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INVESTMENTS AND COMPETITIVENESS OF MOLDOVAN ECONOMY: THE FORMULA OF SUCCESS

Dr. hab., Tatiana PÎŞCHINA

Academy of Economic Studies of Moldova,
Republic of Moldova, Chisinau, 61 Mitropolitul Banulescu-Bodoni street
Phone: +373 22 22 41 28; web site: www.ase.md

Abstract

This study explains qualitative economic growth, or inclusive growth, from the perspective of investments. Investments are crucial for a developing economy like the Republic of Moldova, which is the case study in this overview. Moldova cannot compete on key industrial parameters available for the developed economies of today. However, the country can strengthen the core of its economy and society in order to reorient towards qualitative economic growth. This basis is formed through investments into education, infrastructure and innovations and entrepreneurship. In this way, the country should be successful by using own competitive advantages and becoming a hub for innovations. Among other considerations, the paper concludes on the possibility of many developing nations to 'leapfrog' through several stages of the structural ladder, enabling them to pursue qualitative economic growth. This article is interesting for private and public organization, as well as international and non-profit actors. It provides both an evaluation of Moldova's position on the international socio-economic arena, and makes recommendations potentially supporting the growth of the private sector, at the same time fighting poverty and enforcing sustainable economic growth.

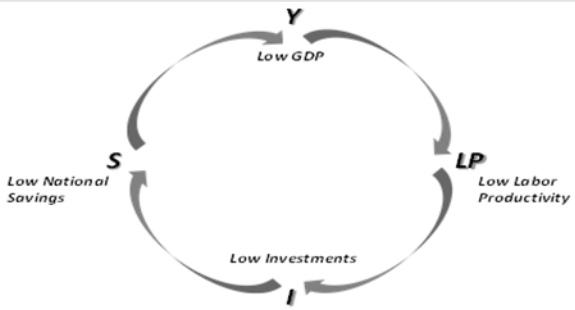
Key words: *globalization, inclusive economic growth, investments, innovation, technology*

JEL CLASSIFICATION: 011, 012, 038

1. Introduction

This article highlights the importance of investments for competitiveness and qualitative economic growth, which is central to well-being of any nation. In today's globalized word inequality gaps between rich and poor economies wide, even at dangerous levels, as Stiglitz often mentions (Stiglitz, 2012). This is true both between the nations, but also within the nations. In the 1990s, the gap in average income of the 20% richest and 20% poorest parts of the global population was at 30 to 1, whereas in 2000 that same gap was already at 78 to 1 (Birdsall, 2006). According to World Bank (2014), there were over two thirds of the global GNP per capita generated per high-income economies in 2015, about one third per share of medium-income nations, and only about 0,5% of global income per share of the low-income economies (Lenzner, 2011). This means that high-income countries generate proportionately more and more GNP, whereas low-income countries trend negatively. Part of the problem is caused by globalization, which in itself is a force of progress. Developing economies usually lack resources of capital accumulation. As competition becomes more severe, industrialized economies gain further access to wealth creation, the developing ones get dragged further backwards. As the result, they end up in the vicious circle of poverty, illustrated in Figure 1: low national savings and low GDP, coupled with negative labor productivity, create lack of resources and unfavorable economic climate for investments. Without investments, national savings remain low, and economic indicators degrade further. In this context, developing economies, and Moldova in particular, tend to loose rather than gain from globalization in the long-run. Keynes once noted

Figure 1: The Vicious Circle of Poverty



Source: By author

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that the best times to act are the times of growth, and not the fall of an economy. However, as notes Paul Krugman, today's economy is in a state of long-lasting decreased activity, demonstrating neither obvious signs of recovery nor of complete collapse (Krugman, 2012). In this respect, counteractive measures against inequality that creates social challenges and conflicts among nations, are crucial for global well-being. This particular article discusses investments and technology as powerful tools to boost competitiveness and create qualitative economic growth.

2. Moldova – Small Economy with Large Potential

Moldova is an interesting case study, it has a lot of challenges but also opportunities. Moldova's GDP (Gross Domestic Product) is about 0,01% of the global. During 1990-2015 it decreased from 0,017% to 0,011%, trending negatively since 1990. This is summarized in Table 1 below. In 2015, Moldova's nominal GDP per capita landed at around $1700 a year, whereas in 2013, it was at over $2200 (United Nations, World Bank, 2014). In 2016, Moldova's GDP was valued at $6,79 billion, GDP per capita was valued at $2062, and trade openness at 91,9% (Birdsall, 2006, NBSM, 2016).

Table 1: Moldovan GDP in Global Context, %

Share of Moldovan GDP in the	1990	2015	deviation
Global economy	0,017	0,011	- 0,006
European economy	0,046	0,037	-0,009
Eastern European economy	0,44	0,22	-0, 22

Source: Based on data from Quandl (2016)

Assessing broader business environment, Table 2 below summarizes key indexes that demonstrate Moldova's position in various international rankings. From 2015 to 2016, the decrease may be noted in key positions, such as competitiveness and economic freedom. Notably, in 2015, Moldova was ranked by Human Development Index at 114th place, in 2008 it was 113th, while in 1990 - 64th, with industrial-agrarian status of the economy (Pischina, 2007). Being one of the poorest European countries with median monthly income of $250 and with the GDP per capita level being about 18 times lower than European Union average, Moldova finds itself balancing on the edge of economic survival. Moldova is the only post-Soviet country that in 26 years of independence did not reach the level of economic development (GDP per capita) that it had in 1991.

Table 2: Moldova's Business Environment, Key Indexes, 2015, 2016

Key Index Rating	2015	2016
Global Competitiveness Index	82	84
Index of Economic Freedom	111	117
Global Innovation Index	46	44
Logistics Performance Index	93	96
Global Enabling Trade Index	92	79
Doing Business	63	44

Source: UNDP (2016), IMF (2016), Heritage Foundation (2015,2016), WEF (2014,2015), WIPO (2015,2016) World Bank (2015,2016,2017), WB/IBRD (2014)

World Bank classifies 3 consecutive stages indicating quality of economic growth: factor-driven, efficiency-driven, innovation-driven (Pischina, 2007, Schwab, 2015). Moldova is somewhere between the first and the second stage, in contrast to 1991, when it was defined as efficiency-driven (for detailed analysis see Pischina, 2007, Pischina, 2007a, Pyshkina, 2002). Indeed, the share of innovation in Moldova's economy is very low, which is visible in the structure of its GDP presented in Table 3 below. Since the main share of value added, 59,4%, is comprised of the Services sector (compared to the global of 64%) and the share of agriculture is decreasing, the economic structure may seem rather progressive.

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Table 3: The Dynamics of the Structure of GDP of Moldova

GDP Structure, %	2000	2001	2002	2003	2004	2014
Gross value added	87,5	88,0	87,3	85,6	85,0	84,3
Agriculture	25,4	22,4	21,0	19,3	17,1	12,8
Industry	16,3	18,7	17,3	17,8	18,2	14,1
Services	48,2	49,2	51,0	50,8	52,2	59,4
Fin. intermediation services (indirectly)	-2,4	-2,3	-2,1	-2,3	-2,5	-2,0
Net taxes, products: taxes less subsidies	12,5	12,0	12,7	14,4	15,0	15,7

Source: Based on National Bureau of Statistics of Moldova (2016)

However, the main contribution in Services sector – through finance and trade – is merely a ‘formal’ value added, in contrast to real, reflecting only a wage increase of individuals engaged in relevant business dimensions, and not of the economy as a whole. Moreover, the development of one of the key services – trade – is mostly dependent on import of Moldovan products by the developed economies, for instance, in the EU, the interest in which is low.

Current situation is a combination of several factors, such as absolute decrease of labour, capital, technologies, erosion of the structure of the economy and production volume (GPRSP, 2004). Since 1991, Moldova lost most large industrial enterprises, i.e. electronics, machinery/instruments. After University completion, there is almost nowhere to ‘apply’ the knowledge for students. It is unlikely that an economy would grow its labour productivity and its competitiveness within a structural environment where scientific and technological activity accounts for less than 0,35% of GDP. For comparison, European Union spends on average 2 to 3% of GDP on similar activities.

Despite challenges, Moldova also has advantages to support its ambitions for long-term inclusive growth: geographic location, stability, high connectivity, high-quality education and healthcare. Moldova shows strong signals for successful evolution of social entrepreneurship - non-profit sector supported by foreign investments built on the concept of social security, striving to develop, finance and implement innovative solutions to social, cultural or environmental problems. More importantly, Moldova accumulated a lot of knowledge in microelectronics and semiconductors. Moldovan physicists closely cooperate with the world centers in USA, Russia and other partners, in production of semiconductor materials and devices based on them. Laser technologies are present and knowledge is well developed. IT specialists of Moldova are considered to be among the best in Eastern Europe. This means that the country has the potential and the prerequisites for creating knowledge-based economy, by integrating innovations into its main structures.

3. Towards Inclusive Growth through Investments

Qualitative economic growth reflects positive and forward-looking dynamics of an economy, and its transition to the higher stages of economic development. Investments and their qualitative share – which are innovations – comprise the true, or material, base of economic growth. Innovations impact the change in the sources, types and quality of economic growth. Even though, presently, prerequisites in the developing countries, including Moldova, to enter the innovative wealth-driven stage of development are not sufficient, it is necessary to start building core elements of innovation-driven growth into the structural ladder of the national economy. Basics of the economy must be recreated after years of unfortunate downward slope. This article suggests at least 3 steps to help this process:

- *Improve the Education System, Especially Higher Education*
- *Attract Foreign Investments into Economy and Businesses*
- *Increase Innovative Share in Economic Structure and Build Technology Platform to Leapfrog into Fourth Industrial Revolution*

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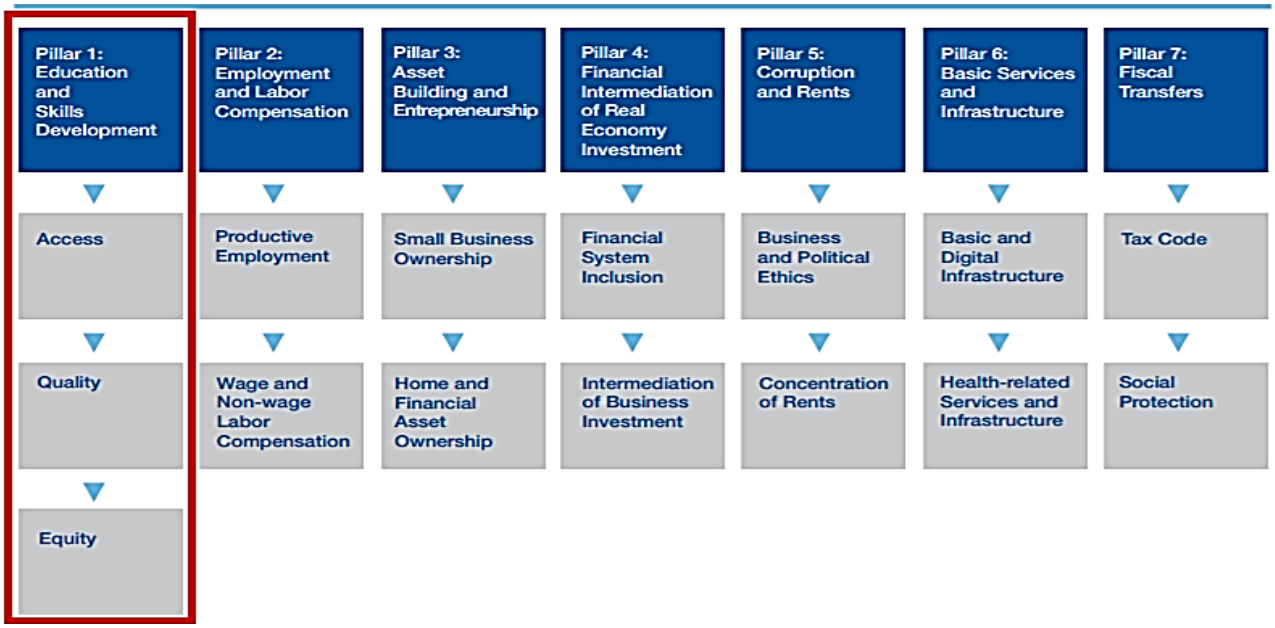
Table 4. Pillars of Inclusive Growth (Qualitative Economic Growth)



Source: WEF (2017)

Education and Skills Development is the First Pillar of economic growth (as illustrated above) that helps to create background for further economic activity, such as innovation, and investments. Tailored approach to University Curriculum based of Access, Quality and Equity can boost students' capacity to create businesses, thus jobs slowing-down 'brain drain', and therefore can increase economic competitiveness, and finally to qualitative economic growth.

Investment, given the prerequisites are in place, is a powerful tool to sustain growth in real terms by creating full-fledged industrial clusters uniting key components of the production chain. Infrastructure investments secure growth in production capacity of various sectors of the economy being a source of growth in aggregate demand with multiple positive external effects. Judging by the global experience, the biggest effect can be reached in partnerships between larger and smaller businesses, venture capitalists, and the government, supporting innovations from idea to commercialization. Moldova has a number of advantages that may make it lucrative to invest, as presented previously. EBRD (European Bank for Reconstruction and Development) portfolio in Moldova is half a billion euros, €8,5 million received in 2016, supporting twelve projects, eight of which in the private sector, e.g. Draexlmaier (German producer of parts for automotive). In total, Moldova managed to attract over €3bn, which is more than half of its GDP (with capital rate at 15-16%). Building on its potential, in the next five years the country must be able to accumulate about twice as much in foreign investments.

However, even more important is innovation-based type of economic growth, adopted by most, if not all, of the developed economies. It is based on the production and consumption of specifically information-technology goods and services, in other words, high-technology products that impact sources, types and quality of economic growth. International practice shows that successful economies of today are able to either create own innovations, which is usually the case for the industrialized nations, or to import innovations and integrate them in own economies in other ways, which is the approach that gives the window of opportunities to the developing countries such as Moldova (Pischina, 2007). Since, in conditions of globalization, the activities of international corporations penetrate national markets regardless of the structural stage, Moldova gets the possibility to integrate those activities and technologies and climb several steps of the structural ladder at the same time (Lenzner, 2011, Murphy, 2001). This is similar to the concept of 'leapfrogging' (Goldemberg, 1998, Murphy, 2001). An obvious example is within mobile networks

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in late-industrializing countries that were able to avoid more costly and less efficient technologies that the first movers had to adopt in the early stages of development of those technologies.

This approach, however, should not be associated merely with taking advantage of inventions of others. Moldova is a country with a lot of potential in terms of research and development, as well as testing and implementation. Moldova's IT specialists are considered to be among the better once in Eastern Europe, and its IT sector exports products internationally competitive not only due to lower costs, but also because of their quality that corresponds to global standards, meaning that the country has the potential for creation of innovation-driven economy based on integration of innovations into its core structures, becoming a hub for outsourcing of technologies for further development as one alternative.

CONCLUSION

Quality of economic growth is determined by the adaptation of innovations by an economy. Industry is unlikely to be the basis of economic growth for Moldova. Low profitability agricultural products are the main source for Moldova's export, which is a challenge since they are labour and cost intensive, while labor productivity in agriculture is low. One source for qualitative economic growth are infrastructure investments. Moldova must create an infrastructure with higher share of innovations to justify investments. Today, this justification comes mostly from relatively cheaper land and labour force. As global economy becomes less and less resource-intensive in the traditional sense, shifting towards intangible resources represented by people, Moldova must be able to offer and promote what makes it qualitatively different from its neighbours: safety, stability, high-quality education and strong IT professionals. There is certainly a window of opportunities for Moldova to exploit the advantages of Globalization, instead of being challenged by it. Globalization gives economies like Moldova the possibility to skip a few stages towards higher levels of economic development and to become an innovation development hub. Investments into innovations and entrepreneurship are key in this context. Moldova is left, among many, with one of the most challenging issues - to integrate effectively into the global context, while preserving national interests and its economic core while forming the basis for inclusive growth.

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