

Stimulating Growth in Belarus: Selecting the Right Priorities

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Belarus is suffering from a substantial decline in economic growth potential. Both the government and academic researchers are discussing a number of options for stimulating the growth rate and enhancing its stability. The government tends to focus on equipment investments as the priority for growth stimulation. However, academic researchers have revealed huge unused potential for growth in institutional environment in Belarus. In this brief, we deal with the issue of selecting the right priorities in growth stimulation policies.

Nowadays emerging markets as a whole, and especially countries of Central and Eastern Europe (CEE) and the CIS region suffer from the problem of declining growth potential (IMF, 2013). Belarus is not an exception from this trend. However, the situation in Belarus is distinct from the regional patterns since the majority of factors behind the declining growth potential in Belarus differ from those in other CEE and CIS countries. While the IMF (2013) emphasizes constraints for capital accumulation as the core challenge for the CEE region, the major problem in Belarus is the lack of productivity growth. Capital accumulation has in fact been huge and ineffective in Belarus in recent years (Kruk and Bornukova, 2014). Hence, a key issue for Belarus for restoring output growth, and enhancing its sustainability, is total factor productivity. Some degree of consensus about this priority exists both in the academic sphere and among economic policy makers. However, further questions about the sources of productivity growth generate ambiguous solutions, which result in different growth strategies.

Embodied Technical Progress versus Neutral Productivity Growth

Two years ago, the Belarusian government initiated a so-called modernization campaign. The idea of this campaign was to accomplish rapid re-equipment of large Belarusian firms, which was expected to increase their productivity. The government considers this channel to be self-sufficient, hence staking on it almost exclusively.

At the same time, a number of both academic (World Bank, 2012; Cuaresma et al., 2012; Kruk and Bornukova, 2014) and economic policy studies (IMF, 2012) emphasize the necessity of institutional changes for productivity growth. Gains in productivity herewith are expected due to improved incentives by firms and more efficient allocation and usage of factor inputs by firms.

From an academic perspective, the first approach may be interpreted as one based on technical progress embodied in capital

(embodied technical progress, ETC). In other words, equipment investments are to provide productivity growth per se (De Long and Summers, 1991; Greenwood et al., 1997; Hernstein and Krusell, 1996). More recent studies provide evidence on the importance of this mechanism for a modern transition agenda (Skare and Sinkovic, 2013).

The second approach deals with so-called neutral productivity growth (NPG), i.e. productivity gains independent of the quantity of either capital or labor inputs. NPG can be divided into a number of channels: neutral technical change, technical efficiency (characterized by the distance between the actual position of the firms and the production frontier), scale economies, and allocative efficiency (Coelli et al., 2005).

Impact of NPG and ETC on Productivity: Complementary or Substitutive?

As a rule, growth models do not assume any trade-off between NPG and ETC. For instance, a firm that succeeds to implement a new technology (independent on capital or labor inputs) will generate higher productivity. This will attract additional inputs – capital and labor – given higher factor returns due to productivity gains. New capital (equipment), in turn, may generate additional gains in productivity. Hence, productivity growth may stem from both tracks complementing each other. In this sense, the issue of decomposing actual sources of productivity growth – capital or technology itself – becomes largely meaningless.

The idea of the Belarusian modernization – that ETC comes first and other things do not matter – substantially changes this growth pattern. Rapid technical re-equipment makes the lack of financial sources for investments roughly inevitable, as national savings can hardly be enough for a surge in investments.

The government in Belarus partially solves this problem through centralized reallocation of financial resources. However, this reallocation negatively impacts allocative efficiency (Kruk, Haiduk, 2013). Further, it is likely to have a similar adverse effect on technical efficiency and scale economies. Hence, in Belarus the trade-off between ETC and NPG arises: artificially pushing ETC suppresses NPG.

Criteria for Assessing Effectiveness of NPG and ETC

A misbalance between the ETC and NPG resulting from an artificial ETC stimulation raises serious concerns about the desirability of this policy. However, the ‘modernization ideology’ uses a counter-argument: productivity gains from ETC may be sufficiently large to allow sacrificing potential gains from NPG growth.

From this perspective, we can compare both channels through the following criteria:

1. *How large is the productivity effect from both channels*

In order to get a quantitative assessment, we employ the model by Greenwood et al. (1997) that dissects NPG and ETC for a balanced growth path (the equilibrium trajectory when capital and output grow with the same rates). We apply our estimates of the Belarusian growth parameters to the model. For assessing ETC growth rate, we employ an approach by Hernstein and Krusell (1996). The latter produces an assessment of an average ETC productivity growth in 2005-2012 from -1.55 up to 6.40% (depending on the measures of correspondent prices). The mean of the corridor seems to be rather close to the one Hernstein and Krusell (1996) estimate for developed countries (3-4%). Hence, in the current exercise we use a value of 3.5% for the Belarusian ETC. In this manner, we get the estimates of output growth-rate returns on

growth rate of NPG (1.69) and ETC (0.41). This means that a change in the growth rate of NPG by 1 percentage point results in 1.69 percentage point increase of output growth rate, while the latter will increase by only 0.41 in case of 1 percentage point increase of ETC. However, the range in which NPG and ETC may vary due to government policies is highly important as well.

2. How large is the sensitivity of NPG and ETC to government stimulation?

Economic modelling assumes that, once an economy is on a balanced growth path (the stock of capital grows by the same growth rate as output), the ETC growth rate is exogenously determined by global technology gains. In this case, an attempt to push ETC by excessive capital accumulation will only generate a savings-investment misbalance. Hence, this kind of stimulus policy makes sense only if the economy has not yet entered the balanced growth trajectory. Whether this is the case for Belarus is still an open question, although findings in Kruk and Bornukova (2014) signal that this path has already been achieved.

Existing options for stimulating NPG seem to be much more numerous. First, technical efficiency and scale economies may progress substantially due to a changing environment, with more intense competition and tighter budget constraints. Such environment will force firms to increase their flexibility and adaptability, which will finally result in more technical efficiency and more proper scaling. Second, Belarus has accumulated great growth potential in the sphere of allocative efficiency. Due to long periods of inefficient capital accumulation, its proper reallocation can provide up to 10% growth of output (Kruk and Bornukova, 2014).

3. What are the costs of growth stimulation?

In the case of NPG, there are actually no direct costs. Enhancing more flexibility and

adaptability for firms, along with establishing tough budget constraints does not require new financial injections. These goals may be achieved through legislative activity, implementing new practices and standards into business activities.

As for ETC, a number of undesirable outcomes may be interpreted as costs. First, while stimulating productivity growth due to technology background, artificial ETC stimulation may further dampen allocative efficiency in Belarus. Second, an attempt to boost it requires sources for additional investments, which typically exceed available savings. Hence, the country is likely to face a deficit of savings-investments balance. The latter is to determine current account deficit, the necessity of external borrowings, and vulnerability of financial market.

Conclusion

In the last two years, Belarus has spent considerable effort towards modernization and re-equipment of large industrial enterprises. However, the most important outcome from the Belarusian experience – artificial stimulation of ETC – is likely not worth the effort as it might hinder allocative efficiency. Because of such practices, Belarus has faced an unfavorable trade-off between ETC and NPG.

However, this trade-off should not be treated as a predetermined one. It is possible and desirable to avoid it. In the long term, the growth should stem from both tracks – NPG and ETC. However, in a shorter perspective, more returns in terms of welfare may be obtained through a more efficient allocation of resources, improvements in the institutional environment, and more flexibility and adaptability by firms.

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