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Recovery experiences of the Russian economy

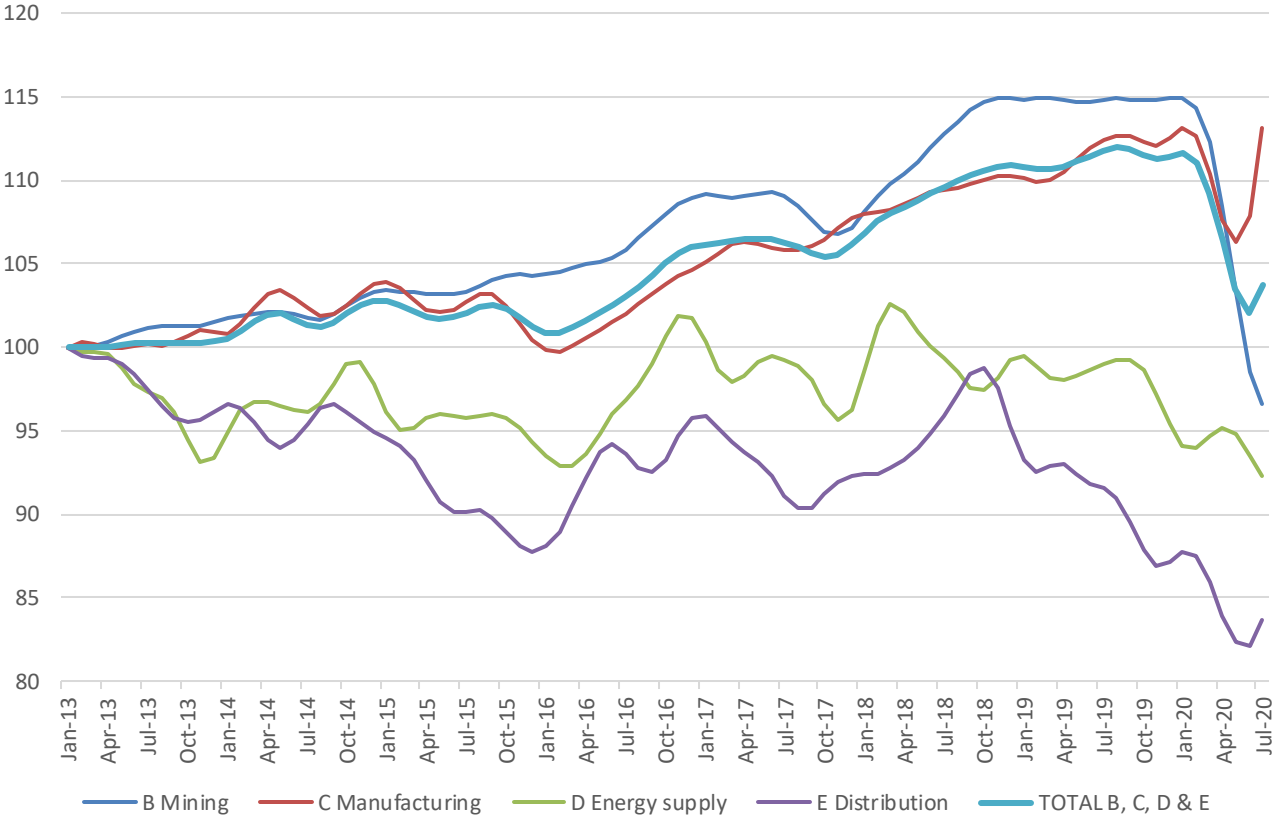
Implications to the Indian Economy

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COVID 19 in Russia: short run perspective

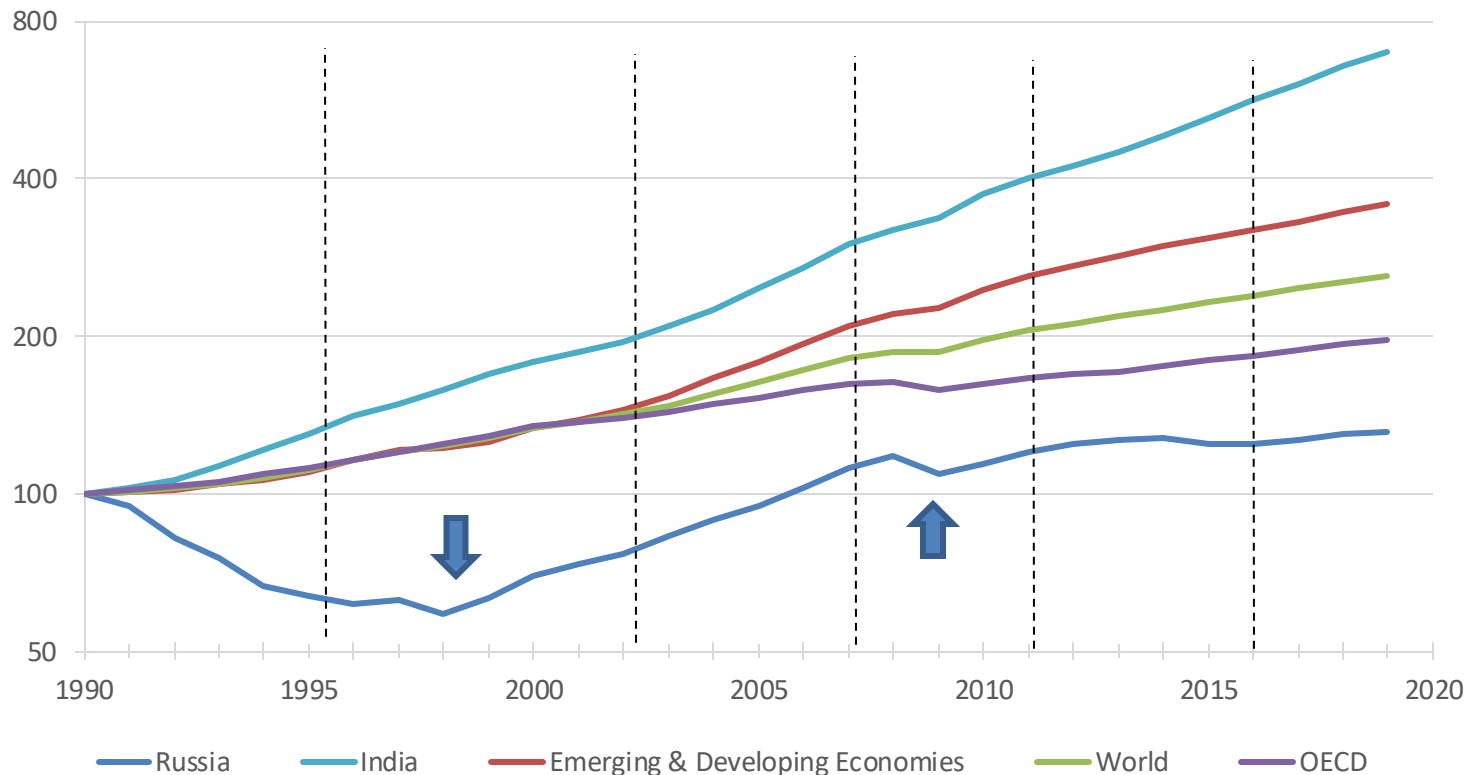


Source: Higher School of Economics; Bessonov, Baranov 2020; Centre of Development Institute



Economic growth of the global economy, India and Russia in 1990-2019 гг.

GDP in comparable prices, 1990 = 100; logarithmic scale



Source: The Conference Board Total Economy Database™ (Adjusted version), April 2019

Comments: Emerging and Developing Economies include China, India, developing economies in Asia, Latin America, Middle East, Africa, Central Asia and South-East Europe.

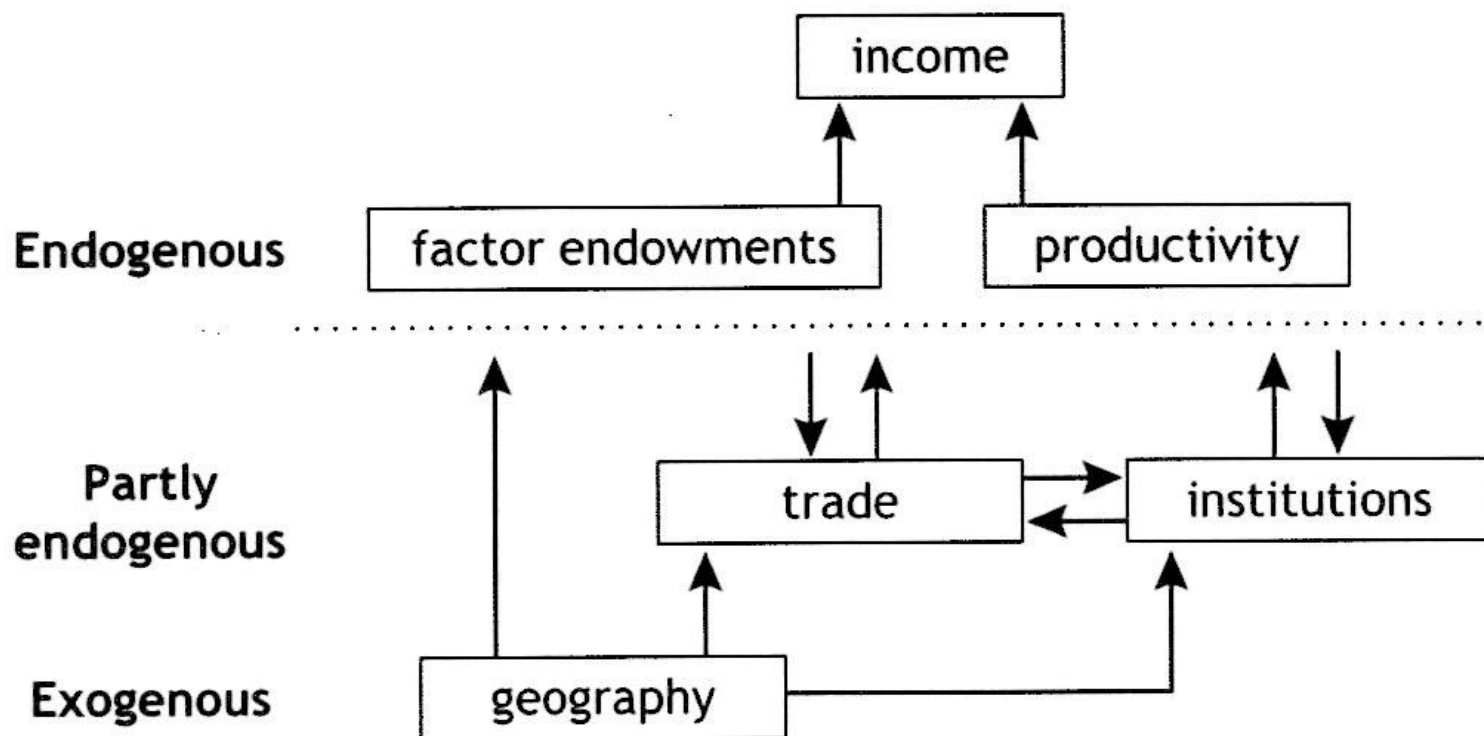


GDP fall in 2020 in Russia: projections

- -2% - HSE Centre of Development Institute
- **-5,3%** - **GDP fall in 1998**
- -5,5% - Bank of Finland Institute of Economies in Transition (BOFIT)
- -4 - -6% - Central Bank of Russia
- -6,6% - IMF (June 2020 World Economic Outlook)
- **-7,8%** - **GDP fall in 2009**
- -8% - Accounting Chamber of Russia



Sources of economic growth: conceptual framework

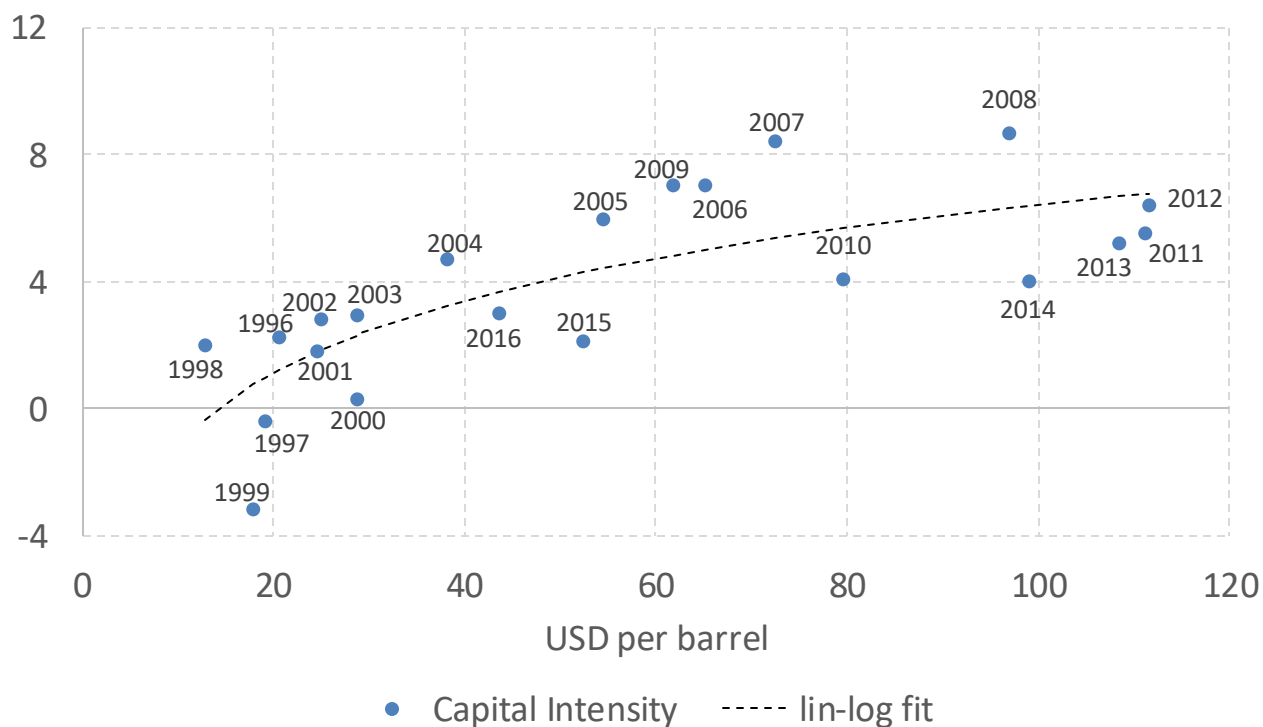


Source: Rodrik, D. (2003) (ed.) *In Search of Prosperity*. Princeton Univ. Press



Russia: capital intensity growth vs oil price levels in 1995-2016

Capital intensity growth rates (per cent per year) and the average level of oil prices

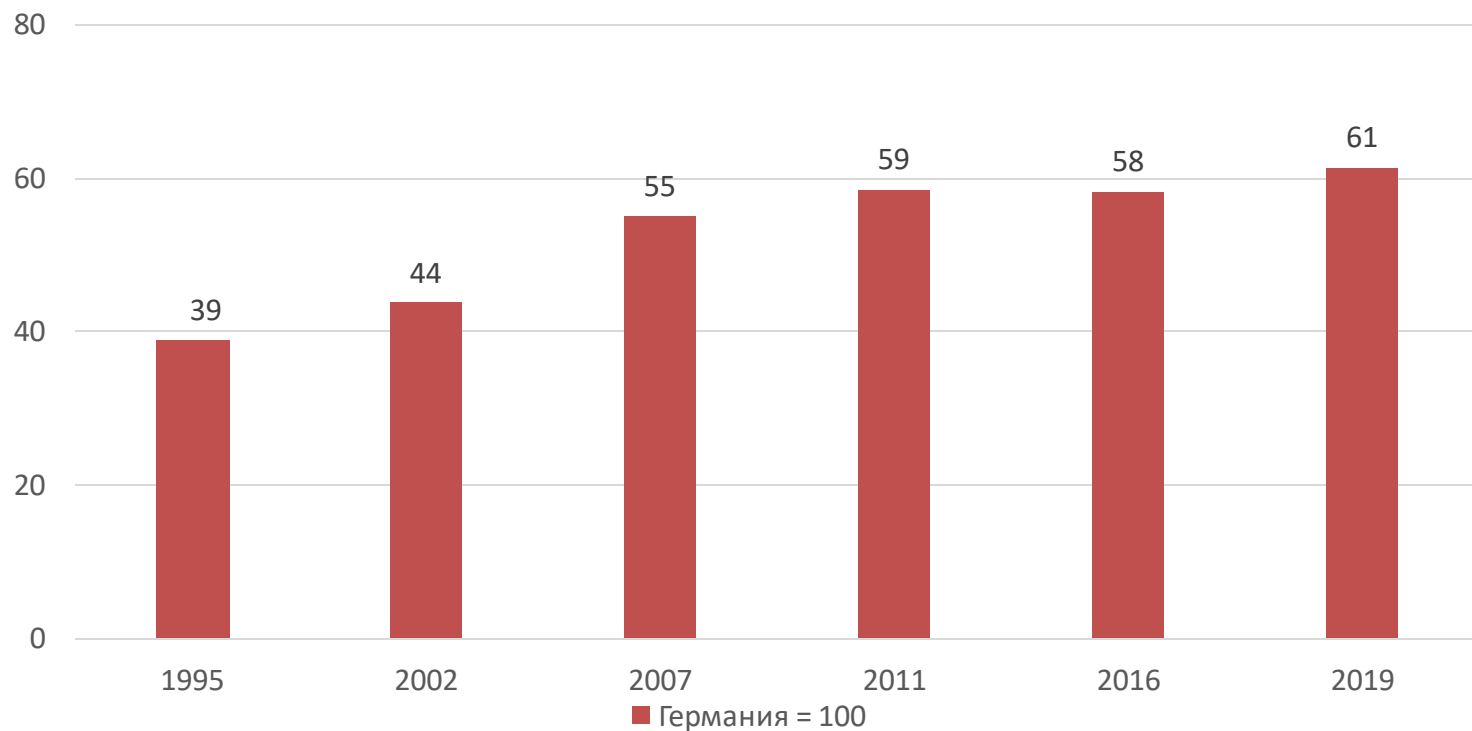


Data: Russia KLEMS; IEA



Technology catch-up: labour productivity levels

Labour productivity level of the Russian economy relative to Germany (Germany = 100)



Source: The Conference Board Total Economy Database™ (Adjusted version), April 2019



Outline

- 1. India, Russia and the Global Economy**
- 2. Structural change and productivity growth in Russia**
- 3. Endogenous sources of intra-industry growth**
- 4. Summary: growth prospects for Russia and possible implications for India**



Approach and Data

- **Neoclassical Industry Growth Accounting (Jorgenson et al. 1987; 2005)**
- **Data**
 - **The Total Economy Database™ (The Conference Board)**
 - **Russia KLEMS 2019 (Higher School of Economics)**



Sectors and Industries (NACE 1)

- **34 industries, grouped by 7 sectors**
- **Market economy**
 - **Agriculture**
 - **Manufacturing (Nace 1: D, excl. 23)**
 - **Extended Oil and Gas (C, 51, 23)**
 - **Other Market Services (e.g. Retail, Construction, Telecom)**
 - **Finance and Business Services (J, 71-74)**
 - **Transport**
- **Non-market services (Education, Public Administration, Healthcare)**

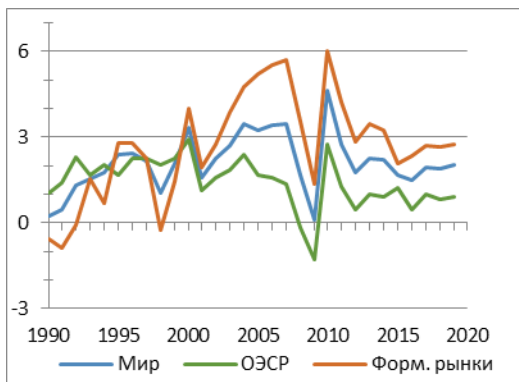


1. India and Russia in the comparative perspective

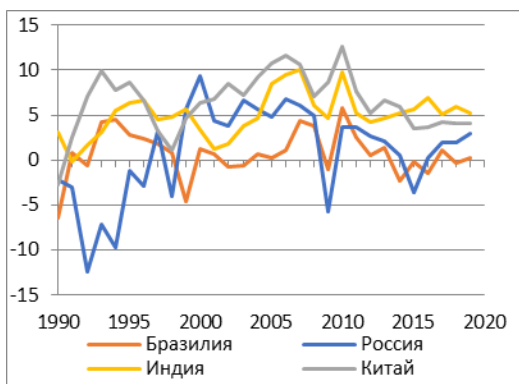
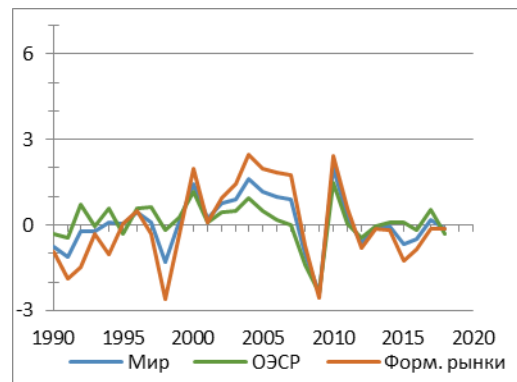


Global Productivity Slowdown: World, OECD, BRIC

Labour productivity growth rates, %



Total Factor Productivity growth rates, %



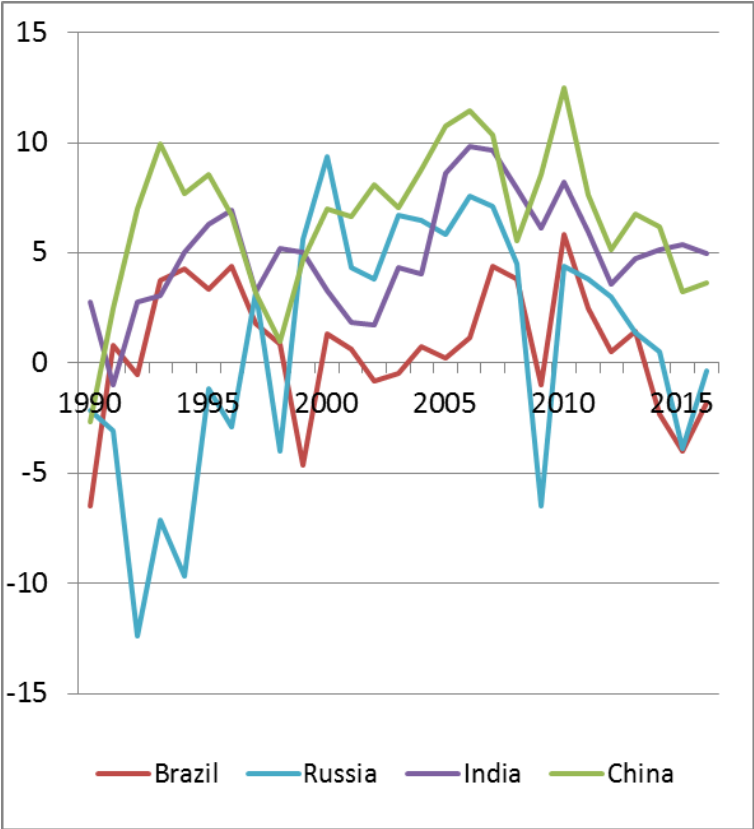
Source: The Conference Board Total Economy Database™ (Adjusted version), April 2019

Comments: Emerging and Developing Economies include China, India, developing economies in Asia, Latin America, Middle East, Africa, Central Asia and South-East Europe.

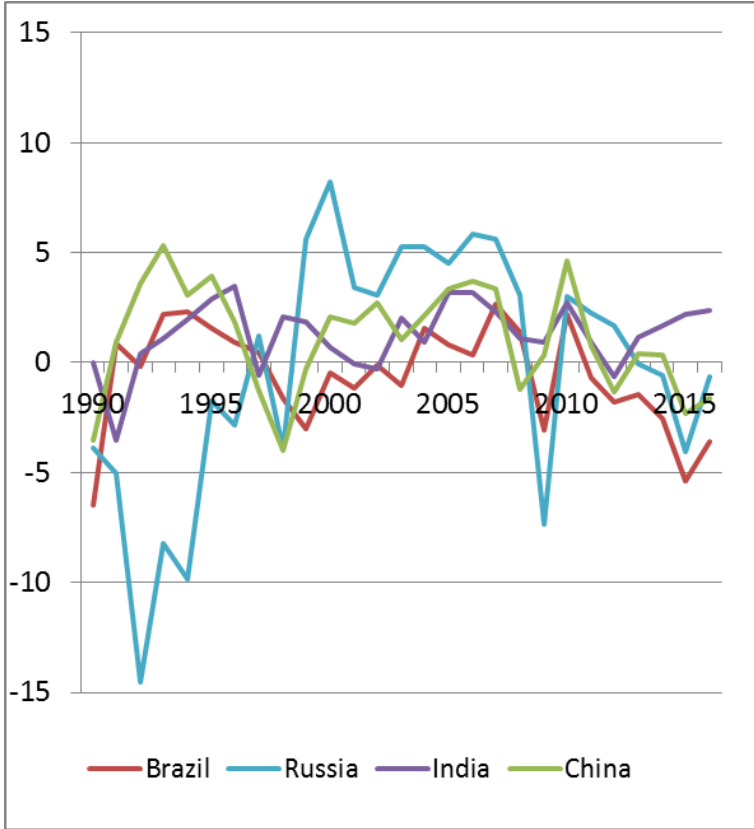


Global Productivity Slowdown: BRIC

Labour productivity growth rates, %



Total Factor Productivity growth rates, %

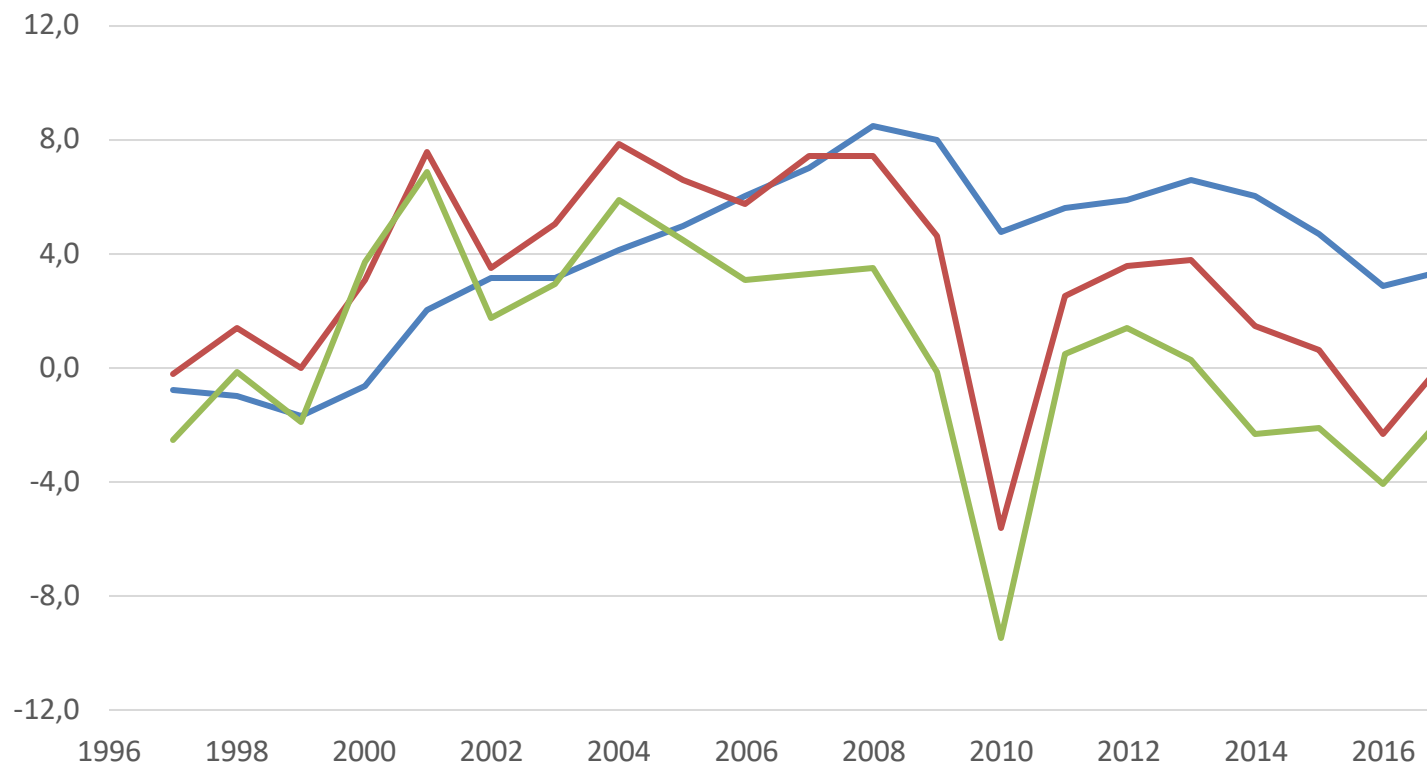


Source: The Conference Board Total Economy Database™ (Adjusted version), April 2019

Comments: Emerging and Developing Economies include China, India, developing economies in Asia, Latin America, Middle East, Africa, Central Asia and South-East Europe.

Russia: labor productivity and TFP growth differ

Labour productivity (red), capital intensity (blue), total factor productivity (green) (percent per year)



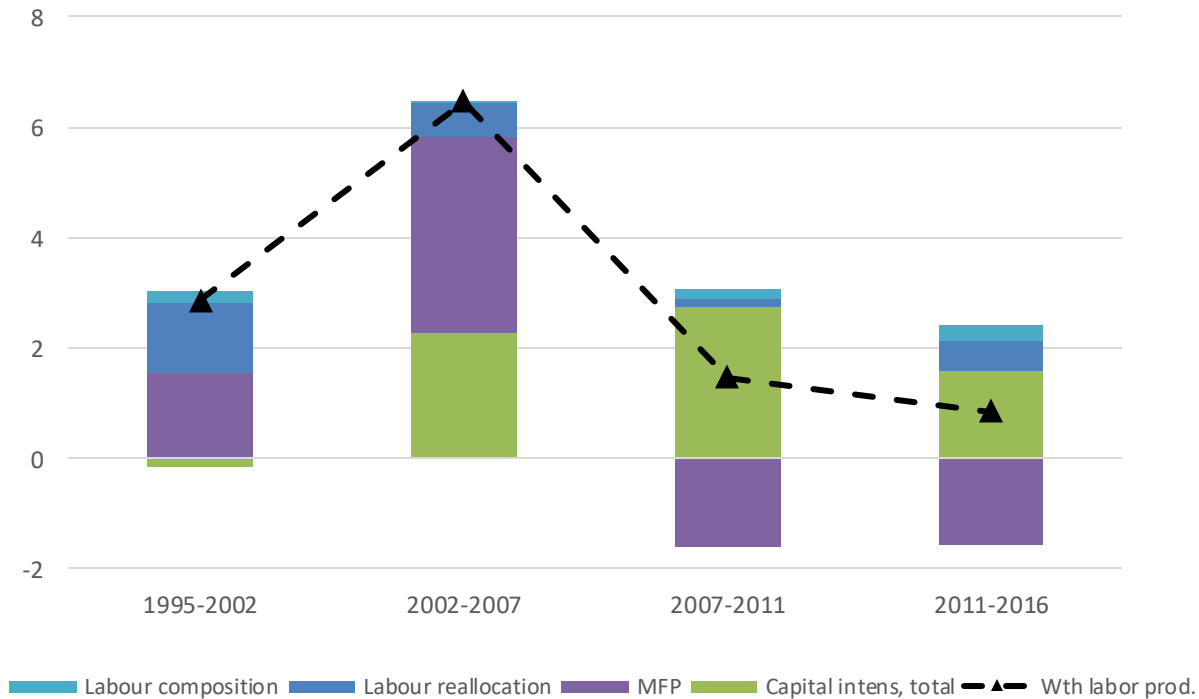
Источник: Russia KLEMS 2019



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Sources of labour productivity growth in Russia

Components of labour productivity growth (p.p.)



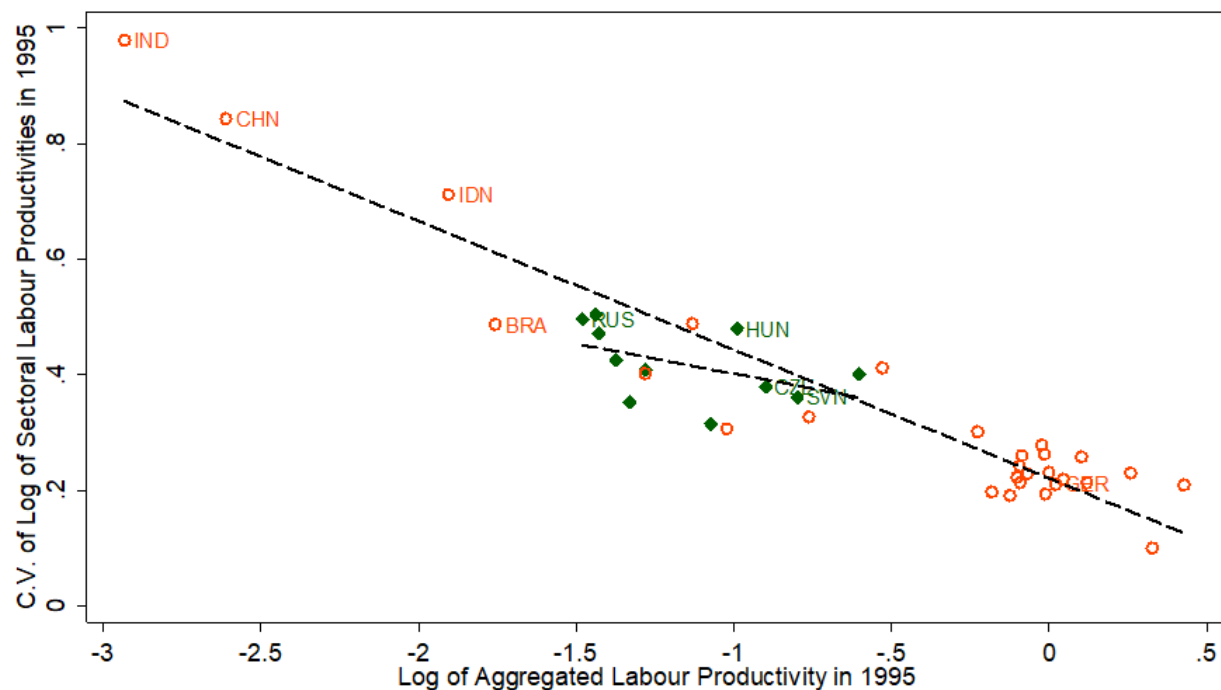
Source: Russia KLEMS 2019



2. Structural Change and Labour productivity Growth



Inter-sectoral productivity variation and aggregate labour productivity levels in 1995



Source: (Das 2018)

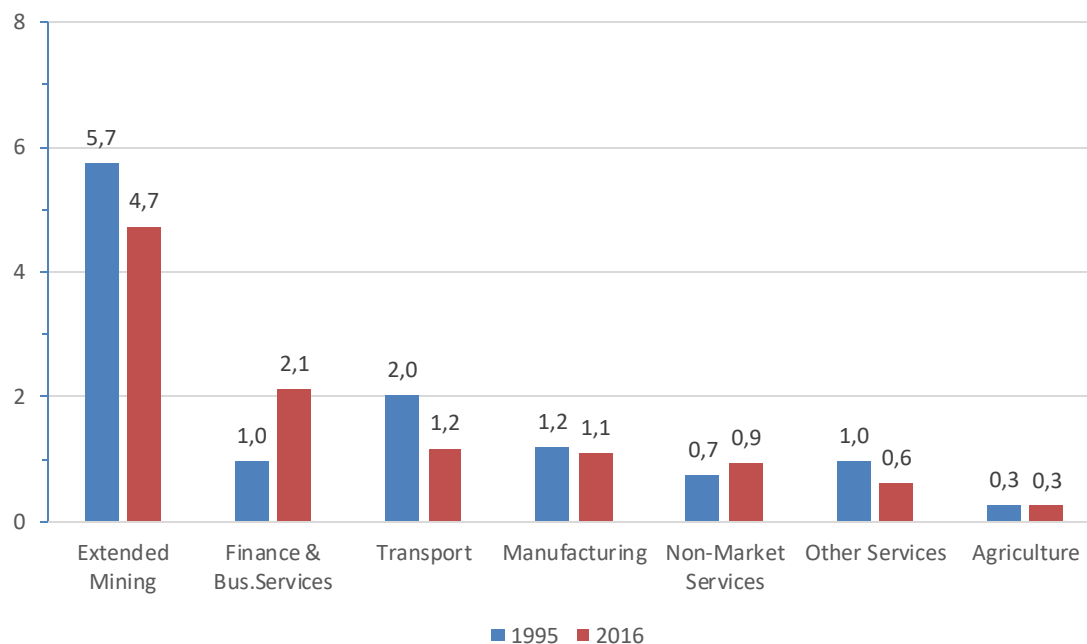
Data: calculations on the basis of WIOD, EU KLEMS, Russia KLEMS;

Comment: Concept – from McMillan, Rodrik (2011)



Russia: variation in labour productivity levels

Productivity levels in sectors of the Russian economy in **1995** and **2016**,
Total economy = 1



Source: Russia KLEMS 2019



Russia: structural change in shares of labour

Shares of hours worked (%)

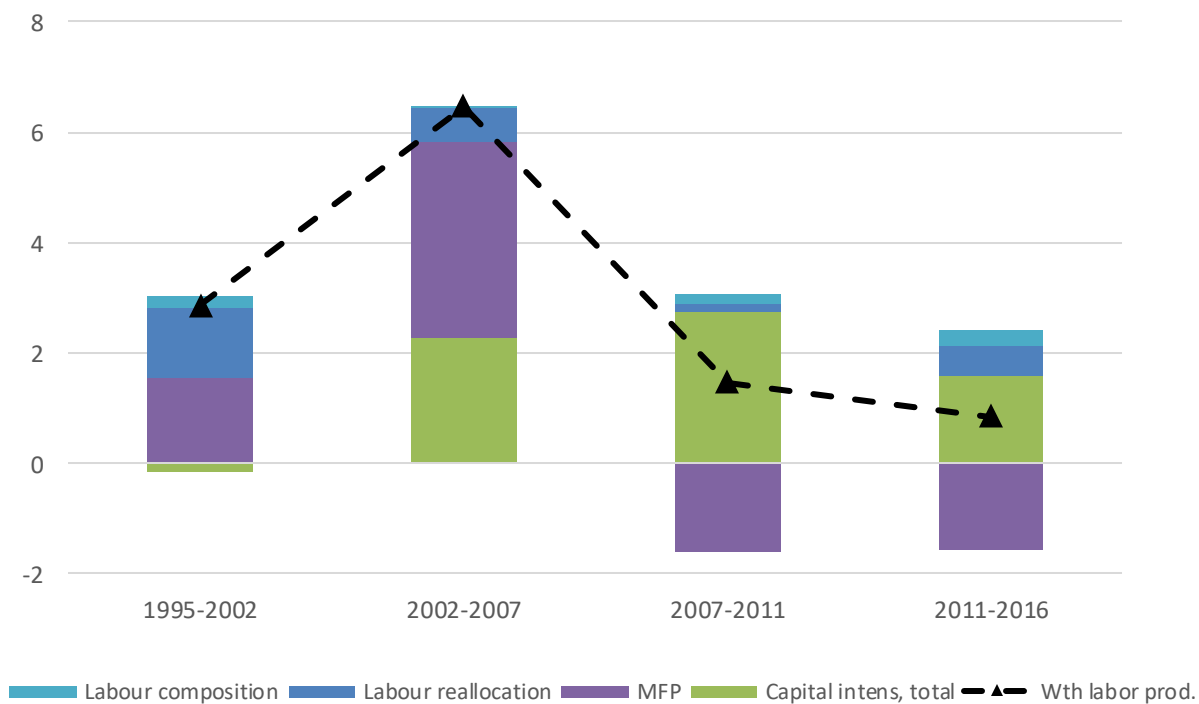
	1995	2002	2007	2011	2016
Total economy	100,0	100,0	100,0	100,0	100,0
Market economy	80,9	79,5	79,7	79,5	79,5
Agriculture	27,9	24,2	21,8	21,4	20,0
Extended Mining	3,5	4,5	4,8	4,5	4,7
Manufacturing	18,8	17,1	16,2	15,2	14,4
Other services (incl. retail, construction and telecom)	19,7	23,6	26,2	27,1	28,3
Finance and Business Services	5,2	4,7	5,1	5,6	6,1
Transport	5,7	5,4	5,7	5,7	6,0
Non-market services	19,1	20,5	20,3	20,5	20,5

Source: Russia KLEMS 2019



Contribution of Labour Reallocation

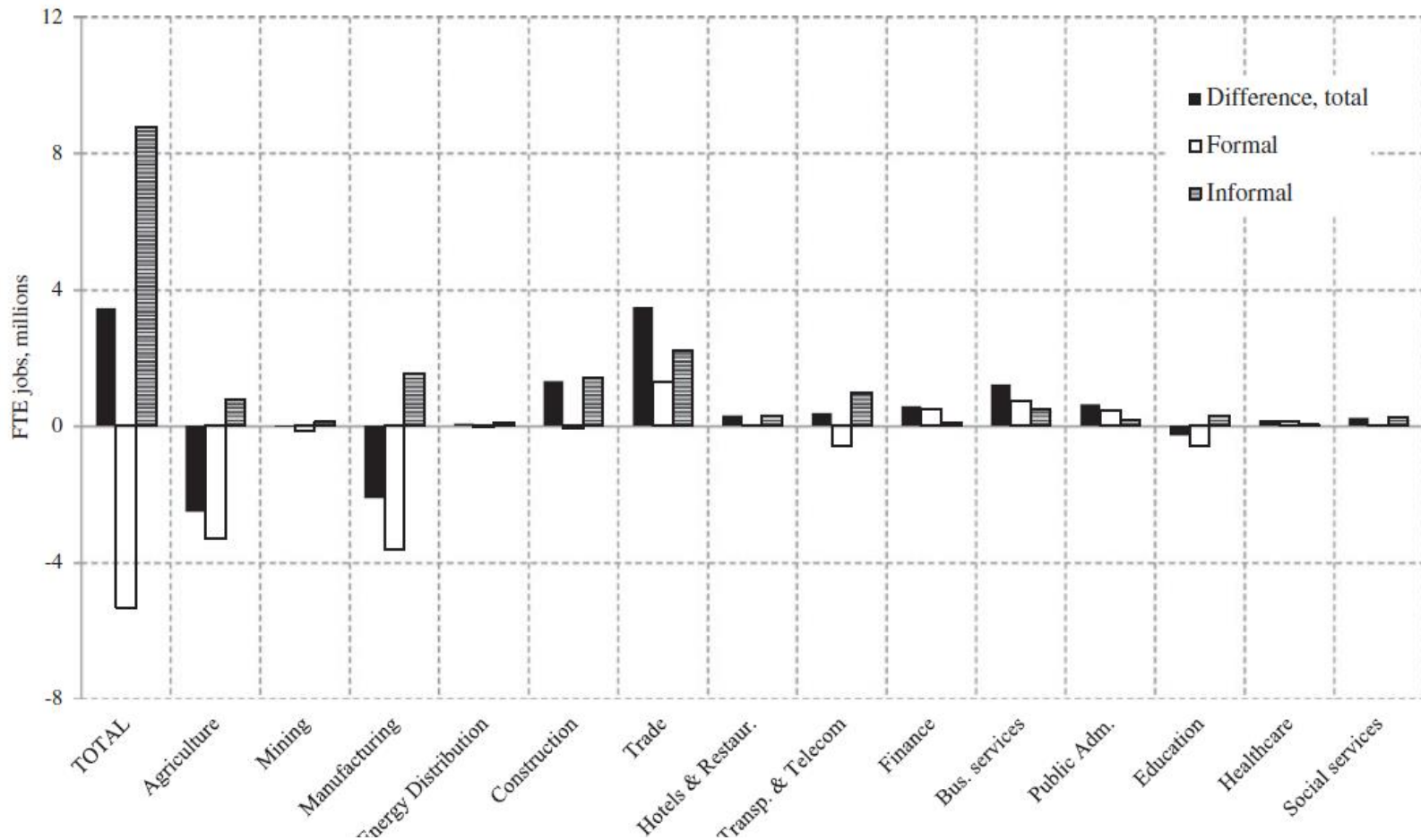
Components of labour productivity growth (p.p.)



Источник: Russia KLEMS 2019



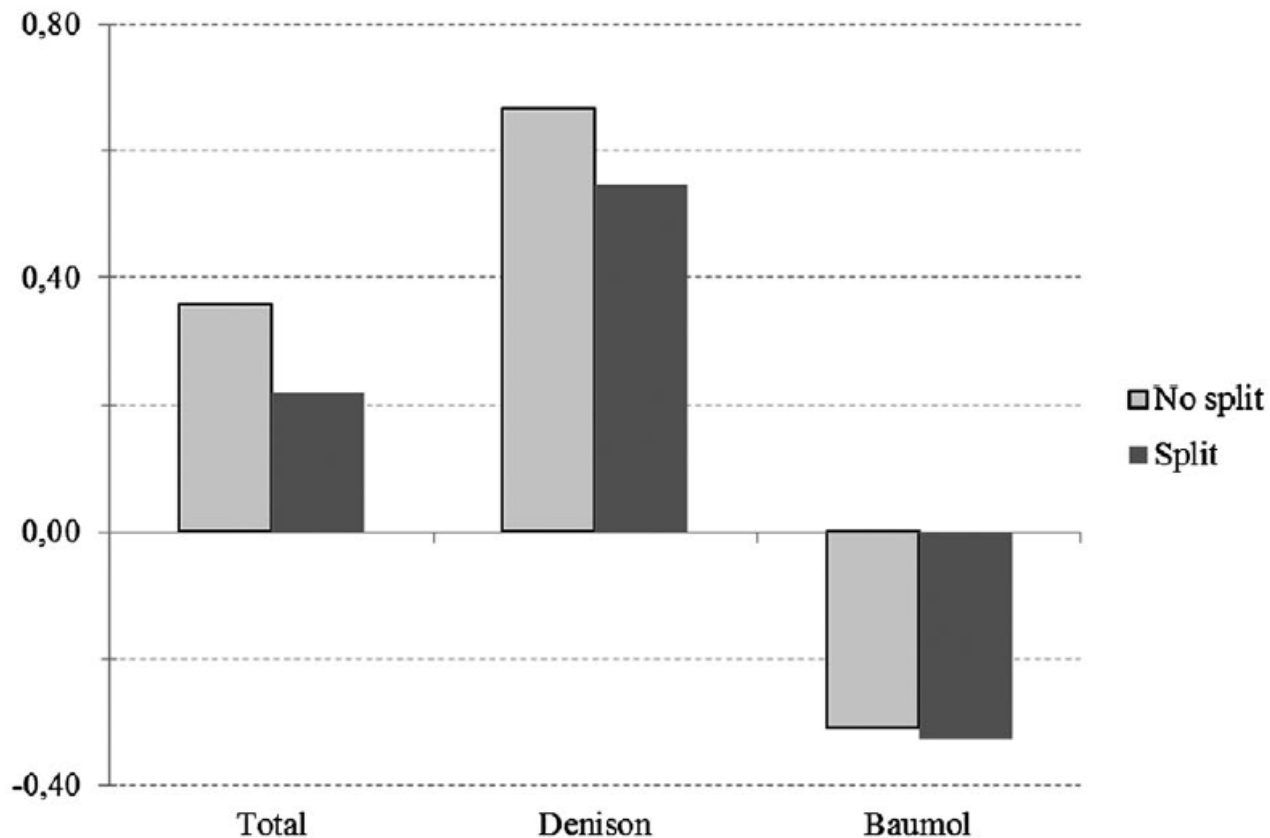
Change in Number of Workers in Total Economy and Major Sectors, 2000–2013



Source: (Voskoboynikov 2020)



Contribution of Labour Reallocation on Labour Productivity Growth & Informality in 2005-2012



Source: (Voskoboynikov 2020)

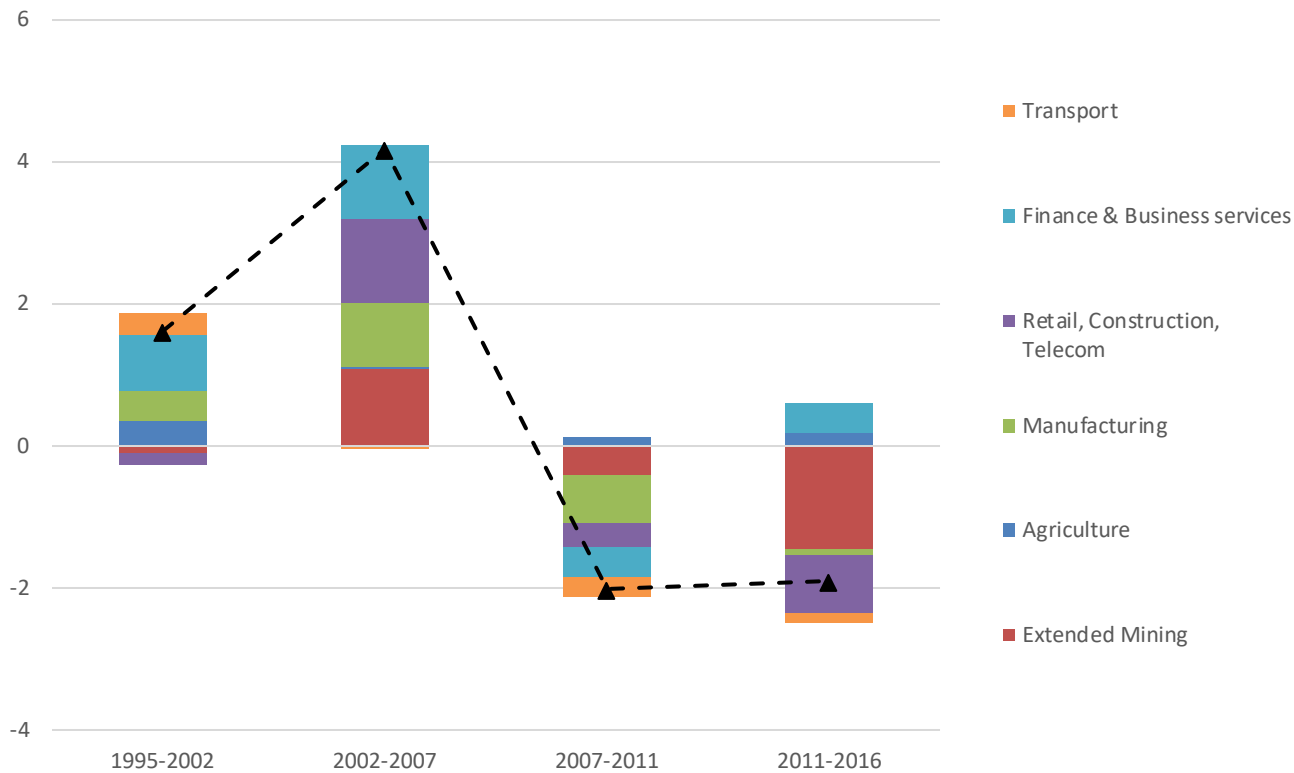


3. Sources of labour productivity growth within industries



Sectoral contributions to aggregate TFP growth

Aggregate TFP growth of the Russian economy and sectoral contributions (p.p.)



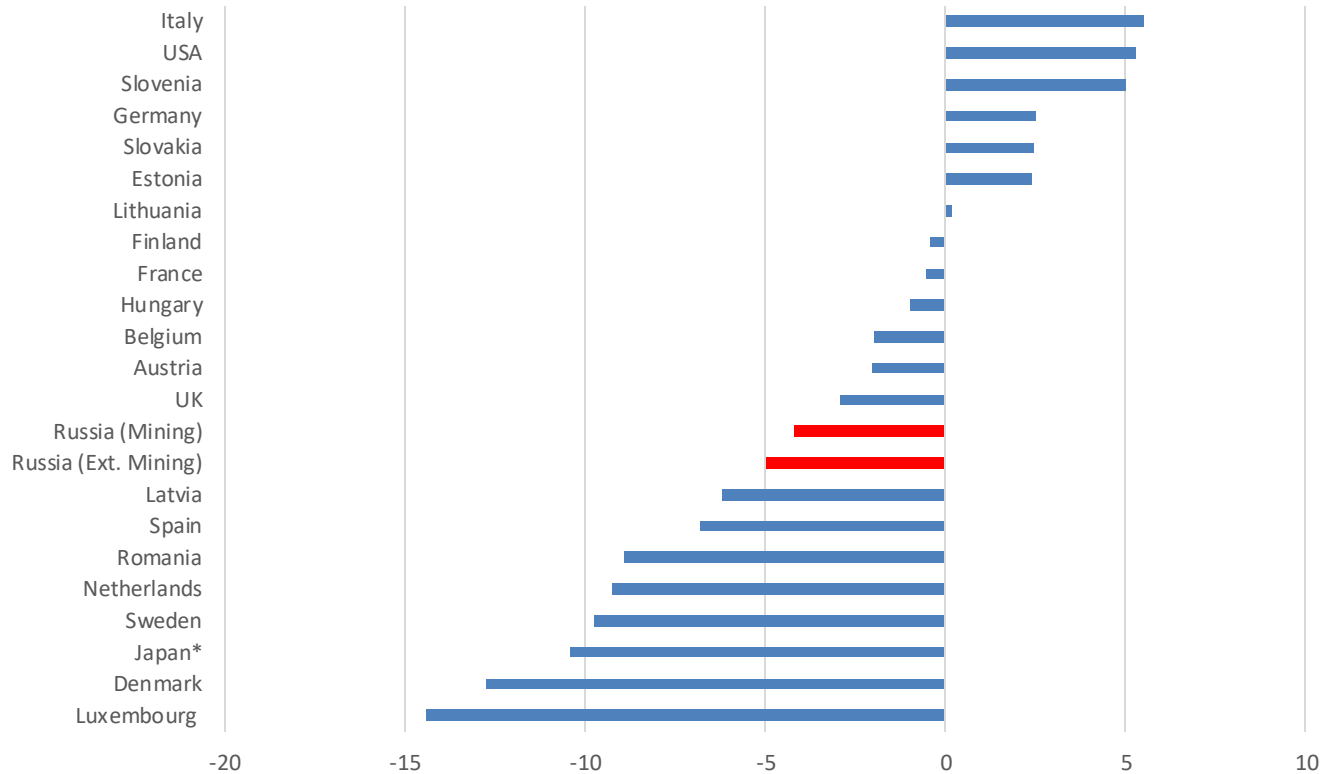
Источник: Russia KLEMS 2019



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TFP fall in Russian Mining is NOT outstanding

TFP growth in Mining in OECD economies and Russia in 2011-2016, growth rates



Sources: EU KLEMS 2019, Russia KLEMS 2019

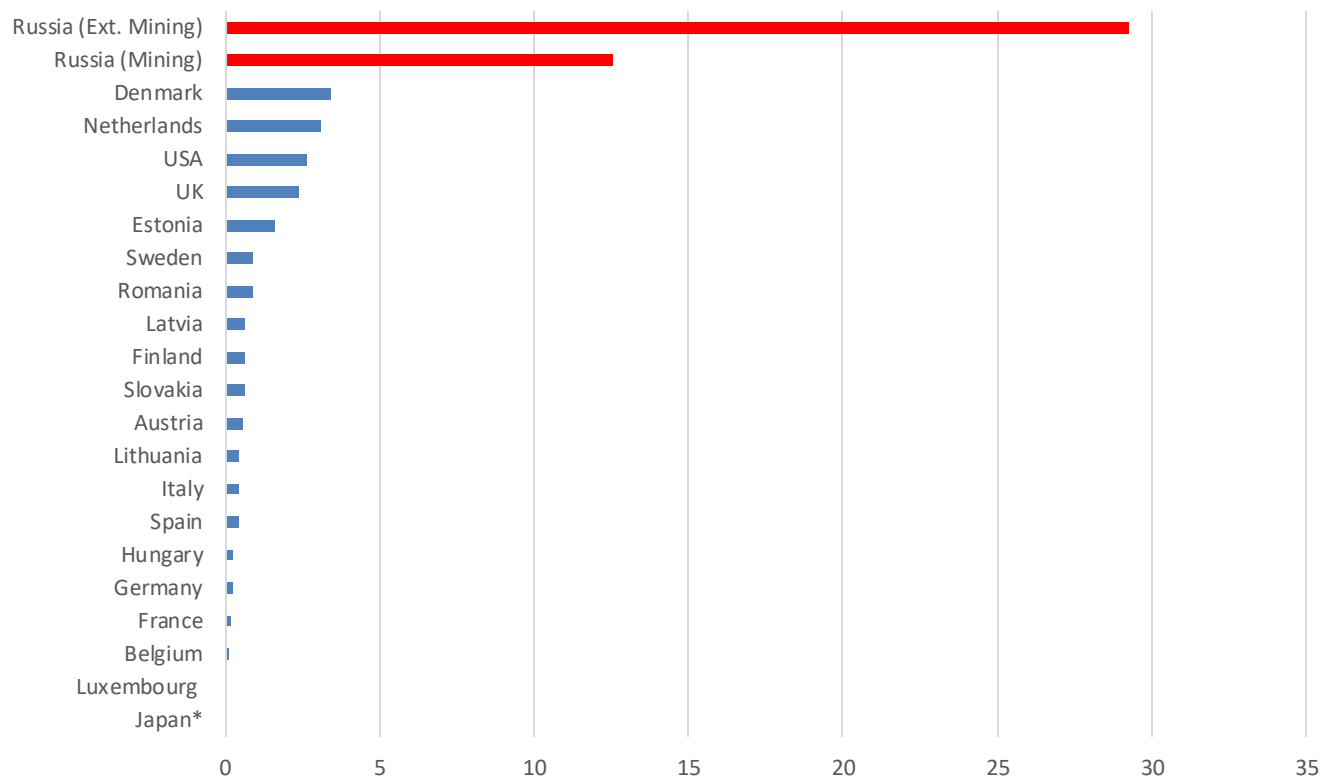
Comment: * Japan – 2011-2015



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... however, the share of Mining in Russia is large

Average share of value added of Mining in OECD countries and Russia in 2011-2016, %



Sources: EU KLEMS 2019, Russia KLEMS 2019

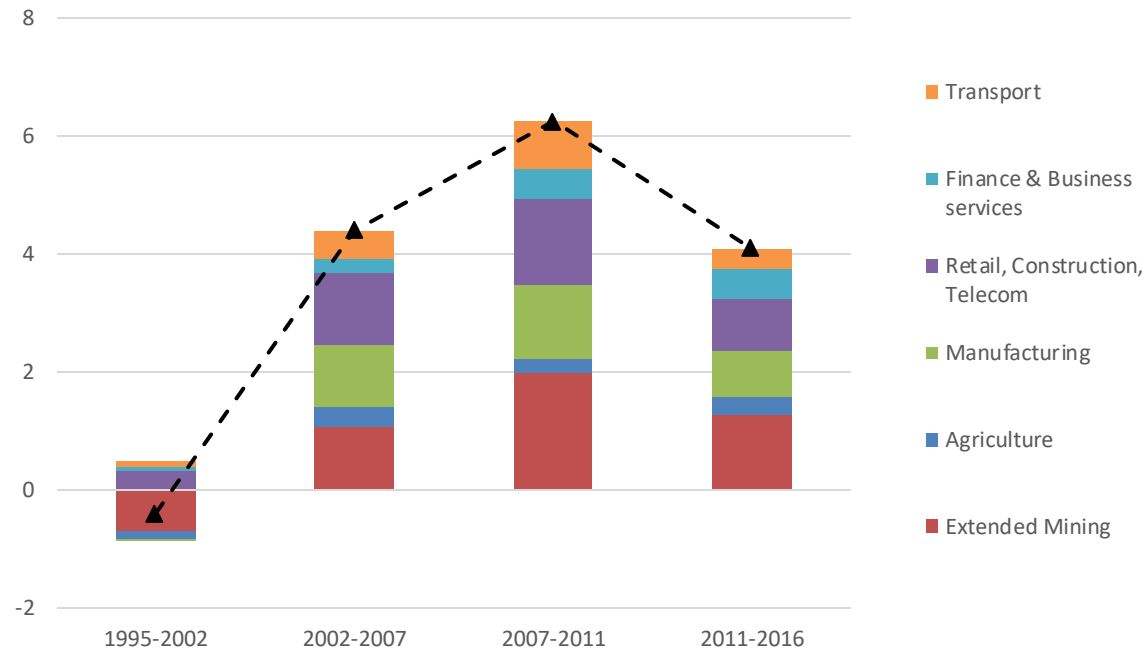
Comment: * Japan – 2011-2015



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Sectoral contributions of capital intensity

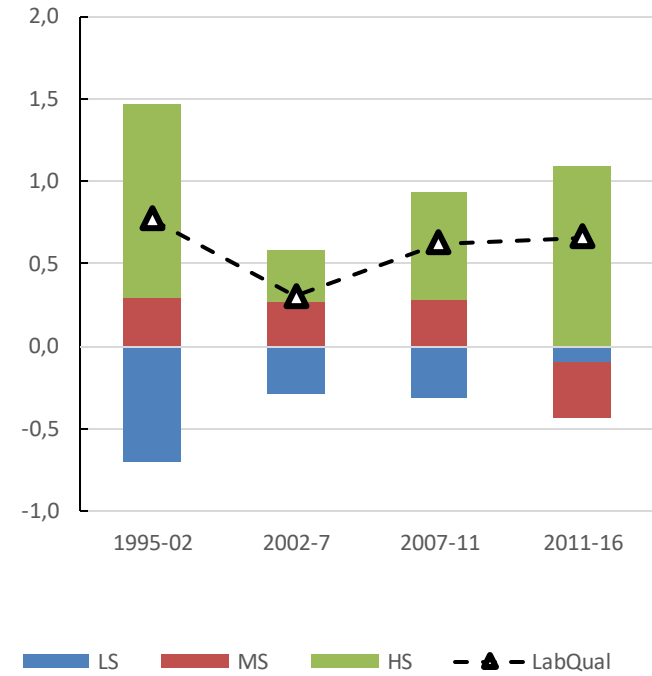
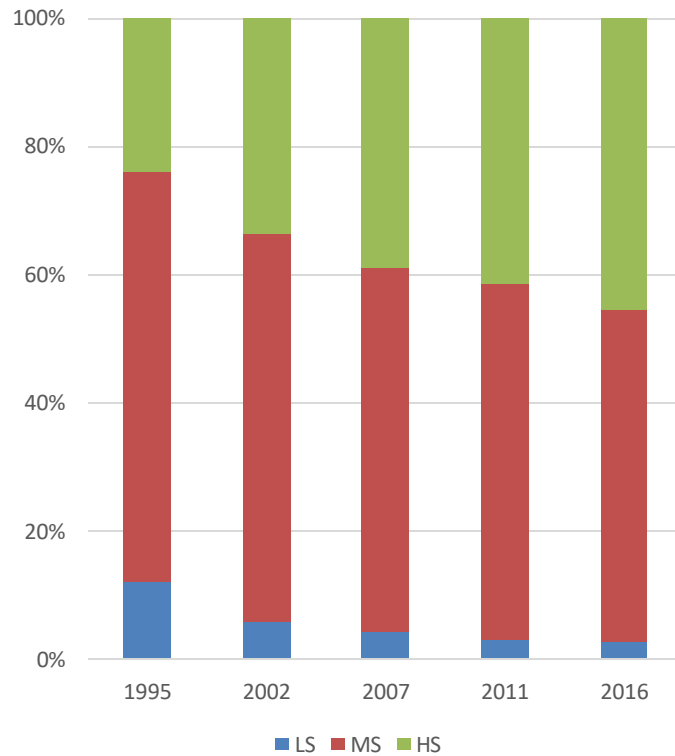
Capital Intensity growth of the Russian economy and contributions of types of assets, p.p.



Source: Russia KLEMS 2019



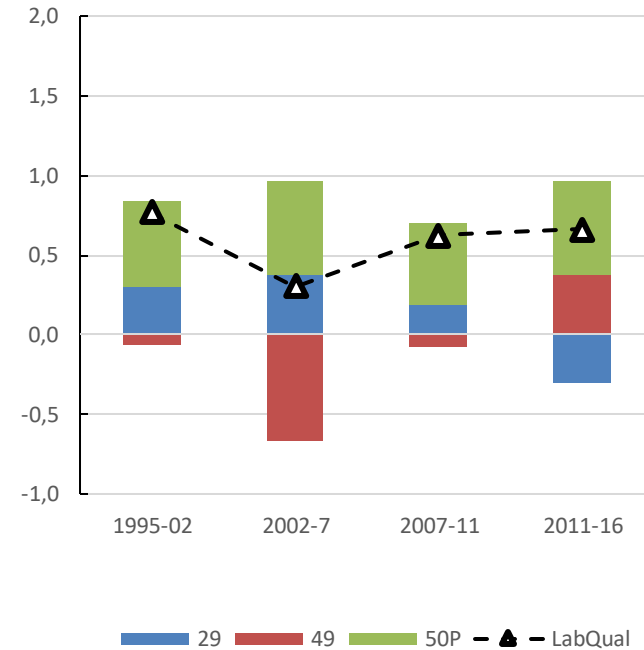
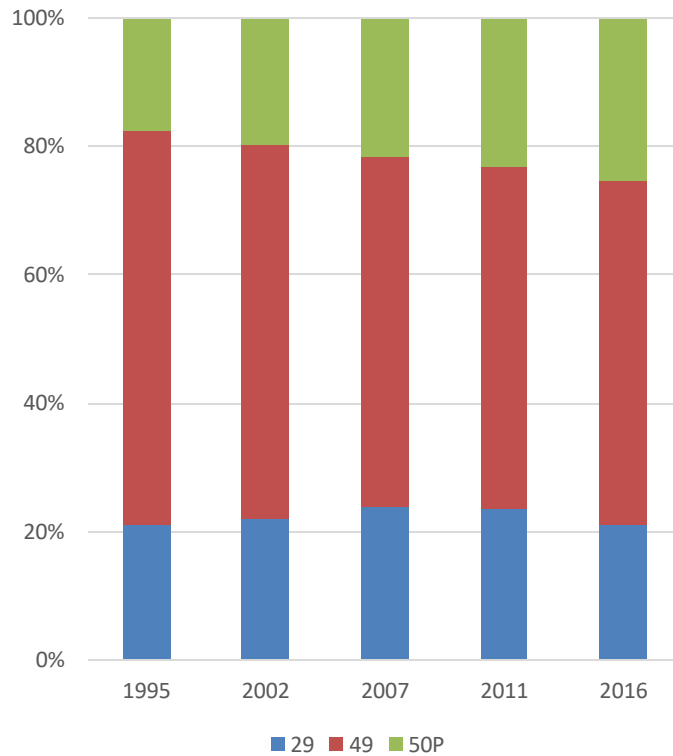
Labour Composition: Education



Source: Russia KLEMS 2019



Labour Composition: Age Structure



Source: Russia KLEMS 2019



4. Summary and Conclusions



Where do we expect growth for Russia after 2020?

Proximate Source	1999-2007	2011-2020	After 2020 - ?
Capital intensity growth as the response to the positive demand of global markets	Extended Mining, Retail	Extended Mining	Extended Mining in response to the recovery of the global economy
Technology catching up and efficiency growth	Manufacturing, Agriculture, Business services, Retail	Agriculture, Business Services	Agriculture: TFP growth is expected, but its contribution to the aggregate is negligible
Growth Enhancing Structural Change	Labour reallocation from Manufacturing and Agriculture	No	Probably, no
Labour composition	Yes	Yes	Yes, but the effect of its contribution will be limited
ICT capital and Intangibles	Yes	No	Most probably, no



What are the learning points for the Indian economy from the recovery experiences of the Russian economy?

- 1. Labour reallocation to informality**
 - **BAD:** decelerates labour productivity growth;
 - **GOOD:** makes external shocks smooth.
- 2. TFP growth in services needs attention. Measurement issues?**
- 3. Global Productivity Slowdown can also be a challenge for India**
 - **Skills Mismatch**
 - **Slow Technology Diffusion**



References

Timmer, Marcel P., and Ilya B. Voskoboynikov. 2016. “Is Mining Fuelling Long-Run Growth in Russia? Industry Productivity Growth Trends in 1995-2012.” In *Growth and Stagnation in the World Economy*, edited by Dale W. Jorgenson, Kyoji Fukao, and Marcel P. Timmer, 281–318. Cambridge University Press.

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Vries, Gaaitzen J. de, Abdul A. Erumban, Marcel P. Timmer, Ilya B. Voskoboynikov, and Harry X. Wu. 2012. “Deconstructing the BRICs: Structural Transformation and Aggregate Productivity Growth.” *Journal of Comparative Economics* 40 (2): 211–27. <https://doi.org/10.1016/j.jce.2012.02.004>.



Thank you!