

Tetiana V. Shchetylova
PhD of Economics
The Institute of the Economy of Industry of the NAS of Ukraine.
03057, Ukraine, Kyiv, 2 Gelabov Str.
E-mail: ritaira@mail.ru.
Interrelation of efficiency of industrial production restructuring, allocation of macroeconomic risks and structural shifts
Section: *Macroeconomic and regional problems of industrial development*
Ekonomika. 2017, 77(1): 5-21
Language: Russian
<https://doi.org/10.15407/econindustry2017.01.005>
Abstract:
The methodological and practical questions of a problem of structural shifts regulation for achievement of effective re-structuring of economy are the research objects of the article. Effective structural shifts are important for the crisis countries for the reason of competitiveness returning and promotion in the global value chains. It is especially important for Ukraine which aspires to become a worthy member of the European community. Determining of methodological interrelation of macroeconomic (sectoral) risks, structural shifts and efficiency of re-structuring of the industrial production and empirical check of the suggested hypotheses are the purposes of this article. The main hypothesis connects efficiency, macrovariability, diversification and/or re-structuring, and the second hypothesis connects macroeconomic risks, economy specialization, and endogenous variability. The methodological interrelation of macroeconomic (sectoral) risks, structural shifts and efficiency of re-structuring of industrial production is determined in the article. Economic-mathematical methods including the methods of vector algebra, deterministic models, analysis of variance and decomposition are applied for this purpose. Research is based on the methodological approach of identification of macroeconomic risks through variability of macroeconomic development, and methodological determination of structural effects, shifts. By means of certain structural shifts it is possible to reach effectiveness of development of industry through reduction of macroeconomic risks, increase of productivity, and effectiveness of re-structuring. Therefore the economic-mathematical conditions of achievement of effective re-structuring of economy are determined in the article. The empirical analysis of the researched methodological interrelation and hypotheses of effectiveness of re-structuring and influence of risks is carried out. The necessary conditions of growth of the aggregate productivity (taking into account migration of labour resources), increase of macroeconomic effectiveness, explicit values of employed share's reallocation in industry and economy sectors are determined as a result of the analysis. The offered rationalization of the structure of economy results not only in deduction of the average level of efficiency, but also in considerable decrease of macroeconomic risks, macroeconomic variability, increase of discrepancy of dynamic cycles of countries and sectoral shocks with bigger possibility of their mutual extinguishing. Re-structuring as a result of the analysis considerably reduces the levels of the global-sectoral risks of the world countries, in Ukraine - especially level of the idiosyncratic risk (almost in 2 times), the Herfindahl sectoral index of concentration (in 1,5 times). Such tendencies raise the

effectiveness of macroeconomic development as a whole through the efficiency of re-structuring of industrial production.

Keywords: efficiency of industrial production re-structuring, variability of macroeconomic development, macroeconomic (sectoral) risks, empirical analysis.

Full text (PDF)

References:

1. Stockman, A.C. (1998). Sectoral and national aggregate disturbances to industrial output in seven European countries. *Journal of Monetary Economics*, XXI, 387-409.
2. Obstfeld, M. (1994) Risk taking, global diversification and growth. *American Economic Review*, LXXIV, 1310-1329.
3. Greenwood, J., & Jovanovic, B. (1990). Financial development, growth and the distribution of income. *Journal of Political Economy*, XCVIII, 1076-1107. DOI: <https://doi.org/10.1086/261720>
6. Imbs, J., & Wacziarg, R. (2003). Stages of diversification. *American Economic Review*, XCIII, 63-86. DOI: <https://doi.org/10.1257/000282803321455160>
8. Koren, M., & Tenreyro, S. (2013). Technological diversification. *American Economic Review*. 103, 378-414. DOI: <https://doi.org/10.1257/aer.103.1.378>
10. Saint-Paul, G. (1992). Technological choice, financial markets and economic development. *European Economic Review*, XXXVI, 763-781. DOI: [https://doi.org/10.1016/0014-2921\(92\)90056-3](https://doi.org/10.1016/0014-2921(92)90056-3)
12. Poirson, H. (2000). Factor Reallocation and Growth in Developing Countries. IMF Working Paper, 00/94. Washington: International Monetary Fund.
13. Bloom, D.E., Canning, D., & Malaney, P.N. (1999) Demographic Change and Economic Growth in Asia. CID Working Paper, 15. Cambridge, Massachusetts: Center for International Development at Harvard University.
14. Dekle, R., & Vandenbroucke, G. (2006). A Quantitative Analysis of China's Structural Transformation (unpublished; University of Southern California). Retrieved 01 Nov. 2017, from <http://ssrn.com/abstract=902497>.
15. Geyets, V.M. (2009). The problem of the structural transformation of the economy of emerging markets. *Ekonomika ta prognozuvannya*, 1, 54-69 [in Ukrainian].
- Chukhno, A. (2007). Economic mechanism and the ways of its improvement at the present stage. *Ekonomika Ukrayini*, 3, 60-67 [in Ukrainian].
16. Osaulenko, O.G. (2000) Assessment of the effectiveness of inter-sectoral shifts in the industry in transition. *Statistika Ukrayini*, 3, 8-14 [in Ukrainian].
17. Shynkaruk, L.V. (2014). Structural and social aspects of the assessment of proportionality and disparities in economics. *Ekonomichniy visnik Natsionalnogo girnichogo universitetu*, 4 (48), 71-78 [in Ukrainian].
18. Shchetylova, T.V. (2007). Study of the relationship between the variability of economic development and macroeconomic risk: methodological aspect. *Ekonomicheskie problemy i perspektivy stabilizatsii ekonomiki Ukrainyi*. Zemlyankin, A.S. (Ed.); The National Academy of Sciences of Ukraine. Institute of economy of industry. Donetsk: IEP of the NAS of Ukraine [in Ukrainian].
19. Shchetylova, T.V. (2008). Methodological principles of variable decomposing analysis of the sources of shifts as determinants of economic development. *Modern scientific achievements: IV International Scientific and practical Conference*. (pp. 69-73) [in Ukrainian].

/> 20.Shchetylova, T.V. (2010). The influence of the determinants of shifts on the performance of the macroeconomic development of countries: an empirical analysis. Problems and prospects of cooperation between the countries of South-Eastern Europe within the black sea economic cooperation and GUAM: collection of scientific works. Istanbul-Donetsk: DonNU, RF NYSA in the city of Donetsk, 143-148 [in Ukrainian].
 21.Shchetylova, T.V. (2011). Methodological dimension of structural changes in the development of macroeconomic systems. Formuvannya merezh prikordonnogo splvrobntnitstva Ukrayini. ? Chernivtsi: CHTEI KNEU, 64-67 [in Ukrainian].
 22.Shchetylova, T.V. (2014). Variability and performance of macroeconomic development as key parameters to achieve a sustainable restructuring of the economy. Menedzhment, marketing, predprinimatelstvo: problemy i perspektivy razvitiya. Simferopol: SA "Economics", 15-20 [in Ukrainian].
 23.Shchetylova, T.V. (2009). Risks and the levels of macroeconomic development: cross-country empirical evaluation of the relationship. Zovnishnya torgivlya, 75-83 [in Ukrainian].
 24.STAN Database for Structural Analysis (2016, October). Organisation for Economic Co-operation and Development. Retrived from <http://stats.oecd.org/Index.-aspx?DataSetCode=STAN%INDICATORS>