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## Индексы международной конкурентоспособности и структурные реформы Японии<sup>\*</sup>

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**Аннотация.** Целью настоящей статьи является определение направлений оптимизации отечественных усилий по преодолению структурных проблем страны по переходу к хозяйственным порядкам, соответствующим «Индустрии 4.0», используя для этого анализ опыта Японии, накопленный за последние десятилетия, и информации индексов международной конкурентоспособности.

Актуальность данной темы связана с универсальным характером таких структурных проблем, а потому возможностью для России обратиться для их решения к опыту аналогичных попыток мировых лидеров, таких как Япония, а также определить целесообразность использовать для этого индексы международной конкурентоспособности. Соответственно, были исследованы основные индексы международной конкурентоспособности и динамика их значений для Японии, сопоставленная с национальной политикой по преодолению структурных проблем. В результате был сделан вывод, что и эти проблемы, и политика по их преодолению слабо отражались в указанных индексах в течение последних лет, показывающих благоприятное положение национальной экономики. Они не учитывали скрытых структурных противоречий и их развитие, что в конечном счете было чревато для конкурентоспособности страны. В этих условиях государство вынуждено было искать пути формирования новой экономический структуры, игнорируя индексный инструментарий.

Такое заключение было важно для решения аналогичных проблем в России. Незавершенный характер поисков Японии по преодолению структурных проблем заставлял учитывать трудности осуществления такой политики, чтобы не повторять ее ошибок. Положительные же оценки экономического положения страны в индексах международной конкурентоспособности говорили о необходимости осторожно относиться к ним, так как они не отражали риски консервации прежней структуры производства с последующей утратой лидерства.

**Ключевые слова:** индексы международной конкурентоспособности; индекс глобальной конкурентоспособности Всемирного экономического форума; индекс конкурентоспособности ЮНИДО; индекс конкурентоспособности обрабатывающей промышленности DeloitteToucheTohmatsu; индекс конкурентоспособности по издержкам в обрабатывающей промышленности BostonConsultingGroup; абэномика.

## The International Competitiveness Indexes and the Structural Reforms in Japan\*\*

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<sup>\*</sup> Статья подготовлена по результатам исследований, выполненных за счет бюджетных средств по Государственному заданию Финансового университета при Правительстве Российской Федерации на 2017 г. в части проведения научно-исследовательской работы по теме «Совершенствование механизмов государственного регулирования промышленного развития, направленного на повышение конкурентоспособности отечественной продукции».

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**Abstract.** The Purpose of the article is to determine the directions of the optimization of national efforts to overcome the structural problems of Russia to transit to the Industry 4.0 economic order taking into consideration the Japanese experience accumulated in the last decades and the information of indexes international competitiveness.

The relevance of the theme is due to the universal character of such a structural problem and thus to the opportunities for Russia to apply to the attempts of Japan to resolve them being the country one of world leaders as well as to make use of the international competitiveness indexes for the same purpose.

These were analyzed with the respective dynamics of their values for Japan compared with the national policy to overcome the structural problems. It proved these problems and the policy to overcome them to be poorly reflected by the indexes pretending the latter to show a positive situation of the national economy of the last decades. The indexes did not reflect the hidden contradictions of the economic structure fraught finally for the national competitiveness. Under such circumstances, the State was to seek the ways to form a new economic structure ignoring the index instruments.

This conclusion resulted valuable to resolve the similar problems in Russia. The unfinished search of Japan for a structural problem solutions made one to consider the difficulties to implement such a policy not to repeat its mistakes. Meanwhile the positive evaluation of the economic situation in Japan presented by the international competitiveness indexes proved it necessary to treat them cautiously since these didn't reflect the risks to conserve the elder production structure with the consequent loss of leadership.

**Keywords:** the Global Competitiveness Index of World Economic Forum; the Competitive Industrial Performance Index of UNIDO; The Global Manufacturing Competitiveness Index; BCG Global Manufacturing Cost-Competitiveness Index; Abenomics.

he current trend of national competitiveness intensification is aggravated seriously with the global transition towards a new economy based on modern processes of digitalization, technological convergence, innovations and entrepreneurship. It implies a new logic of micro- and macro- subjects' performances threating their welfare if these are late to transform their production patterns in line with the new challenges and provoking a respective structural gap. Such a transformation and the gap bridging is to be effectively considered by means of the economic policies.

The execution of the latter pretends to be broadly supported with various national and international data, synthesized among others in form of international competitiveness indexes. Of the most prominent of them are the IMD World Competitiveness Scoreboard and Customized Rankings (IMD index), The Global Competitiveness Index (GCI), the Competitive Industrial Performance Index (CIP index), The Global Manufacturing Competitiveness Index (GMCI) and BCG Global Manufacturing Cost-Competitiveness Index (BCG index). Rich in content and range of countries accounted they pretend to show a genuine state of world competitiveness valuable for governments, business and other stakeholders.

Thus the main objective of IMD Index is to show the relationship between a country's national environment (with the State as a key player) and the wealth creation process (of enterprises and individuals) and to measure the countries' management of all their resources and competencies to facilitate long-term value creation [1]. Reasonably the Index results with a wide-angle picture of various aspects of the international competition for resources and competences.

Similarly the GCI is to serve as a neutral and objective tool for governments, the private sector and civil society to work together on effective public-private collaboration to boost future prosperity [2]. It is to keep the competitiveness on the public agenda and to focus the society and scholars on various topics to debate on long-term competitiveness policies.

Narrowed to industrial space a CIP index pretends to be a means by which governments can benchmark and track countries' relative competitive industrial performance over time. It can be used also as a diagnostic tool to design policies and assess their effectiveness, to give governments the opportunity to view a nations' relative performance over time in the various sub-indicators of the index [3].

Last but not the least is the manufacturing competitiveness indexes which refer to the respective industrial sector as one of the most important for national

competitiveness and critical to the long-term economic prosperity and growth of the countries. Of these the GMCI pretends to facilitate business and policy-makers worldwide to know the global competitive landscape now and in five years; the manufacturers' views of the most important drivers of competition, their efforts to match them and what governments can do to improve manufacturing competitiveness [4, 5]. Different from the overall sector data of GMCI the BCG index is focused on the shifts in relative costs to drive companies to rethink their assumptions of their sourcing strategies and ways to build production capacity and the governments for their policies to provide a stable manufacturing base.

With the common objectives of the indexes the similarity of their competitiveness interpretations form a basis for the complementarity of all of them to structure an integral view of the state of a national economy and the opportunities for the development strategies by the respective governments.

Thus the IMD index is based on a broad definition of competitiveness as an extent to which a country is able to foster an environment in which enterprises can generate sustainable value creation for themselves and prosperity for its people [6]. The concept is not reduced to productivity or profits but considers the government participation to thrive in the long term thus to share the wealth created, insure an adequate health or education infrastructure and maintain political or social stability.

The GCI interpretation of competitiveness discloses the importance of the institutions, policies and other environment factors to impact the productivity of the economy, long-term growth and prosperity that a country can achieve.

The CIP index which applies the industrial mesoconcept of competitiveness focuses on the capacity of countries to increase their presence in international and domestic markets by means of developing industrial sectors and activities with higher value added and technological content [3].

The interpretations of competitiveness in GMCI and BCG indexes are a bit more intuitive and define it by means of its impact factors. Thus the former states that to understand and explain better the dynamics of a country's overall manufacturing competitiveness, one must examine two major and inextricably linked forces — market and government. (The two are determined directly from the survey responses, assigning a single number for each country reflecting its relative

attractiveness in terms of manufacturing.) The latter focuses on "the heart of the competitiveness" for the manufacturing operators with the accounting of the main costs components and their principle factors together to form the frame concept of cost competitiveness in manufacturing.

Structured on such a common basis but with various methodologies the indexes are to facilitate the judgement of the structural problem of the Industry 4.0 transition and the elaboration of the economic policies to overcome it in various countries.

Of the most promising cases of such and opportunity development is the case of the competitiveness policy in Japan by means of which the government seeks to facilitate a transition mentioned and thus to consolidate the nations' world leadership for more than two decades.

In view of a long period the country ranked among the most advanced nations after the international competitiveness indexes and without any important particular feature to aggravate additionally its structural problem the analysis of the nations' political efforts to overcome it in lens of the indexes would help to judge the opportunities to use the letter to resolve the problem as well as the instruments of the former to apply by other nations in view of the similar problem. (In this article we assume the terms of industrial, structural, economic, competitiveness and growth policies as identical because of the identity of its structural problem in view and a subjective character of the differences of their speculative interpretations.) For Russia these arguments are complemented with importance of manufacturing development which is of the special significance in Japan treated as a second world best manufacturer after the USA with more than 20% of its GDP, almost 17% of the total work force and 80% of exports [7].

Thus after the IMD index calculated for the 60 economies with more than 260 variables and ranked criteria Japan results rather far from the best placed 22d — 27th in the 21st century to fix the 26th in the years of 2016 and 2017. Still at mid 00s the authors of the index actually asserted its insufficiency because of its statement of the "number one position" of Japan in the early 90-s with the competitiveness "unassailable, with a strong domination in economic dynamism, industrial efficiency and innovation" [8]. But as stock market broke down in 1989, followed by land prices in 1992, banks in mid 90s and credit crunch in 1998 the index went down.

By that time the limited prognosis capacity of this index instrument was explained actually not by the policies identification and benchmarking in the index but by the capacity of the country to adapt them to its own environment and balance the economic imperatives imposed by world markets with the social requirements of a nation formed by history, value systems, and tradition. Without them the execution of the policy and the drastic economic results escaped from the index and thus affected its efficiency.

The moderate competitiveness ranking of Japan after the IMD Index differed radically from its evaluation in terms of GCI. For the years of 2006/7-2016/7 the country was among the top ten world economies to occupy the  $10^{th}$ – $6^{th}$  places in the respective ranking of more than 130 countries [2]. The positive evaluation of the Japanese competitiveness confirmed the values of sectoral indexes. After CIP Index the country was ranked between the first and the third one for more than 140 nations stabilizing its position as the 2d after Germany in the 2d half of 00-s and 10-es. The similar conclusion provided the GMCI based on the survey of more than 400 senior manufacturing executives opinion worldwide data inform of 25 component indicators from 40 countries. After it Japan kept among the best 10 world competitors in manufacturing with the 4th-10th rows in 2010-2016 and was expected to continue with the same position till the end of the decade [5]. This statement was partly confirmed by the BCG Index data which revealed some shifts in relative costs of Japanese manufacturers in 2004–2014 but still indicated the country to continue with the same ranking by 2018.

The positive values of indexes mentioned diverged radically from the political-economic approach focused on the structural difficulties of Japanese economy. Its first symptoms manifested themselves in the decade of 90s of 20th century and were intended to be resolved with the successful policies of the previous decades. But these applied in 90s resulted in sufficient to overcome the structural problems formulated by that time in terms of the difficulty to transit from a "strongly state-influenced model of economic development" to a "more market-driven decentralized approach" more adequate to the imperatives of the digitalization of the economy and thus to the perspectives of the Industry 4.0 consolidation [9]. The new environment required new modes of business performance and the public policy modification which were not identified.

Unable to adapt promptly to the new imperatives the Japanese business began to erode and the selective public stimulation with some increase in output resulted vague in welfare-enhancing. The situation was aggravated by the "parochial" politics for the large declining sectors and the difficulties for the government to match the messages from domestic and international environment. All this resulted in the relative decrease of the national GDP per capita the country sliding from the 3rd place in the global ranking in 2000 to the 23d in 2008 and the decline of Japanese share of global GDP from > 14% in 1990 to < 9% in 2008 [10].

In view of such a "deadlock situation" a new complex political package to overcome it was required. Initiated by the Ministry of Economy, Trade and Industry in 2010 such a "Vision" proposal included the integral cross-cutting policies of the industrial restructuring package of competition stimulation and employment development, all easing of legal frames for corporate performance, financial support for restructuring and industrial growth; corporate tax reform; enhancement of key industrial capabilities; integration of information technologies with all industries; human resources capacity development; international strategy development, etc.

Further on in late 2012 Prime Minister Shinzo Abe unveiled the strategy with fiscal, monetary and structural policies (growth strategy) to pep up the recession-hit economy and revive Japan's competitiveness, the "Three arrows" of Abenomics. By means of the first one the government financed the building of the critical-infrastructure projects (bridges, tunnels, earthquake-resistant roads and other projects). With the second set the Bank of Japan initiated an asset purchase program combined with the liquidity injection in the economy and in 2016 pushed negative interest rates. The third element was about the slashing of business regulations, liberalizing and diversifying the labor market and agricultural sector, cuts of corporate taxes, etc.

Still 3 years after the launch of the reform the experts recognized its limited effects. In spite of the labor inputs boosted the economic growth kept quite modest (Table 1) [11, 234] and without the notable improvement of the welfare (Graphic 1) [11, 234].

Thus the per capita income remained about a quarter below the most advanced OECD countries, reflecting somewhat weak labor productivity, held back by a marked slowdown in capital accumulation. The Gap between the government spending and its tax revenues kept well pronounced. The multiplier effect of public investments was estimated to be barely above 1.0. Yen devaluation ( $\approx$ 50% against the dollar since the end of

Table1 **Economic performance indicators (const. 2010PPPs)** 

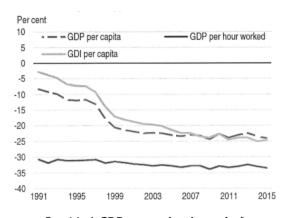
Average annual growth rates (%)		2003-09	2009-15
GDP per capita		0.1	1.4
Labour utilisation		0.3	0.6
of which:	Labour force participation rate	0.2	0.3
	Employment rate <sup>1</sup>	0.0	0.3
	Employment coefficient	0.0	0.0
Labour productivity		0.1	1.1
of which:	Capital deepening	0.4	-0.6
	Total factor productivity	-0.3	1.8
Dependency ratio		-0.3	-0.4

1. The employment rate is defined with respect to average the economically active population; a positive growth corresponds to a decline in the structural unemployment rate and vice-versa.

2012) affected slightly the foreign trade operations of the business which growth attributed more to the revival of the US economy and the stabilization of the Chinese one. Commercial banks, unwilling to pay the Bank of Japan for their deposits, resulted at an impasse with the absence of the low-risk businesses to borrow them no matter the level of the interest rates set. Blue-chips abstained from investing in spite of banking offers and enough internal reserves retained. The animation of the internal markets was much mitigated with the increase in the pro forma standard tax to make up for the decline in tax revenues due to the corporate tax reduction. The household consumer spending has not grown, the country continued with the chronic deflation [12]. For the year of 2017 the OECD estimated the economic growth of Japan to remain modest since the problems beneath the macroeconomic surface had not been resolved definitively until nowadays with the arrows of the Reform.

This situation contradicted the overall positive values of the national competitiveness indexes with the poor values of some sub-indexes balanced by others more favorable. Such a mode of accounting complicated the identification of the efficiency of structural policy measures and the very problem as well.

As per the Japanese scholars and experts such an effects of the reform were due to a number reasons. From the systemic point of view the execution of the reforms required to balance fiscal, monetary and "structural" policies. Actually it was neglected and thus violated the principle of mutual complementarity of the three



Graphic 1. GDP per capita dynamics\*

\* Percentage gap with respect to the weighted using population weights of the highest 17 rate OECD countries in terms of GDP per capita.

and of their simultaneous implementation in practice. From the point of the speed of the subjects' performance transformation an economically mature country of Japan impeded the quick effects and required the ability to see its long-term perspective. Thus the modest results of the three year reform were due to the state of the reforming technologies of the government and the incomplete readiness of business to execute the transformations in national and global context. Without being strictly formulated in terms of international competitiveness indexes these problems kept obscure and hindered these competitiveness problems of the country.

Some attempts to consider them were operated outside the framework of the indexes in form of additional comments and\or other complements. In case of BCG index, for example, it was stressed the importance of the indirect costs and risks not considered in the rating and the need for the manufacturers and their governments to factor long-term trends by means of global supply chains participation, the business model transformation and the corporate networks development to improve productivity. In case of IMD index the new index of the World digital competitiveness ranking (IMD digital) was initiated recently with the values for Japan of 20<sup>th</sup>–27<sup>th</sup> places in 2013–2017 similar to the principle index and with a tendency to worsen [13].

The content of such information correlated more with the political-economic approaches to reflex the serious state of national competitiveness in strategic perspective, to indicate the structural problems beneath and efforts to overcome them. Still the reasons of such

a situation kept unclear in the index since formally they were due to deterioration of the so called "Knowledge Factor" and its Talent sub-factors (i.e. international experience and digital technological skills). The index didn't reveal the causes and the logic of the worsening tendency in the ranking of Japanese Talent from the 28th in 2013 to the 41st in 2017 [13, 101].

The similarity of such lacunas with that of other competitiveness indexes and with more or less common initial data used the same for political-economic analysis made one focus on the differences in the principles of combination of such data in two approaches (index- and political-economic). The index' one did not consider the mechanisms of the correlation of basic elements in lens of time and space as the political-economic one did. Still the latter was more arbitrary to select the basic elements for the further deduction and the interpretation of the casual relationship between them.

The bridging of these deficiencies requires the integration of the two be it in the form of a special sup-

plement as in IMD or an integral part of the existing index. The ways of such integrations demand a special analysis of the structural problem, its forms and the attempts of overcome them in various national contexts far above Japan. To meet the challenge a broad international platform would help able to provide various stakeholders with more options to determine the structural elements of their competitiveness and the practices to factor them.

Meanwhile the analysis of the current situation proves to be effective to facilitate the solution of the similar problems in Russia. The unfinished search of Japan for such a solutions is to be considered not to repeat the mistakes of its structural policy. Meanwhile the positive evaluation of the economic situation in Japan presented by the international competitiveness indexes make it necessary to treat them cautiously since these didn't reflect the risks to conserve the elder production structure with the consequent losses in international leadership.

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