribution to growth (and not according to the degree of loyalty); regional decentralization.

- Formation of a national planning system based on the interaction between state, business and society, for the iterative development and coordination of targeted programs, short-, medium - and long-term plans⁸.

⁷ Due to the limited volume of the article not all of these areas have been discussed above.

⁸ Of course, Russia should not copy the institutions that exist in the countries of the “economic miracle”. Specifics of establishing a system for national planning in the Russian context is discussed in: Polterovich (2015).

- Improving absorptive capacity of the country and the formation of NIS to adopt technology with a gradual transition to innovation development.

- Development of the scientific sector and streamlining the interaction in the chain: basic science – applied science – development institution + R&D departments of large firms. Universities and the lifelong learning system are to provide this chain with highly qualified personnel. Updating and restoring the Russian Academy of Sciences.

- Education reform: granting the right to all universities to determine the passing score as a weighted sum of their own exams and the unified state exam; modernization of training programs; empowerment of teachers; shut down of educational institutions of extremely low quality on the basis of anonymous examination of their programs and classroom activities; development of the system for lifelong learning and continuous monitoring of the labor market.

- Creating a system that combines budget financing, public-private partnership and project financing of the scheduled projects. Formation of temporary unions (associations) of firms and providing them with funds on a competitive basis for the development of modernization projects.

- Establishment of a Federal Agency for Development subordinate directly to the Head of the Government, for the purpose of managing the system of national planning, NIS and institutional reforms.

- Modernization of state property management: formulating a mission for each state-owned enterprise, large-scale sale and purchase of shares only on the basis of appropriate project validation.

- Changing the policy of the Central Bank: focus on growth, rather than on lowering one-digit inflation. Maintaining a stable low real ruble exchange rate through the accumulation of reserves, and (or) reduction of the key interest rate.

- Reducing income inequality through progressive taxation and excise duties on luxury items.

- Establishing national construction savings banks, regional and corporate programs helping employees to purchase housing⁹.

- Gradual improvement of market institutions along with the improvement of civic culture and welfare.

Of course, this list is not complete. In addition, each of these sections of the program needs detailed elaborating in accordance with the current state of Russian institutions and civic culture.

It is important to note that this project does not propose shock therapy. In its main points it requires the completion of the reforms that are already underway, which increases its chances of success.

About the program of the Stolypin club

The program described above develops a draft of the institutional reform proposed in the papers (Polterovich, 2009, a, b; 2010) and in the monograph Polterovich

⁹ See: Polterovich (executive editor; 2015).

(exec. ed.; 2010). In these works and in some of our subsequent publications we spoke about the formation of a system for interactive growth management (SIGM); the previous section essentially elaborates the structure and functions of this system¹⁰. The program of the Stolypin club, “Economics of growth” (Stolypin club, 2015, 2016) contains a number of similar proposals. However, between the approach that we propose and the “Economics of growth” there are important differences that I would like to emphasize in a hope that the following comments will be further considered by the developers.

A. Indicative planning is not reduced to an “electronic system” whose main task is to forecast, as you can tell from the program text. This is the mechanism for initiation and selection of major projects, as well as a powerful tool to improve business environment – to strengthen trust, reduce uncertainty, increase the horizon of decision-making and reconciling interests.

B. The use of the growth rate of the number of productive jobs¹¹ that the program proposes as the primary criterion of effectiveness, in my opinion, is incorrect for three reasons. First, this index does not consider the costs of job creation. Second, it encourages “fragmentation” of the most effective jobs: it is more profitable to have two jobs than one job that produces greater

¹⁰ In particular, the work (Polterovich, 2010) emphasizes that in a period of stagnation of Western economies it is advisable to rely on import substitution (p. 15).

¹¹ For a considerable number of companies this indicator is equal to the number of new jobs that provide value-added per employee above a certain threshold.

value added. Third, this criterion gives an advantage to firms with a very low number of jobs.

C. There is no reason to believe that in the near future small and medium-sized enterprises can become the main drivers of growth. The experience of the countries of the “economic miracle” and the data of surveys of Russian enterprises show that large companies are better at borrowing, and cooperation with them is an important factor in the stable development of SMEs.

D. There exists an opinion that the “Economics of growth” offers to increase the money supply as an antidote. This understanding should be ruled out. Perhaps the reason lies not only in the speeches of some members of the Stolypin club, but also in the fact that the proposed funding scheme of projects has nothing to do with the process of their selection within the planning system; a link to project financing in our situation does not look like a reliable guarantee of projects’ efficiency.

E. It is necessary to supplement the Program with sections on NIS, on science and education, and on the problems of privatization. In our current environment it is necessary to emphasize the relevance of borrowing and to consider the appropriate mechanisms; the policy of “stimulating” innovation leads to nowhere, given the fact that there is no demand for innovation; such a policy gives rise to manipulation and inefficiency.

F. Some of the program suggestions are not coordinated with each other. For example, rightly rejecting the reduction of

inflation as a prime goal, the authors proclaim the need for market lending rates amounting to 4–5%, which does not make sense for non-priority projects with inflation of more than 4%; it is Alexei Kudrin’s suggestion that such a rate be achieved.

It is not clear what the purpose of the proposed tax on foreign currency loans is: these loans make it possible to finance the purchase of foreign equipment without the risk of inflation.

On methodological errors in the development of reforms

It should be noted that the program put forward by Alexei Kudrin and the program of the Stolypin club contain some of the same methodological errors. One of them is pointed out by P.A. Minakir: both programs provide for the achievement of a balanced budget at the expense of the population, which will reduce demand for goods and thus cause the inhibition of growth (Minakir, 2016). Decline in welfare usually entails increasing social tensions, rising crime rate, expansion of the shadow economy and, therefore, deterioration of the institutional climate and decrease in tax collection. But it deprives Kudrin’s program of the only tool it proposes to initiate growth and negates one of the main sources of growth specified in the program of the Stolypin club – a decline in the shadow production. Thus, both programs ignore the most important requirement for any reform: the need to form positive institutional expectations.

Both programs do not use the achievements of the economic science to justify their regulations, nor do they use the research on the strategies of catch-up growth in successful countries. Thus, their confrontation turns into a “struggle of opinions”. This results in a negative consequence such as an incorrect comparison of Russia with developed countries¹². Both programs rely on innovation development, ignoring the fact that the lack of “demand for innovation” in Russia is typical of the current stage of Russia’s technological and institutional development. Accordingly, none of the programs attaches due importance to the crucial factor in overcoming stagnation – effective development of large-scale borrowing projects and diffusion of technology. At the current stage, this goal should underlie all institutional transformations. As experience shows, it is hardly achievable with the use of material incentives only. In order to overcome mistrust and start the process, the state should be initiator and participant of such projects.

Speaking about the general shortcomings, we cannot but underline a fun-

¹² Thus, in the work “Economics of growth” (2015) on p. 34 we read that in Russia “in 2014 ...interest rates on loans were significantly higher than the rates in other developed countries”. And here is an argument in favor of low inflation: “Neither the G7 members, nor China allow high inflation” (Kudrin, 2016, p. 12). Note that since the mid-1990s China has been accumulating gold and foreign currency reserves, and thus promoted economic growth and ran the risk of accelerating inflation. In February 2008, prices in China rose by nearly 9% compared to February 2007, but inflation in general remained low due to economic growth.

damental difference of the programs discussed. The reforms proposed by Kudrin focus solely on improving competitive market institutions. Experience suggests that such a strategy has little chance of success. The program of the Stolypin club, without denying the importance of competitive market institutions, is based on improving catch-up growth institutions and is, therefore, more promising.

Conclusion

As it is emphasized in the work (Polterovich, 2014), it is necessary to distinguish between investments in the level and investments in long-term growth rate. The increase in growth rate can be achieved by creating effective mechanisms for technological progress. Therefore, it is not just about regulatory measures, but primarily about the formation of institutions that contribute to technological evolution and rapid growth of physical and human capital. Countries that successfully implement catch-up growth were distinguished by the fact that they managed to build such institutions. This view is close to the idea of Chalmers Johnson concerning the feasibility to distinguish between regulatory state and developmental state.

The paper made an attempt to unite and develop the idea of institutional reforms in Russia, described in the work (Polterovich, ed.; 2010) and in several subsequent works based on analysis of institutions in the countries of the “economic miracle”. We

proposed the principles of administrative reform. The issue of formation of a national planning system was formulated as a task of creating a mixed system that includes indicative planning and program budgeting. The proposed system for financing planned projects was specified: here we speak about a combination of public-private partnership and project financing. It was proposed to use the Japanese experience of stimulating association of firms for the formation of modernization projects. The principles of reforming the system of state property management and the science sector were formulated.

Each of these ideas needs to be thoroughly elaborated. Their full implemen-

tation is likely to take 3–5 years. However, it is necessary to design the reform in such a way that positive changes could be observed during the very first year. Such effect is possible. It is well known, for example, that the process of drawing up plans, if it is not implemented by firms specifically hired for this purpose, but by the performers, forces them to take a new look at routine processes of production, stimulates the search for new solutions. It is necessary to improve the standard of living as soon as possible, even if this improvement is small. If after making such efforts the citizens believe in the reform, it will significantly increase the likelihood of its success.

References

1. Akindinova N., Ya. Kuz'minov, E. Yasin (2016). *Ekonomika Rossii: pered dolgim perekhodom* [Russia's economy: Before the long transition]. *Voprosy ekonomiki* [Voprosy ekonomiki], no. 6, pp. 5-35. (In Russian).
2. Polterovich V.M. (Ed.), Denisova I.A. (2010). *Sistema podgotovki kadrov kak zveno modernizatsionnoi politiki* [Personnel training system as an element of modernization policy]. *Strategiya modernizatsii rossiiskoi ekonomiki* [Russian economy modernization strategy]. Saint Petersburg: Aleteiya. (In Russian).
3. Yescombe E.R. (2015). *Gosudarstvenno-chastnoe partnerstvo. Osnovnye printsipy finansirovaniya* [Public-private partnership. Principles of policy and finance]. Moscow: Al'pina Publisher. 457 p. (In Russian).
4. Klyachko T.L. (2013). *Obrazovanie v Rossii: osnovnye problemy i vozmozhnye resheniya* [Education in Russia: main problems and possible solutions]. Moscow: Izdatel'skii dom "Delo" RANKhiGS. 48 p. (In Russian).
5. Kudrin A.L. (2016). *Ob istochnikakh ekonomicheskogo rosta (v perspektive do 2025 g.)* [On the sources of economic growth (up to 2025)]. *Tezisy doklada, predstavlennye na zasedanii prezidiuma Ekonomicheskogo soveta 25 maya 2016 g.* [Report proceedings presented at the Economic Council Presidium meeting, May 25th, 2016]. Available at: <http://polit.ru/article/2016/06/01/theses/> (In Russian).
6. Kuznetsov B.V. (Ed.). (2014) *Ocherki modernizatsii rossiiskoi promyshlennosti. Povedenie firm* [Essays on the modernization of Russian industry. Companies' behavior.]. Moscow: Izd. dom VShE. 399 p. (In Russian).
7. Minakir P.A. (2016). *O strategiyakh rosta rossiiskoi ekonomiki* [On the growth strategies of the Russian economy]. *Prostranstvennaya ekonomika* [Spatial economics], no. 2, pp. 158-167. (In Russian).

8. Polterovich V.M. (2006). Snizhenie inflyatsii ne dolzhno byt' glavnoi tsel'yu ekonomicheskoi politiki Pravitel'stva Rossii [Lowering inflation must not be the main objective of the Russian economic policy]. *Ekonomicheskaya nauka sovremennoi Rossii* [Economics of contemporary Russia], no. 2, pp. 40-48. (In Russian).
9. Polterovich V.M. (2007). *Elementy teorii reform* [Reform theory elements]. Moscow: Ekonomika. 447 p. (In Russian).
10. Polterovich V.M. (2009a). Gipoteza ob innovatsionnoi pauze i strategiya modernizatsii [The innovation pause hypothesis and the strategy of modernization]. *Voprosy ekonomiki* [Voprosy ekonomiki], no. 6, pp. 4-23. (In Russian).
11. Polterovich V.M. (2009b). Problema formirovaniya natsional'noi innovatsionnoi sistemy [The problem of creating a national innovation system]. *Ekonomika i matematicheskie metody* [Economics and the mathematical methods], no. 2, pp. 3-18. (In Russian).
12. Polterovich V.M. (Ed.). (2010). *Strategiya modernizatsii rossiiskoi ekonomiki* [The strategy of Russian economy modernization]. Saint Petersburg: Aleteiya. 424 p. (In Russian).
13. Polterovich V.M. (Ed.). (2010). *Strategiya modernizatsii: vykhod iz krizisa na traektoriyu bystrogo ekonomicheskogo rosta* [Modernization strategy: resolving the crisis by achieving rapid economic growth]. *Strategiya modernizatsii rossiiskoi ekonomiki* [The strategy of Russian economy modernization], Saint Petersburg: Aleteiya. 424 p. (In Russian).
14. Polterovich V.M. (2011). Regional'nye instituty modernizatsii [Regional modernization institutions]. *Ekonomicheskaya nauka sovremennoi Rossii* [Economics of contemporary Russia], no. 4(55), pp. 17-29. (In Russian).
15. Polterovich V.M. (2012a). Privatizatsiya i ratsional'naya struktura sobstvennosti. Chast' 1. Privatizatsiya: problema effektivnosti [Privatization and rational ownership structure. Part 1. Privatization: issues of effectiveness]. *Ekonomicheskaya nauka sovremennoi Rossii* [Economics of contemporary Russia], no. 4 (59), pp. 7-23. (In Russian).
16. Polterovich V.M. (2012b). O stimulirovanii nakoplenii i semeinoi pensii [Stimulation of savings and the family pension]. *Zhurnal Novoi ekonomicheskoi assotsiatsii* [Journal of the New Economic Association], no. 3 (15), pp. 187-189. (In Russian).
17. Polterovich V.M. (2012c). Proektirovanie reform: kak iskat' promezhutochnye instituty [Reform Design: How to Search for Interim Institutions]. *Montenegrin Journal of Economics*, volume 8, no. 2, special issue, pp. 25-44. (In Russian).
18. Polterovich V.M. (2013). Privatizatsiya i ratsional'naya struktura sobstvennosti. Chast' 2. Ratsionalizatsiya struktury sobstvennosti [Privatization and rational ownership structure. Part 2. Ownership structure rationalization.]. *Ekonomicheskaya nauka sovremennoi Rossii* [Economics of contemporary Russia], no. 1 (60), pp. 7-24. (In Russian).
19. Polterovich V.M. (2014). Promyshlennaya politika: retsepty ili instituty? [Industrial policy: recipes or institutions?]. *Zhurnal Novoi ekonomicheskoi assotsiatsii* [Journal of the New Economic Association], no. 2(22), pp. 190-195. (In Russian).
20. Polterovich V.M. (2015). O formirovanii sistemy natsional'nogo planirovaniya v Rossii [On the formation of national planning system in Russia]. *Zhurnal Novoi ekonomicheskoi assotsiatsii* [Journal of the New economic association], no. 2 (26), pp. 237-242. (In Russian).
21. Polterovich V.M. (Ed.). (2015). *Korporativnye programmy pomoshchi sotrudnikam v priobretenii zhil'ya: problema vybora institutsional'noi struktury* [Home purchase assistance programs in corporations: a problem of institutional design]. Moscow: TsEMI RAN. 81 p. (In Russian).
22. Polterovich V.M. (2016). Instituttsional'nye reformy i grazhdanskaya kul'tura [Institutional reforms and civic culture]. *Doklad na XVII Aprel'skoi mezhdunarodnoi nauchnoi konferentsii po problemam razvitiya ekonomiki i obshchestva, NIU VShE, 19–22 aprelya 2016 g.* [Report at the 17th April International Scientific Conference on the issues of society and economy development, National Research University Higher School of Economics, 19–22 April]. Available at: <https://www.hse>.

- ru/data/2016/06/21/1116116733/%D0%98%D0%BD%D1%81%D1%82%D0%B8%D1%82%D1%83%D1%86%D0%B8%D0%BE%D0%BD%D0%B0%D0%BB%D1%8C%D0%BD%D1%8B%D0%B5%20%D1%80%D0%B5%D1%84%D0%BE%D1%80%D0%BC%D1%8B.pdf (In Russian).
23. Polterovich V.M., Popov V.V. (2016). Valyutnyi kurs, inflyatsiya i promyshlennaya politika [Exchange rate, inflation and industrial policy]. *Zhurnal Novoi ekonomicheskoi assotsiatsii* [Journal of the New Economic Association], no. 1 (29), pp. 192-198. (In Russian).
 24. Polterovich V.M., Starkov O.Yu. (2007). *Formirovanie ipoteki v dogonyayushchikh ekonomikakh: problema transplantatsii* [Mortgage formation in catching-up economies: the problem of transplantation]. Moscow: Nauka. 196 p. (In Russian).
 25. Stolypinskii klub [Stolypin club] (2015). *Doklad "Ekonomika rosta" [Report "Growth economy"]*. Available at: http://expert.ru/data/public/499741/499785/dir-polnaya-versiya-19_10_15.pdf. (In Russian).
 26. Stolypinskii klub [Stolypin club] (2016). "Ekonomika rosta". *Srednesrochnaya programma razvitiya ekonomiki. Kratkaya versiya. Mart 2016* ["Growth economy". A medium-term program of economic development. Short version. March 2016]. Available at: <http://stolypinsky.club/economica-rosta/> (In Russian).
 27. *Ukaz Prezidenta Rossiiskoi Federatsii № 306 "O Sovete pri Prezidente Rossiiskoi Federatsii po strategicheskomu razvitiyu i prioritetnym proektam" (2016). Iyun'* [Decree of the President of the Russian Federation No. 306 "On the Presidential Council for Strategic Development and Priority Projects", dated June 2016]. Available at: <http://kremlin.ru/events/councils/by-council/1029/52504> (In Russian).
 28. Khrustalev A.A., Tishchenko T.V., Sokolov I.A. (2013). *Issledovanie vliyaniya programmogo tselevogo podkhoda na byudzhetni protsess, puti sovershenstvovaniya metodologii i informatsionnoisistemy formirovaniya byudzhet, orientirovannogo na rezul'tat* [The research of the impact of program targeted approach on budget process, ways of improving the methodology and information system of results-oriented budgeting]. Moscow: RANKhiGS. 93 p. (In Russian).
 29. Benhabib J., J. Perla, Ch. Tonetti (2014). Catch-up and fall-back through innovation and imitation. *Journal of Economic Growth*, no. 1, pp. 91-35.
 30. Delmon J. (2015). Creating a Framework for Public-Private Partnership Programs: A Practical Guide for Decision-makers. *World Bank, Washington, DC*. Available at: <https://openknowledge.worldbank.org/handle/10986/22822>
 31. Horváth R. (2012). Does Trust Promote Growth? *IES Working Paper 9/2012*. IES FSV. Charles University. 33 p.
 32. Inglehart R. (2000). Globalization and Postmodern Values. *The Washington Quarterly*, volume 23, no. 1, winter, pp. 215-228.
 33. Inglehart, R., C. Welzel (2010). Changing Mass Priorities: The Link between Modernization and Democracy. *Perspectives on Politics*, no. 8 (2), pp. 551-567.
 34. Johnson Ch. (1982). *MITI and the Japanese Miracle: The Growth of Industrial Policy, 1925–1975*. Stanford University Press. Kindle.
 35. Woo-Cumings M. (Ed.), Johnson Ch. (1999). The Developmental State: Odyssey of a Concept. *The Developmental State*. Ithaca, N.Y.: Cornell University Press. Pp. 32-60.
 36. Kayal A.A. (2008). National innovation systems a proposed framework for developing countries. *Int. J. Entrepreneurship and Innovation Management*, no. 8(1), pp. 74-86.
 37. Kim K. S. (1991). The Korean Miracle (1962–1980). *Revisited: Myths and Realities in Strategy and Development. Working Paper no. 166* – November, Kellogg Institute. Available at: <https://kellogg.nd.edu/publications/workingpapers/WPS/166.pdf>
 38. Masse P. (1965). The French Plan and Economic Theory. *Econometrica*, volume 33, no. 2.

39. Odagiri Hiroyuki, Akira Gotō (1996). *Technology and industrial development in Japan: building capabilities by learning, innovation, and public policy*. Oxford: Clarendon Press; New York: Oxford University Press. 40 p.
40. Page J. (1994). The East Asian Miracle: Four Lessons for Development. In: Fischer S., Rotemberg J.J. (Eds.). *NBER Macroeconomics Annual*, volume 9, January, pp. 219-282. Available at: <http://www.nber.org/books/fisc94-1>
41. Stolper W. F., Roskamp K.W. (1979). Planning a Free Economy: Germany 1945–1960. *Zeitschrift für die gesamte Staatswissenschaft* [Journal of Institutional and Theoretical Economics], volume 135. no. 3, pp. 374-404.
42. Sandru M., Pirnea I. C., Purcarea A., Surugiu I., Schmid J. (2015). Study On The Multi-Project Management Practices for Complex Investments. *Amfiteatru Economic*, 17 (special No. 9), pp. 1314-1330.
43. Unger J., Chan A. (2015). State Corporatism and Business Associations in China: A Comparison with Earlier Emerging Economies of East Asia. *International Journal of Emerging Markets*, volume 10, no. 2, pp. 178-193.
44. World Bank (2008). Global Economic Prospects. Technology Diffusion in the Developing World. Washington DC. *The International Bank for Reconstruction and Development*. 201 p.
45. Wong P. et. al (1999). *National Innovation Systems for Rapid Technological Catch-up: An Analytical Framework and a Comparative Analysis of Korea, Taiwan, and Singapore, paper presented at the DRUID's summer conference, 1999, Rebild, Denmark*. 32 p.
46. Wu X., Yao J. (2012). Understanding the rise and decline of the Japanese main bank system: The changing effects of bank rent extraction. *Journal of Banking & Finance*, volume 36, issue 1, pp. 36-50.
47. You Jong-sung, Sanjeev Khagram (2005). A Comparative Study of Inequality and Corruption. *American Sociological Review*, volume 70, pp. 136-157.

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