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SERVICE INDUSTRIES DEVELOPMENT AS A PRIORITY FOR NATIONAL POST-INDUSTRIAL MODERNIZATION

The article presents a two-step analysis of the services sector dynamics in selected countries along with the correlation between the national industry development indices and the dynamics rate of their macroeconomic systems modernization. The role of the national services sector in building the country's external competitiveness has been assessed. The instruments and directions of industrial relations modernization are offered.

Keywords: services; post-industrialization; modernization; internal and external competitiveness.

Катерина В. Андреева

РОЗВИТОК СФЕРИ ПОСЛУГ ЯК ПРІОРИТЕТ НАЦІОНАЛЬНОЇ ПОСТІНДУСТРІАЛЬНОЇ МОДЕРНІЗАЦІЇ

У статті представлено двоступінчастий аналіз динаміки розвитку сфери послуг в обраних країнах, а також досліджено кореляцію між показниками розвитку національної індустрії сервісу та темпами динаміки модернізації їх економічних систем. Оцінено роль національної сфери послуг у формуванні зовнішньої конкурентоспроможності країн світу, зроблено висновки щодо інструментів та напрямків модернізації виробничих відносин.

Ключові слова: послуги; постіндустріалізація; модернізація; внутрішня та зовнішня конкурентоздатність країни.

Табл. 8. Літ. 10.

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РАЗВИТИЕ СФЕРЫ УСЛУГ КАК ПРИОРИТЕТ НАЦИОНАЛЬНОЙ ПОСТІНДУСТРІАЛЬНОЙ МОДЕРНИЗАЦИИ

В статье представлен двухступенчатый анализ динамики развития сферы услуг в ряде современных стран, а также исследована корреляция между показателями развития национальной индустрии сервиса и темпами динамики модернизации их экономических систем. Оценена роль национальной сферы услуг в формировании внешней конкурентоспособности страны, сделаны выводы относительно инструментов и направлений модернизации производственных отношений.

Ключевые слова: услуги; постиндустриализация; модернизация; внутренняя и внешняя конкурентоспособность страны.

Service industries in contemporary macroeconomic systems. High shares of service industries' significance within national economic systems are not the necessary criteria for their transition to the post-industrial phase of development (Balaeva and Predvoditeleva, 2007: 27). However, this confirms the prevalence of qualitative components of the service sectors' growth as an evidence of national economy's post-industrialization. Secondly, it proves the importance of additional features of post-industrial modernization (such as transition to high-technological production, the growing role of human capital, quantitative and qualitative growth of services' value in macroeconomic systems) in determining the dynamic trends of post-industrialization (Lukhto, 2005).

In order to check this hypothesis, we can conduct here the two-step analysis of the service industries role in today's macroeconomic systems under transformation.

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At the first level we analyze the quantitative importance of services in different countries. At the second – determine the criteria of service industries’ role and value and consider their qualitative importance.

According to the UN data, we can identify the countries-leaders and outsiders by the role of service sector in GDP formation.

Table 1. Leaders and outsiders by the role of service sector in GDP formation, %, author’s own construction based on the UN and IMF data

	Country	Share of service industry in GDP		Country	Share of service industry in GDP
1	USA	80.5	58	Brazil	51
2	Luxemburg	80	59	Ukraine	51
3	France	75.8	65	KSA	46.8
4	Belgium	74.2	66	Thailand	46
5	Netherlands	73.2	67	Malaysia	45.1
6	UK	73.1	68	UAE	42
7	Latvia	73	69	Oman	42
8	Lebanon	72	71	Vietnam	38
9	Denmark	71.5	72	Indonesia	37.7
10	Sweden	70.2	75	China	31.8
43	Russia	58	77	Nigeria	26

Here and further on only 77 world countries with GDP (2013) of more than 15 bln USD according to the available statistical data are considered.

As seen from Table 1, the high share of service industries in GDP formation is typical for developed economies and also for the countries of post-socialist block (i.e. Latvia, Hungary, Slovakia, Croatia). This can be explained by intensification of the service industries transfer there (e.g., to Mexico, Costa Rica, Eastern European countries) from nearby developed countries, mostly through franchising and outsourcing; by rapid growth of tourism industries in developing countries (Turkey, Tunisia, Kenya, Eastern Europe) due to potential demand for them at tourist markets of developed states; as well as by lower entry barriers, allowing opening export-oriented service companies in developing countries (Peru, South Africa, Lebanon, Zimbabwe).

At the same time in the list of countries with the lowest services share in GDP we can see those, traditionally focused on natural resources’ extraction (Venezuela, UAE, Oman, KSA, Kuwait, Algeria); countries actively developing own industries and agriculture (China, Thailand Malaysia, Brazil), as well as the poorest or economically and politically instable countries.

Analyzing the statistics of the largest economies in the world, it is possible to track the dynamics of services industries changes in the share of countries’ GDP during 1990–2014 (Table 2).

As seen from Table 2 the largest increase in service industries shares in GDP formation in the period from 1990 to 2014 occurred in the former socialist countries, including Russia and Ukraine.

Moreover, the rates of this growth are much higher than in developed and newly industrialized countries. This can be proved by service industries rapid development within the post-Soviet space due to the undervaluation of non-production sectors in

comparison with industry and agriculture in planned economy (Ushakov, 2011). It formed the effect of "pent-up demand" for almost all types of services (from essential ones to tourism, educational, financial services; from mass demand to highly differentiated, characterized by outstanding price and quality).

Table 2. Leaders and outsiders by dynamic changes in service industries share in GDP (1990–2014), %, author's own construction based on the UN and IMF data

#	Country	Changes of service industry share in GDP	#	Country	Changes of service industry share in GDP
1	Latvia	41	59	KSA	1.8
2	Slovakia	33.7	62	China	0.8
3	Bulgaria	26	66	Oman	-1
4	Hungary	24	67	Brazil	-2
5	Kazakhstan	23	72	Indonesia	-3.3
6	Romania	23	73	Thailand	-4
7	Russia	23	74	Algeria	-6
8	Poland	22	75	Kuwait	-6
9	Ukraine	21	76	Ireland	-6.1
10	Lithuania	19.2	77	Cameroon	-16.1

The presence of Saudi Arabia, Algeria, Oman, Kuwait, Indonesia and Cameroon in the outsiders group is primarily explained by their economies' orientation on natural resources' export and by the growth of natural resources world prices (typical for a rather long period of 2000–2008) that significantly increased their mining sectors' share in national GDP.

Slight increase or even reduction of service industries' share in GDP of Lebanon, New Zealand, Ireland can be explained by its initial (in the early 1990s) high performance, and impossibility of preserving previously growing dynamics. Finally, the case of China, Thailand, Argentina, and Vietnam is explained by their economies' active industrialization and by the impact of the financial crisis in the late 1990s that reflected on all services, especially financial ones.

Similarly we can analyze the role of service sectors (Table 3), based on their shares of employed population in different countries of the world.

Table 3. Leaders by the rate of population employment in service industries (2014), %, author's own construction based on the UN and IMF data

#	Countries	Employment in service industry	#	Countries	Employment in service industry
1	Peru	79	11	Netherlands	74
2	Argentina	78	12	France	74
3	USA	76	13	Norway	74
4	Luxemburg	76	14	Kuwait	73.6
5	Singapore	76	15	Denmark	73
6	Israel	75	16	Belgium	73
7	Canada	75	17	Switzerland	72
8	UK	75	18	Venezuela	69
9	Australia	75	19	New Zealand	68.1
10	Sweden	75	37	Russia	59

By the share of population employed in the service sectors Latin American countries (which are occupying much more modest rank by the share of services in GDP) are the leaders. They are followed by dense blocks of developed states with high rates of services' share in the national production (the United States, Western Europe, Canada, and Australia).

Service industries development and the dynamics of national strategies for post-industrialization. The conducted analysis does not allow correlating the degree of national economies' post-industrialization and quantitative assessment of the role of services within them.

It is required to include certain qualitative characteristics (Demidova, 1999) in further analysis. As this aggregate index we selected labor productivity in the national service sector, calculated in USD, to demonstrate the absolute value of surplus product in services created by one employee per year (Table 4).

Table 4. The value of surplus product created by one employee in service industries of the selected countries (in 2014), 000 USD, author's own construction based on the UN and IMF data

	Countries	Value of surplus product created by one employee in service industry during one year		Countries	Value of surplus product created by one employee in service industry during one year
1	Luxemburg	60.82	11	Germany	34.98
2	Switzerland	49.72	12	France	34.95
3	Denmark	47.21	13	Belgium	34.74
4	USA	42.48	14	UK	34.5
5	Norway	39.66	15	Ireland	32.52
6	Japan	37.38	16	Italy	31.73
7	Austria	37.06	17	Australia	29.3
8	Finland	37.04	18	Canada	28
9	Sweden	35.98	19	Spain	25.09
10	Netherlands	35.8	40	Russia	5.32
70	Indonesia	1.01	74	Vietnam	0.87
71	Pakistan	1	75	Kenya	0.72
72	Sudan	0.95	76	Zimbabwe	0.64
73	Bangladesh	0.89	77	Nigeria	0.3

Obviously, leaders by labor productivity (in absolute values) in the service sectors are Western Europe, the USA, Japan, Australia – the recognized initiators and leaders in social structures' and economic systems' post-industrialization (Malysheva, 2000). Thus, the presented method of macroeconomic indicators' analysis, based on the correlation of qualitative and quantitative criteria for countries' development allows us select the world leaders and outsiders in post-industrialization processes, basing our choice on the transformation of the service sector's role within national macroeconomic systems.

Moreover, it is possible to monitor the labor productivity dynamics (that can show the rates of their macroeconomic systems' post-industrialization) (Martynov, 2005).

The correlation of labor productivity in services industries with macroeconomic indicators can be used to identify the indicator of the national service sector internal competitiveness, which reflects how labor productivity in the service industries differs from the national average (Table 5). The higher is the level of added value produced in the service sector, the higher is its internal competitiveness, industrial productivity, investments attractiveness etc.

Table 5. Dynamics of economic systems' post-industrialization (2002–2014),
author's own construction based on the UN and IMF data

#	Country	Change in labor productivity in service industry (2002–2014)	#	Country	Change in labor productivity in service industry (2002–2014)	#	Country	Change in labor productivity in service industry (2002–2014)
1	Switzerland	9.57	11	Austria	4.65	21	Slovakia	2.57
2	Denmark	7.4	12	Canada	4.3	22	Thailand	2.41
3	S. Korea	7.11	13	Sweden	4.06	23	Hungary	2.3
4	Finland	6.99	14	KSA	3.94	24	Australia	2.28
5	USA	6.41	15	Germany	3.86	25	Czech	2.26
6	France	6.25	16	Italy	3.28	26	Russia	2.17
7	Singapore	5.52	17	Latvia	3.12	27	Japan	1.88
8	UAE	5.42	18	Greece	3.08	28	Portugal	1.27
9	UK	5.22	19	Spain	2.95	29	Morocco	1.26
10	Netherlands	5.05	20	Lithuania	2.77	30	South Africa	1.1
65	Kenya	0.25	74	Vietnam	-0.09	76	Norway	-0.82
68	India	0.15	75	Brazil	-0.51	77	Israel	-2.22

Tables 6 and 7 demonstrate that different states have different sets of advantages in services production. It not only determines the level of internal competitiveness of the service industry, but also impacts service specialization within national export, and hence the country global positioning in the world trade (Astapov, 2006).

We can track the dynamics of labor productivity growth in the service sector of some countries and its internal competitiveness, comparing the figures for 1995 and 2014 (Table 7).

Every macroeconomic system has a particular set of advantages (local and global) to produce competitive services (Yasin and Yakovlev, 2004: 26–31), to form a system for effective services export, primarily through foreign demand stimulation. The study analyzed the factors of services industries competitiveness in different countries. In this analysis we took into account the following groups of factors.

1. High level of domestic demand for services (capacity of the internal services market, local population literacy, level of its awareness, demographic characteristics of population, the share of urban population).

2. Economic and social indicators of business freedom that determine the opportunities for services supply growth, following the consumer markets changes (the share of the state in the economy, the level of economic freedom, inflation, exter-

nal debt, costs of doing business in the service sector; corruption costs; investment attractiveness and liberalization of foreign investment activity).

3. Indicators of the service infrastructure development (telecommunications, technology, transport, information, trade) and countries' abilities to use specific factors of service production (especially skilled labor, package of innovation, competitive technologies).

Table 6. Service industries internal competitiveness (2014),
author's own construction based on the UN and IMF data

#	Country	Labor productivity in service industry in 2014, 000 USD	Average labor productivity in the country, 000 USD per hour	Difference between labor productivity in service industry and average labor productivity in the country, 000 USD	#	Country	Labor productivity in service industry in 2014, 000 USD	Average labor productivity in the country, 000 USD per hour	Difference between labor productivity in service industry and average labor productivity in the country, 000 USD
1	Oman	34.22	25.75	8.47	11	Latvia	8.66	7	1.66
2	Portugal	19.44	15.27	4.17	12	Slovakia	9.77	8.2	1.57
3	KSA	13.98	10.46	3.53	13	Hungary	11.59	10.1	1.49
4	Luxemburg	60.82	57.78	3.04	14	Mexico	7.84	6.5	1.34
5	Italy	31.73	28.93	2.8	15	Romania	4.65	3.32	1.33
6	Slovenia	18.73	16	2.73	16	Poland	7.69	6.37	1.32
7	Greece	21.04	18.64	2.4	17	Japan	37.38	36.12	1.26
8	USA	42.48	40.1	2.37	18	Croatia	9.67	8.5	1.17
9	Germany	34.98	33.02	1.95	19	Lithuania	8.31	7.33	0.98
10	Turkey	5.87	4.21	1.66	49	Russia	5.32	5.42	-0.09

Table 7. Dynamics of changes in national service industries internal competitiveness in selected countries (1995–2014), %,
author's own construction based on the UN and IMF data

#	Country	Dynamics of internal competitiveness of the services industry	#	Country	Dynamics of internal competitiveness of the services industry
1	India	121.74	11	Kenya	47.5
2	Bangladesh	116.67	12	Guatemala	40.44
3	Zimbabwe	81.82	13	Romania	40
4	Cote-d'Ivoire	78.13	14	Turkey	39.53
5	Cameroon	75.88	15	KSA	33.71
6	Sudan	63.64	16	Oman	32.91
7	Vietnam	58.33	17	Thailand	31.43
8	Pakistan	57.74	18	Portugal	27.27
9	Sri-Lanka	53.2	19	Latvia	23.73
10	Morocco	52.5	51	Russia	-1.69

Table 8 shows the results of the conducted analysis: countries are ranked according to the level of their national advantages in services production (Russia was taken as 1).

Table 8. Indices of socioeconomic advantages of selected countries involved in services' production (2014), calculated by the author

#	Country	Index of socioeconomic advantages of the countries producing services	#	Country	Index of socioeconomic advantages of the countries producing services
1	USA	7.5	11	New Zealand	3.41
2	Norway	5.32	12	Belgium	3.41
3	Finland	4.96	13	Japan	3.11
4	Netherlands	4.91	14	Singapore	2.99
5	Denmark	4.82	15	Israel	2.92
6	Switzerland	4.33	16	Italy	2.89
7	Sweden	4.32	17	UK	2.71
8	Australia	3.96	18	Canada	2.69
9	France	3.74	19	Germany	2.67
10	Austria	3.51	41	Russia	1

Obviously, the post-industrial world has a significant set of advantages in national services production, at times exceeding the indicators of the former socialist or newly industrialized countries. Obvious US leadership (outrunning the nearest rival by almost 1.5 times), is based primarily on the colossal (quantitatively and qualitatively) domestic demand for services and high level of service industry innovatization.

Russia falls behind not only Eastern Europe (Poland, Czech Republic, Slovakia), but also some developing economies (Thailand, Argentina, Mexico), oil monarchies (Saudi Arabia, UAE), mostly due to low indicators, first of all, for "business freedom" and national infrastructure.

Conclusions. The conducted research on the role of services in the world macroeconomic indicators and international trade development led us to the following conclusions.

The service industry shares in national employment or GDP formation are currently not the factors or criteria of countries' post-industrialization, their economic system transition to a new level of institutional relations. This is determined primarily by globalization and transnationalization allowing the formation even within the boundaries of emerging economies of high-effective export-oriented industries that exploit the advantages of local service production and are not significantly affecting social transformation and economic relations.

The analysis of qualitative characteristics of the services sector role in national economies (such as the absolute value added in services by one employee per year) allows considering the role of service sector as the determinant of post-industrialization processes. The study of these indicators' dynamics allows finding the rate of post-industrialization dynamics in today's macroeconomic systems.

The conducted analysis was based on the hypothesis that any country has a set of advantages in services production and sale at world markets and this helped identify the indicators of service industry's internal competitiveness.

In this study internal competitiveness was considered as based on the comparison of labor productivity in other sectors and in services, and the results of assessment of social, economic and demographic factors led us to the set of service production benefits.

The identified system of indices allows more realistic assessment of the role of individual countries in world services production, both in statics and dynamics, to determine the direction and the structure of world services' trade development; to monitor and predict trends at global services markets along with qualitative features and factors of national service sectors' competitiveness within the world economy.

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