New dimensions in international comparative analysis: education economy in China and Moldova

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Abstract. We can often hear the word "incomparable". It is quite often heard that Moldova's economy "cannot be compared" with the big economies of the world; the supposition is that it can only be compared with the economies belonging to the same size category, like the former soviet republics of the Central Asia, Baltic States, etc. The author of the paper claims that it might be irrelevant to compare Moldova's economy with the big economies of the world in terms of what has already been achieved in the real economy so far; however, comparing its education economy with any country of the world, in terms of how economics of education has been applied as a scientific background used to buildup skills as well as analysing the outcomes of the added value in education, seems to be a must. The actions undertaken in education by big economies constitute a sound basis for learning and/or eventually imitating, should the teaching staff will to really assume the role of supporting the Moldovan government carry out its mandate in an accountable manner. The role of the academic class in the context of this issue is a key one. The same refers to the role of teachers in the national economy particularly because educating economists and other kinds of specialists who lack an awareness of the intangible economy as well as attitudinal skills is quite under-productive and hampers Moldova's sound development. Only the availability of a sound, resilient Moldovan School of Economic Thought can spill over in a sound, resilient Moldovan economy. Any attempts to look for "alternative approaches" are far too risky and counterproductive. New requirements are

imposed by the newly emerging intangible economy, with regard to the labour force quality and new criteria need to be met in order for a country to adjust to international economic disequilibria.

Keywords: the economics of education, education economy, the real economy, productivity, the cost of ideas, international economic disequilibria.

Introduction

"The best that each country can do for other countries is to keep its own economy in shape."

Fisher Stanley (1988) [1, p. 48].

In a broader sense, the educational systems of various countries can be divided into the following two categories: (i) systems producing skills of competitive quality, economic culture and economic comparative advantages, etc., and (ii) systems that focus on "screening" people and cultivate illusions of being educated, combined with frequent shifts from euphoria to disappointment; commonly related to the *economic depression*. The difference between these two major types depends on:

- the existence of a national School of Economic Thought(SET) and on its quality
- whether the respective educational system admits or disregards the *Economics of Education* as a science capable of guiding the making of educational policies.

Countries around the world started to attain sustainable material wellbeing inasmuch as they have got to know and have applied *Economics of Education* as a science, with a view to a deeper understanding of the: (i) need, (ii) data quality, (iii) estimation (iv), analysis and (v) qualified interpretation of the Rates of Return to Education (RRE). This has been even more remarkable in conditions of a virtually "exponential" growth of the Global GDP after 1950's. The difference between approaches before and afterwards owes quite a lot to the education economists (educologists), who started to subject education systems to *estimates*

of RRE. The logic of supply and demand started to be applied in carrying out the process of:

- developing human skills and abilities to produce ideas.
- idea production.

The need of a deeper understanding of the essence of the *cost of ideas* has emerged and has been acknowledged. The intangible economy started to take shape and more emphasis has been put on the *effectiveness* and *relevance* of the methods and contents used in the process of education. The "volume" of *idea production*, combined with better opportunities to produce ideas, has also grown when university education became massively available [2]. With the contribution of a more *efficient* and *relevant* education, an essential shift from the *selection of labour force* towards the *motivation of the labour force* occurred.

Why economics of education?

In various fields of science, the typical reaction to a scientific claim is: what are the arguments? Such reaction is quite plausible, but not to the extent of disregarding the hermeneutical approach. Gadamer defined hermeneutics as: "a historiology that could serve as a methodological organon for the human sciences" [3]. Schleiermacher claimed that: "Hermeneutics does not apply exclusively to classical studies, nor is it merely a part of this restricted philological organon; rather, it is to be applied to the works of every author. Therefore, its principles must be sufficiently general, and they are not to be derived solely from the nature of classical literature" [4]. Applying hermeneutic analysis to economic education ought to be a common practice, since the quality of interpreting economic data, used in the contexts of education and decision-making, seems to be not less important than the quality of the data itself. Interpretational skills considerably help to produce better qualitative analysis and decisions in situations where one has to deal with imperfect data. Sengers Ph. and Gaver B. claim: "If we understand interpretation as the process by which users, nonusers, and designers come to assign meaning to the structures and functions of computational systems, whether at the level of what a button press might do or at the level of their relevance for on-going life, then it is difficult

to conceive interaction without interpretation. Problems and issues around interpretation continually arise in human-computer interactions" [5]. Hermeneutics is essential for acquiring a deeper understanding of the issues and for the production of ideas, which help to develop and to "safeguard" positions already achieved. The Chinese philosopher Zhu Xi suggested: "Correct mistakes if you made them, watch for them if you have not". If the economic situation is good - one must care not to admit stagnation and decline; if the economy is in crisis - one must find solutions for correcting the mistakes that were made. hermeneutics in fields other than philosophy and history can be traced out in some other sources.

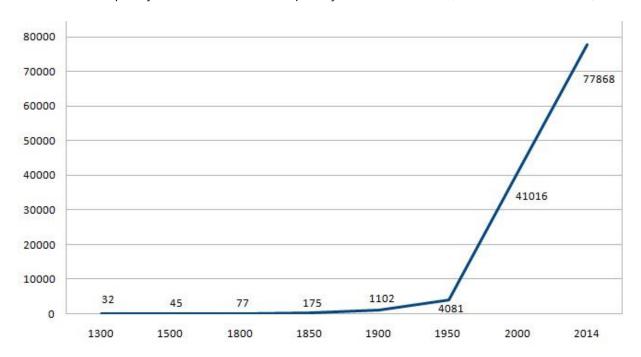
Likewise, the economics of education is the science that justifies broader scientific and hermeneutic analyses for obtaining better economic outcomes from education. To increase country's chances of economic development, an educational system whose main focus would be its ongoing effectiveness, is required. One of the many significant points on the role of hermeneutics in the process of training professional economists, and expanding economic culture in general, is the rhetorical question: " Is economics a science? The 19thcentury economists certainly liked to think so, and although Carlyle thought it dismal, even he dignified it with the label of science. A large part of the contents of the economic theory was modelled on mathematics and even physics (perhaps the "-ics" ending of "economics" helped to lend it scientific respectability), and it sought to determine the laws that govern how the economy behaves, in the same way, that scientists had discovered the physical laws underlying natural phenomena. Economies, however, are man-made and are dependent on the rational or irrational behaviour of the humans that act within them, so economics as a science has more in common with the "soft sciences" of psychology, sociology, and politics" [6, p. 14].

Good decisions in economic policy making seem to be a function of how well the relevant data has been interpreted, more than a function of the quality of the data itself. The *economics of education*, as a science, is worth particular attention, because in the 1950s it was the basis for a shift from *education planning*

based on demographic data to education planning based on the analysis of the rates of return to education. The state of the world economy, as reflected in the Global GDP, has achieved a quasi-exponential growth (Figure 1); hence the need to draw conclusions based on the *causal relationship* seems quite plausible.

Figure 1 The Global GDP growth in billions of USD, 1990.

Source: Developed by the author, based on http://tinyurl.com/hhanwao, (visited on Nov. 19, 2015).



A hermeneutical analysis of the economic situation long before and after the 1950s helps to unveil the strong correlation between (i) the beginning of an unprecedented growth in the Global GDP and (ii) the beginning of economists' involvement in the analysis of the educational policy, that is – the expansion of the science of *economics of education*.

George Psacharopoulos, in a research involving 44 countries (1958-1978), concluded that investments in education can generate: "well above the 10 percent common yardstick of the opportunity cost of capital" and "The returns to education in less developed countries are higher relative to the corresponding returns in more advanced countries" [7, p. 24].

Fischer claims that: "Coordination implies a significant modification of national policies in recognition of international economic interdependence" [1, p. 18]. Thus, the economics of education as a science is of utmost importance in identifying the most effective ways for the economy of a poor country to adapt to

international economic disequilibria, also through its international economic integration (IEI). In our opinion, nowadays, we can speak about a *de facto* IEI that anticipates the *de jure* one, i.e. demand for creating international institutions to monitor "macroeconomic policy cooperation" [1, p. 19]. Nowadays IEI can be assessed in terms of various qualitative traits:

Figure 2. International Economic Integration (IEI) assessment quadrant

Source: elaborated by the author.

advantageous	disadvantageous
equitable i	inequitable
coherent	sporadic

In the context of the globalised world economy, the *economics of education* seems to be unavoidable, should the Moldovan government want to provide plausible economic security for the society at large and the capacity to adjust to *international economic disequilibria*, ideally based on a combination of "advantageousequitable-coherent" variables (Figure 2). We

believe that an inequitable IEI for the citizens of a country like Moldova can also happen due to the incompetence of the national government, not necessarily due to an eventual improper attitude of the international economic partners. George Akerlof made a very plausible statement in this regard: "...small countries have an inadequate administrative capacity to manage globalisation" [8, p. 56].

An impartial look on Moldova

The Republic of Moldova can be characterised by a series of "vicious circles", heavily detrimental to its development as a state, should it be looked at through the angle of international comparative analysis based on the economics of education theory. Moldova's economic crisis can be generally characterised by many vicious circles inherited from the past. However, after the declaration of independence, several specific traits have either emerged or have been unveiled. The deep crisis of Moldova's School of Economic Thought (SET) is obvious, calling for the special attention of the most progressive forces of today's Moldova's society. In the overall "combative zeal" that can be observed in the general culture, one can hardly trace out true economic culture. The deep crisis of the SET also involves a whole series of spillovers. High ranking officials believe that secondary education has "nothing to do" with the national economy and the reforms of education can be carried on without economists' involvement in analysing returns to education. Thus, little attention is paid to shaping and developing attitudinal skills.

There also prevails the opinion that (i) the country has a "very good" education system inherited from the USSR and (ii) the fact that the former Soviet Union collapsed due to having missed developing a sound SET is almost not taken into consideration at all. Altogether, these seem to represent the major reasons why one can still see "distorted policies" being promoted by many Moldovan politicians. One can still come across the opinion that the intensive economic growth after World War II and international economic integration has been mostly influenced by the Cold War, whereas the suggestion to apply Returns to Education Analysis in assessing education productivity and its impact on the overall economic development

coming from the Chicago School of Economic Thought, is quite disregarded. For instance, undergraduate economic education does not yet contain a module in the economics of education that would offer the student a scientific explanation as to why over 80% of the economic assets within global markets are classified as intangible assets [9]. In 2001, the former prime minister of Moldova – Vasile Tarlev, stated: "Only through the revival of the economy will we also obtain money for education, libraries, theatres, painting, etc." [10]. 10 years afterwards, in 2011, the former Minister of Education, Mihai Şleahtiţchi stated: "The Republic of Moldova continues to be the poorest state in Europe. And when you are the poorest state you cannot afford to upkeep luxurious schools. We must resort to the consolidation of the educational space, which, by means of restructuring and optimisations will be capable of solving the problem of primary importance: all children's access to quality education" [11], which, at first sight, might seem plausible. Yet, one can hardly remember any of Moldova's ministers of education having ever tried to give a plausible definition of the notion of "quality education". It is hard to find anyone in Moldova, who had ever complained about not having "luxurious schools", and thus, the above statement looks much like an example of the typical attempt of Moldova's political officials to "justify" the heavily destructive decisions they make for the overall development of the country. More recently, in 2015, another former Minister of Education - Maia Sandu, stated that: "...we cannot, we do not have good indicators, we have no systems, no mechanisms to measure the quality of education, ... this is why we are able to judge only from the perspective of the business circles" [12]. Yet, nobody has ever waived the right of the Ministry of Education of Moldova to calculate returns to education based on the methodology that has been made available around the world by renowned scientists. Ministers of education of different political affiliation and serving the state at different points over a long period of time displayed almost a lack of positive changes in their attitude towards education as a factor of economic growth. Therefore, the Moldovan School of Economic Thought and the teaching staff, are expected to display a "high quality" attitude in the current context, in order to help the government in carrying out the economic analysis of the educational system. Now, will the Moldovan School of Economic Thought revive through its own efforts or will it remain in its current state until the pressure will become even higher due to the deepening of the economic crisis?

"cause-and-effect logic" [13] suggests that Moldova's population is in burning need of a better economic culture, which is required, firstly, if the Republic of Moldova really wants to survive as a state. In the event of having overcome poverty, this economic culture would make it easier to change other cultural aspects. In this context, the Moldovan School of Economic Thought has a paramount role to play. Moldova's education will continue to be inequitable as long as there is a state-imposed limit on the number of university places and the public money is spent on teaching a lot of content that is not relevant for the development of life skills. It is quite demoralising for entire generations of young people to feel constrained to emigrate to seek "better work opportunities", which often imposes huge risks on their lives. There is hardly any country in the world that has reached sound development economic without considerable supply of authentic qualifications exceeding the demand.

The Education Code of the Republic of Moldova (No. 152 dated 2014.07.17, Art. 140, item (d)) stipulates that one of the commitments of the Ministry of Education is to: "carry out estimates and analyses of the indicators of economic returns and performance of the national education system, which shall be published on the official website of the Ministry". This commitment has not yet been honoured.

Education economy in China - what is there to learn for Moldova?

The Chinese economy is in the spotlight, being intensively studied and approached from various perspectives. "In 1978 [...] China enacted the Law on Joint Ventures using Chinese and foreign investment. This law effectively began China's reintegration into the global economy" [6, p. 132]. In May 1995 "the People's Republic of China Law on Negotiable Instruments was adopted [...] with the characteristics of the first regulative law on negotiable instruments in China" [14, p. 28]. In 2014, according to the

Bloomberg rankings of the Most Innovative Countries in the World, China ranked 1st in terms of Manufacturing Capability, 4th in terms of High-Tech Density and 4th in terms of Patent Activity [15]. In March 2016, a news broadcast stated that: "The latest PricewaterhouseCoopers Global CEOs Survey found that China was identified by 34 per cent of CEOs surveyed as the most important market for their business prospect over the next 12 months, second only to the United States (39 percent) and much higher than Germany (19 per cent). The annual survey covered 1,409 CEOs from 83 countries" [16]. The chairman of the PwC professional services group stated: "I'm a big fan of what's going on in China. If you had faith in China's potential 12 months ago, then that it has hit some bumps on the road, which I believe are all short-term and should not impact your view on the long-term potential of the economy" [ibid.]. In September 2016, the Chinese economy was described as potentially having "hundreds of ghost cities dotted across the country [that could be...] hiding a mountain of bad debt" [17, min. 0.15]. It could be so, but nowadays China is seeing an unprecedented mass migration of its population from rural to urban residential areas. According to the Millennium Development Goals Achievement Fund, roughly 150 million people are migrating to cities [18], which can easily be a spill-over effect for a higher phase of China's economy industrialisation. Even if construction of those cities is eventually "frozen", it will not be for a long time. "...according to the government, China has more than 2 billion square meters of empty residential space" [9, 02:45 min.] and this can hardly be considered a loss; it could be a significant facility for the Chinese government to help the newly urbanised population adapt to a quicker enrolment in the urban labour market and lifestyle. The China's prime minister admitted that: "[The Chinese] government indeed interfered in some unnecessary things" [9, min. 3.23]. This statement can be interpreted in multiple ways. One might understand that sometimes, even strategic visionaries make technical mistakes. Yet, at the "daily routine" level one can easily notice the waiters refusing to take "tips", most taxi drivers refusing to take 2 or 3 Yuan in addition to what the taxi counter displays and the locksmith refusing to take some "gratitude petty cash" because he has a salary, and this kind of attitudes do not seem to be due

to the "fear of Government" at all. Such phenomena look more like an *economic culture* manifested in the situations of the daily life, an economic culture that is deeply rooted in people's conscience as a result of their education. Notably, "several studies provide evidence which suggests that the returns to education in China have increased in the last two decades and now approaches average returns observed for major market economies" [19, p. 5]. "After controlling for publication selection bias, Precision Effect and Funnel Asymmetry test results [in China] indicate that an additional year of schooling is associated with 17.26% increase in income" [19, p. 1].

It might have been the case that "The issue of transparency with Chinese data has been on-going for years and continues to be a problem" [9, min. 7.58]. Nowadays, the quality of data seems to be an issue in many countries. This is the reason why a particular accent has been placed in this article on the importance of developing the skills of hermeneutical analysis for:

- economic data analyses
- international comparative analyses
- more balanced attention to *qualitative* aspects of analysis in economic research and education
- analysis of economic productivity and performance of a country through the angle of *Returns to Education Analysis*. It is calculated based on the real incomes registered in the Household Budgets comprising also the *economic motivation dimension*, not just in terms of the GDP per capita, whose distribution is difficult to foresee in a country like Moldova.

When there is considerable economic interdependence in the world and "evidence suggests that the potential gains from coordination are in any event small" [1, p. 48], to what extent can the "absolute transparency" of data contribute to making coordination more trustworthy in support of the economic security of a poor country? Besides, one might admit that producing data of the highest possible quality does matter, but it is very costly and thus, for a country affected by the critical shortage of funds,

relevant indicators matter even more, and good skills of relevant indicators matter most of all.

A topic that attracts a good deal of attention in China, in contrast to the Republic of Moldova, is the intense public debate about education equity. It envisions that: "In China, a great deal of education reform focuses on ensuring that students from migrant families those who have moved from rural areas to find jobs and a better way of life - have equal access to a high-quality education" [20]. Nowadays, in China, one can see many foreign teachers from countries like UK, USA, Australia, Romania, Moldova, Ukraine, Czech Republic teaching various subjects in English. Their classes are closely monitored and analysis is carried out on their work resulting in constructive feedback is also given. International experience in teaching and education sciences is received with an openminded and friendly attitude. In China, the application of the returns to education analysis started roughly 15 years after China's reintegration into the global economy began. Since then, significant changes took place, which seems to have triggered an unprecedented migration of the labour force towards cities. There is also strong evidence of qualitative changes such as the increase in the security and strategic nature of the national economy and the state as a whole.

Conclusions

Moldova's educational system ought to become the subject of an intense and thorough debate in which the problem of the equitability of country's education policies would be treated with greater awareness. The *science* of Economics of Education ought to be the major scientific background for building up opinions and attitudes in this debate.

The academics working in the field of economic sciences ought to get more involved in combining the theoretical training of the future economists with the field of Economics of Education; more awareness of the human factor is required in relation to the study of economic activities.

Moldova's School of Economic Thought seems to be in a pressing need for a "purification" from its very core. A new strategy is required. It might be necessary to revise if the doctoral dissertations defended at least within the last couple of years contain genuine *scientific novelties*, as stipulated by the "Guide to Improving Doctoral Dissertations and Author's Review" approved by the Resolution of the Attestation Commission of the National Council for Accreditation and Attestation (CNAA), no. AT03/11 dated April 23, 2009. The process ought to be transparent and minutes of the working sessions ought to be published on a web-site with audio files available.

The Republic of Moldova significantly lacks behind China in terms of applying the *Returns to Education Analysis*. For Moldova to "catch up", economic education as a field of undergraduate and post-graduate training, needs to become more open to the *economics of education* as a module of professional training. This could increase the speed of skills development among the future economists, business people and university degree holders overall.

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