Comparative Analysis of the Government of Moldova and Georgia's Management of the Education Sector. The Magic Wand or the Achilles heel?

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Abstract

Human capital is one of the few resources that can offer to the Republic of Moldova a comparative advantage. However, if labor is not specialized in fields required by potential investors—job providers—human capital remains an untapped resource.

The development of human resources and the efficient use of existing potential are two of the most important factors contributing to comprehensive economic growth of Georgia.

Fast economic growth is an important precondition for increasing population's welfare and reducing poverty. At the same time, creation of equal opportunities for developing human capital through provision of quality services, social justice and strengthening the social systems is necessary as it provides access to quality education and healthcare systems.

This research paper consists in an analysis of the political views of Moldova and Georgia's Government on Education sector. Also, to understand better the issues related to this area, I will focus my attention more on the financial aspects of this sector. In order to obtain the correct comparative analysis of the Moldova and Georgia' situation, I will use the macroeconomic aggregates. The methods used in this research document are chronologically and progressive analysis.

Finally, it is supposed to be able to respond at the question: the Government of Moldova and Georgia's Management of the Education sector. The Magic wand or the Achilles heel?

Keywords: education, General Government Expenditures (GGE), General Government Expenditures on Education (GGEE), competitiveness, EU Association Agreement

1. Introduction

In recent years, an increasingly characteristic phenomenon for the education system in Republic of Moldova is preference for higher education showing that university education is a priority for Moldovan citizens.

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Consequences are felt directly on the economic front:

- 1. About 30% of graduates do not work according to professional qualifications obtained in vocational schools, colleges and universities, which show the necessity to diversify the educational routes by promoting the lifelong learning concept;
- 2. Lack of qualifications and low quality education of job candidates;
- 3. Non-competitive salaries lack of business attractiveness;
- 4. Labor migration an increasingly pressing problem.

The Government of Moldova' statement is that aligning the education system to the requirements of the labor market is imperative.

The strategic vision of the Government of Moldova consists in:

- 1. Modernization of the vocational education system;
- 2. Partnerships between education and labor market representatives;
- 3. Enacting new legislation on education, adjusted to the European experience, will allow structural and institutional reform in the field, taking into account the principle of efficiency and quality;
- 4. Reform of research and innovation system, by de-monopolization of its financing, by applying consistent and relevant rules supporting excellence in education and science, will boost the quality of career education;
- 5. Establishment of the National Agency for Higher Education and Research Quality Assurance is crucial for evaluation and accreditation of institutional and professional training/development programs for labor market specialists;
- 6. The National Framework for employment qualifications and standards will guide the educational process towards development of competencies required on the labor market:
- 7. A precondition for increasing the quality of education is to eliminate corruption factors in the education system.

At the same time, important investments in human resources development are necessary in Georgia. Georgian policies should be directed towards capacity building in human resources, it especially concerns youth, individuals with inadequate qualifications and persons that face the danger of discrimination in the labor market (handicapped people etc.).

The Government of Georgia statement is that in order to receive qualified academic and technical workforce in the long-term period, it's necessary to improve the quality of education and access to quality education systems.²

Formation of quality and accessible education system at all levels of education (general, vocational and tertiary) is a priority for the Government of Georgia.

Education is a fundamental factor of development and achieving sustainable economic development is impossible without investments in human capital. Only under strong and socially fair educational system can the existing social, cultural and economic challenges be overcome.

The problems of the education sector in Georgia are:

1. The quality of education especially in Georgia's general educational system. Only 38 percent of students are proficient in terms of reading literacy at or above the threshold set for functional illiteracy, and a mere 31 percent are proficient in mathematics at or above the threshold;

- 2. The quality of pre-school education also influences the development of human resources: on average, only 46 percent of children go to kindergartens in Georgia;
- 3. Georgia's vocational training system also faces challenges: vocational training programs struggle to meet labor market requirements, levels of public awareness of such programs are low and vocational training is still not regarded as being an equal or more attractive alternative to straightforward academic education.
- 4. Low level of spending on education is also a problem.

 The strategic vision of the Government of Georgia consists in:
- 1. Improving accessibility to high-quality general education is one of the Government's main priorities. In order to improve the quality of general education, the education system must be based on modern, scientifically proven vision and concepts. The system's activities will be planned and implemented in accordance with that common vision:
 - a)education sectors will be harmonized and access to uninterrupted education will be ensured (preschool-general-vocational-tertiary education during the whole life);
 - b)training programs will be improved and developed;
 - c)the physical infrastructure of schools will be upgraded and developed;
 - d)strengthening preschool children's readiness for school;
 - e)increasing access to kindergartens and developing their quality.
- 2. Tertiary education system in Georgia must provide education of European standards, constantly work on improving its quality and obtain international trust, Social-economic Development Strategy of Georgia prepare competitive youth for local and international labor markets. A common informational-analytical system will be introduced with a view to evaluating the efficiency of tertiary education system.
- 3. With a view to improving learning and research quality internationalization component will be strengthened in education management model, legislative barriers will be removed in order to ensure students' and academic personnel's mobility.
- 4. Georgia will be more involved in relevant instruments and programs under EU-Georgia Association Agreement.

2. Comparative analysis of the Education public expenditures in Moldova and Georgia for the period of 2005-2014 years.

Table 1. Nominal value of the Education Public Expenditures and their share in the General Government Expenditures of Moldova, 2005-2014

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| GGE* | | | | | | | | | | |
| (mln. | 13,94 | 17,97 | 22,41 | 26,14 | 27,35 | 29,32 | 32,10 | 35,37 | 38,65 | 44,39 |
| MDL) | 9.2 | 3.9 | 5.6 | 6.9 | 4.3 | 6.4 | 1.0 | 3.5 | 1.3 | 3.1 |
| GGE | | | | | | | | | | |
| E** | | | | | | | | | | |
| (mln. | 2,697. | 3,605. | 4,248. | 5,178. | 5,665. | 6,574. | 6,869. | 7,397. | 7,064. | 7,823. |
| MDL) | 0 | 8 | 6 | 3 | 9 | 5 | 0 | 0 | 1 | 6 |

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|----------------------------|-----------|-------------|----------------|
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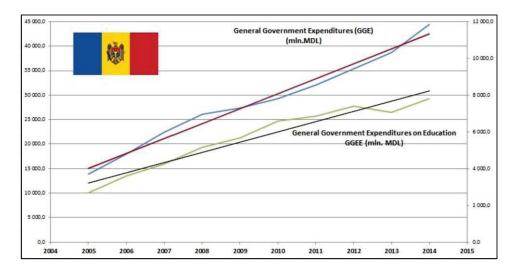
| Share | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|
| of | | | | | | | | | | |
| GGE | | | | | | | | | | |
| E in | | | | | | | | | | |
| GGE | 19.3 | 20.1 | 19.0 | 19.8 | 20.7 | 22.4 | 21.4 | 20.9 | 18.3 | 17.6 |
| (%) | % | % | % | % | % | % | % | % | % | % |

^{*} General Government Expenditures (GGE) = Central Government Expenditures + Local Government Expenditures

Source: elaborated by author based on data from www.mf.gov.md/en/reports [visited 15.05.2016]

As it is observed in the table above, the General Government Expenditures on Education (GGEE) in Moldova had increased from 2 697,0 mln. MDL to 7 823,6 mln. MDL in 2014. At the same time, it is noted that the share of GGEE in General Government Expenditures (GGE) had decreased from 21,4% in 2011 to 17,6% in 2014. So, what had happened in the period 2009-2010? It is sure that this change was caused by a political decision. It could be supposed that the European Government Coalition which overcame the Communist Party in 2009-2010 declined the share of this sector in General Government Expenditures.

Figure 1. The trend lines of the Education Public Expenditures and General Government Expenditures of Moldova, 2005-2014



Source: elaborated by author based on data from Table 1

In the Figure 1, it is noted that the trend of GGE's increasing in Moldova is higher than the trend of GGEE's and looking forward the difference becomes more evident.

^{**} General Government Expenditures on Education (GGEE)

Table 2. Nominal value of the Education Public Expenditures and their share in the General Government Expenditures of Georgia, 2005-2014

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| GGE* | | | | | | | | | | |
| (mln. | | | | | | | | | | |
| GEL) | 3,086.2 | 4,177.8 | 5,851.1 | 6,935.2 | 6,649.8 | 7,021.1 | 7,461.8 | 7,994.2 | 7,863.6 | 8,813.3 |
| GGEE** | | | | | | | | | | |
| (mln. | | | | | | | | | | |
| GEL) | 288.7 | 413.8 | 458.2 | 553.8 | 579.6 | 611.7 | 656.4 | 757.7 | 825.5 | 933.0 |
| Share of | | | | | | | | | | |
| GGEE | | | | | | | | | | |
| in GGE | | | | | | | | | | |
| (%) | 9.4% | 9.9% | 7.8% | 8.0% | 8.7% | 8.7% | 8.8% | 9.5% | 10.5% | 10.6% |

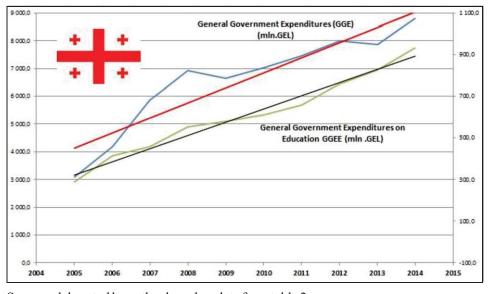
^{*} General Government Expenditures (GGE) = Central Government Expenditures + Local Government Expenditures

Source: elaborated by the author based on data from www.mof.ge/en/4537 [visited 15.05.2016]

In the Table 2, it is observed that the General Government Expenditures on Education (GGEE) in Georgia had increased from 288,7 mln. GEL in 2005 to 933,0 mln. GEL in 2014. At the same time, what is different from the situation in Moldova, the share of GGEE in GGE had increased and reached a value of 10,6% in 2014, with small declines in 2007-2008.

It could be supposed that the political decision of Georgia is to invest and spend more on Education or at least to maintain the expenditure in this sector at the same level by reallocating funds from other sectors.

Figure 2. The trend lines of the Education Public Expenditures and General Government Expenditures of Georgia, 2005-2014



Source: elaborated by author based on data from table 2

^{**} General Government Expenditures on Education (GGEE)

In Figure 2, as it is observed, the trend lines of GGE and GGEE's increasing of Georgia are roughly parallel with a small discrepancy at the end of the period. So, the GGEE of Georgia had had the same rate of increasing as the GGE's.

Table 3. Nominal value of the Education Public Expenditures and their share in Gross Domestic Product of Moldova, 2005-2014

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------------|-------|-------|---------|-------|-------|-------|-------|-------|--------|--------|
| GDP* | | | | | | | | | | |
| (mln. | 37,65 | 44,75 | 53,42 | 62,92 | 60,42 | 71,88 | 82,34 | 88,22 | 100,51 | 112,04 |
| MDL) | 1.9 | 4.4 | 9.6 | 1.5 | 9.8 | 5.5 | 8.7 | 7.8 | 0.5 | 9.6 |
| GGE | | | | | | | | | | |
| E** | 2,697 | 2 605 | 1 2 1 9 | 5 170 | 5 665 | 6,574 | 6,869 | 7 207 | 7.064. | 7 922 |
| (mln. | , | 3,605 | 4,248 | 5,178 | 5,665 | , | | 7,397 | /,004. | 7,823. |
| MDL) Share | .0 | .0 | .6 | .3 | .9 | .5 | .0 | .0 | 1 | 0 |
| of | | | | | | | | | | |
| GGE | | | | | | | | | | |
| E in | | | | | | | | | | |
| GDP | | | | | | | | | | |
| (%) | 7.2% | 8.1% | 8.0% | 8.2% | 9.4% | 9.1% | 8.3% | 8.4% | 7.0% | 7.0% |

^{*} Gross Domestic Product (GDP)

Source: elaborated by author based on data from www.mf.gov.md/en/reports [visited 15.05.2016]

For the tables above and below, for making more analysis, it is taken into consideration a macroeconomic aggregate – Gross Domestic Product (GDP). According to the Table 3, it is remarked that the GGEE in Moldova reached in 2014 a value higher by 290,0% than in 2005. At the same time, the share of GGEE in Nominal Gross Domestic Product (GDP) had increased during the period 2005-2009 from 7,2% to 9,4%. After this period, it had declined to 7,0% in 2014.

Taking into account the 2014 year of analysis, when Moldova's population was almost 3,6 mln. citizens, it is distinguished that in 2014, on every 10 000 people, General Government spent 0,019% of GDP nominal value on Education.

^{**} General Government Expenditures on Education (GGEE)

120 000,0 15 000,0 Gross Domestic Product Nominal (GDP) 13 000.0 100 000,0 11 000,0 80 000 0 9 000,0 General Government Expenditures on Education GGEE (mln. MDL) 40 000.0 3 000,0 1 000,0 -1.000.0 2004 2005 2013 2014 2015

Figure 3. The trend lines of the Education Public Expenditures and Gross Domestic Product of Moldova, 2005-2014

Source: elaborated by the author based on data from table 3

In the Figure presented above, it is noticed that in Moldova during the period 2005-2014 GGEE had increased slower than the GDP nominal value, so, the rates of increasing are not the same and the differences become more evident at the end of the period.

In the data of the table below, it is attested that the GGEE value in Georgia reached in 2014 a value by 323,2% higher than in 2005. At the same time, the share of GGEE in nominal GDP of Georgia had increased from 2,5% in 2005 to 3,2% in 2014, with minor declines during the period 2007-2008.

Taking into account the analysis of 2014 year, when the population of Georgia was almost 4,6 mln. citizens, it is supposed that on every 10 000 Georgians, the General Government spent on Education 0,007% of GDP nominal value, which is smaller by 0.012% of GDP nominal value than in the case of Moldova.

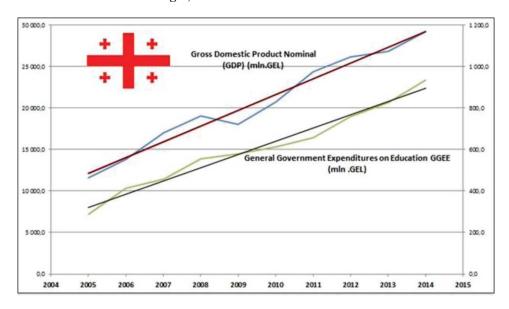
Table 4. Nominal value of the Education Public Expenditures and their share in Gross Domestic Product of Georgia, 2005-2014.

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| GDP* (mln. GEL) | 11,621.0 | 13,790.0 | 16,994.0 | 19,075.0 | 17,986.0 | 20,743.0 | 24,344.0 | 26,167.0 | 26,847.0 | 29,151.0 |
| GGEE** | | | | | | | | | | |
| (mln. GEL) | 288.7 | 413.8 | 458.2 | 553.8 | 579.6 | 611.7 | 656.4 | 757.7 | 825.5 | 933.0 |
| Share of GGEE in GDP (%) | 2.5% | 3.0% | 2.7% | 2.9% | 3.2% | 2.9% | 2.7% | 2.9% | 3.1% | 3.2% |

- * Gross Domestic Product (GDP)
- ** General Government Expenditures on Education (GGEE)

Source: elaborated by author based on data from www.mof.ge/en/4537 [visited 15.05.2016]

Figure 4. The trend lines of the Education Public Expenditures and Gross Domestic Product in Georgia, 2005 2014

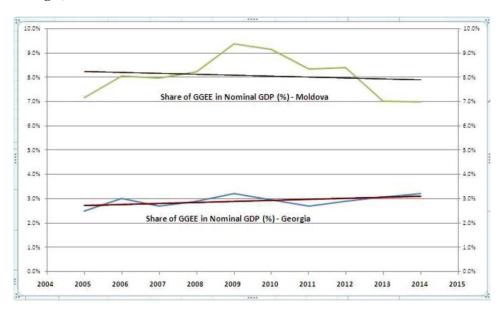


Source: elaborated by author based on data from table 4

According to the Figure 4, the trend lines of GDP and GGEE's increasing during the concerning period are roughly parallel with small discrepancies in the last years of the period. So, in Georgia, we attest more or less a stable increasing of GGEE that is in line with GDP growth.

At the same time, if we analyze both of the values concerning the GGEE in percentage of GDP, it is distinguished that the GGEE of Moldova in percentage of GDP is higher than the GGEE of Georgia. Nevertheless, during the period 2005-2014, in Moldova the rate of the share of GGEE in percentage of GDP declines, while the share of GGEE in percentage of GDP of Georgia increases (see the figure below).

Figure 5. The trend lines of the shares of GGEE in Nominal GDP of Moldova and Georgia, 2005-2014



Source: elaborated by author based on data from table 3 and 4

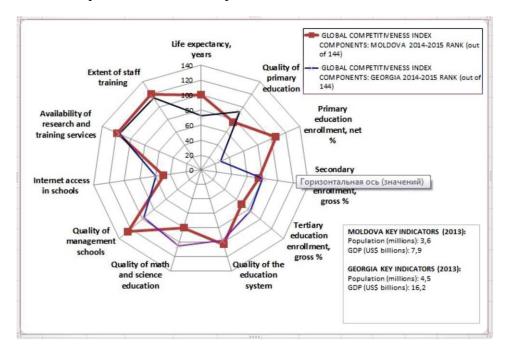
3. The international assessment of the Moldova and Georgia's education index

Table 5. The international assessment of Moldova and Georgia by the 2014-2015 Global Competitiveness Index Components

| | MC | LDOVA | (| GEORGIA |
|---|-------|-----------|-------|-----------|
| EDUCATION | Value | RANK | Value | RANK |
| | | (out 144) | | (out 144) |
| Life expectancy, years | 68.7 | 100 | 73.9 | 72 |
| Quality of primary education | 3.8 | 76 | 3.5 | 92 |
| Primary education enrollment, net % | 87.9 | 106 | 98.3 | 27 |
| Secondary education enrollment, gross % | 88.2 | 75 | 86.8 | 80 |
| Tertiary education enrollment, gross % | 40.1 | 69 | 27.9 | 84 |
| Quality of the education system | 3.2 | 103 | 3.2 | 98 |
| Quality of math and science education | 4.0 | 80 | 3.4 | 105 |
| Quality of management schools | 3.2 | 125 | 3.8 | 98 |
| Internet access in schools | 4.9 | 49 | 4.6 | 59 |
| Availability of research and training | 3.3 | 119 | 3.4 | 116 |
| services | | | | |
| Extent of staff training | 3.4 | 120 | 3.5 | 114 |

Source: elaborated by author based on data from World Economic Forum Competitiveness Report 2014-2015

Figure 6. The international assessment of Moldova and Georgia by the 2014-2015 Global Competitiveness Index Components



Source: elaborated by author based on data from table 5

In the table and figure above, it is remarked that Moldova has got a better rank on:

- 1. quality of primary education;
- 2. secondary education enrollment, gross %;
- 3. tertiary education enrollment, gross %;
- 4. quality of math and science education;
- 5. internet access in schools.
 - Therefore, Georgia overcomes Moldova in:
- 1. primary education enrollment, net %;
- 2. quality of education system, which is one of the most important education index components;
- 3. quality of management schools;
- 4. availability of research and training services; and
- 5. extent of staff training.

Conclusions:

According to the analysis above, it is attested that both of countries have good strategic political visions on Education sector, defined in the National Development Strategy: Moldova 2020, as well as, in the Social – economic Development Strategy: Georgia 2020.

The trend lines of increasing the General Government Expenditures on

Education in Moldova are different from those of General Government Expenditures and Gross Domestic Product. Not the same, in the case of Georgia, where the rates of increasing of the aggregates above are stable and roughly in the same line.

In 2014, on each Moldovan citizen, General Government spent roughly 3 times more expenditure on Education than in the case of Georgia. So, pursuant to the ranking report mentioned above, it is supposed to be the time to reform the management of this sector and with fewer funds to do more concrete things.

The efficiency of the public funds allocated by the Government has been attested in the nternational assessment of the Moldova and Georgia's education index provided by the World Economic Forum Competitiveness Report 2014-2015. At this moment, it is remarked that with less public expenditure, Georgia is more efficient and better than Moldova concerning important education index components. So, it's time to claim and to reform the education sector according to the European standards, to eliminate corruption from this sector and, even the General Government Expenditures on Education declines in recent years as share of the General Government Expenditures and GDP, to do concrete actions for improving the quality of the education system and therefore the welfare of the population.

Bibliography:

National Development Strategy: Moldova 2020 Social – economic Development Strategy: Georgia 2020 World Economic Forum Competitiveness Report 2014-2015 www.mf.gov.md/reports www.mf.gov.ge/reports