

Accounting For Russia's Growth In 1961-2012

Ilya B. Voskoboynikov
Higher School of Economics

Paper Abstract: What are long run sources of economic growth in Russia? Did they change after transition from plan to market economy in early 1990-s? A great deal of previous research into this has suggested the story of a shift of the economy from inputs-driven (extensive) growth before transition (see, e.g., Krugman (1994)) to multifactor productivity-driven (intensive) growth (e.g. Jorgenson and Vu (2013)) afterwards. One question that needs to be asked, however, is why evolution of a command economy to a more efficient market-based model was accompanied by a severe fall of multifactor productivity (MFP) in first years of transition. Was it because of disorganization, as Blanchard and Kremer (1997) suggested or, at least partially, due to mismeasurement, caused by multiple difficulties with data?

This paper examines decomposition of output growth into contributions of labour, output and MFP, which is also called growth accounting, using a recently discovered detailed historical statistics for the planned economy period since 1961, and Russia KLEMS data for years from 1995 onwards. At this stage of the project I consider mostly an Industrial sector, which includes Mining, Manufacturing and Distribution. For capital the paper applies the concept of capital services along with traditional capital stocks, taking into account three types of capital, which are machinery, constructions, and other assets. As it turns out, that capital accumulation before transition was not as high as it follows from official numbers. Surprisingly, being measured both as stocks and as services, before transition it grew slower than in the post-transition resurgence in 1999-2008. Main reason for this discrepancy is underestimation of discards in the official statistics. Next, the Soviet era does not seem more extensive in comparison with the post-transition period. In particular, MFP contribution in the Industrial sector in 2.4 p.p. of GDP growth 5.5 per cent in 1961-1973 (the so called Kosygin reforms in years of low level of oil prices before the first oil price shock) seems comparable with MFP growth 3.0 p.p. of 4.6 GDP growth between 1998 and 2008. And also MFP performance of Perestroika in 1985-1990 of 1.0 p.p. is as high as recent post-crisis years 2009-2012. Finally, in contrast with capital stocks, capital services did fall in early years of transition, explaining 0.5 yearly average percentage points of a fall of more than 10 p.p. in 1991-1998, mostly because of the drop in the stock of machinery by 4.1 percentage points a year.

All in all, for this half a century Russia demonstrates alternate periods of extensive and intensive growth both before and after transition. This stresses the point made by Allen (2003), that economic causes of the economic collapse of the Soviet Union have not been entirely understood so far.