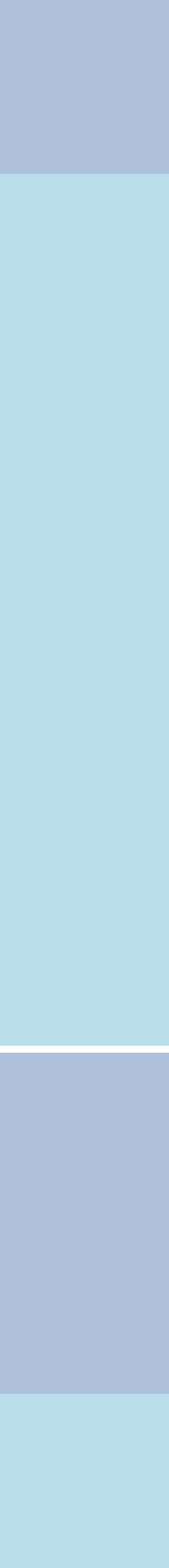


# Effects of Economic Crisis on Higher Education Funding

*Edited by*  
**DUŠAN LESJAK**

ToKnowPress



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# Chapter One

## Higher Education in the Grip of Economic Crisis

Dušan Lesjak, Vesna Skrbinjek, and Janez Šušteršič

The beginning of the 21st century had marked higher education (HE) with an extensive process of transformation that covered structural, cultural and ideological changes, incorporated into terms ‘globalisation’ and ‘knowledge society.’ In the light of those changes also the view of providing (public) funding for HE, which was no longer self-evidently based on the concept of the welfare state, but focused on finding new ways to finance and regulate and also govern the public sector (David & Naidoo, 2013, p. 1).

After 2008 the global economic crisis had a significant impact on the HE systems of countries all over the world as its effects have expanded rapidly and had a major impact on the economies and virtually on all other sectors.

Our research includes examining the effects of the global economic crisis<sup>1</sup> on the (public) HE funding in selected European countries.<sup>2</sup> Since the shape and the structure of HE are different in each particular country, the impact of economic crisis on it is also various and distinct (Eggins, 2009) and interesting for examination.

While the role of the government in economic development is already well-founded among the theorists of public finances (Murn, 2009, p. 3), its power of regulation is however being challenged in times of global financial and economic fluctuations. Accordingly to standard economic view (e.g. Acocella, 2005), the role of the govern-

<sup>1</sup> The term global economic crisis relates to the crisis which hit the USA in the middle of the 2007 and spread to other parts of the world in 2008. Countries affected by the global economic crisis are marked by a drop of GDP and a high unemployment rate (Tilak, 2010, p. 4).

<sup>2</sup> For the research purpose, 27 Member states of the European Union and 3 EFTA (European Free Trade Association) were included in the analysis, making a total of 30 European countries. The analysis does not include Croatia, the latest associated member that only joined the European Union on the 1st of July 2013, as the majority of the research was conducted prior to this period.

ment is focused on determining the legal framework for the more efficient functioning of the market economy and the execution of the macroeconomic stabilization, allocative and distributive function. In times of economic crisis, governments focus primarily on those sectors that have an immediate effect of stimulating the economic growth (Tilak, 2010, p. 4). Timely, effective and appropriate choice of measures (Murn, 2009, p. 1) that enable faster recovery and contribute to a more rapid exit from the crisis is of extreme importance. Due to the financial turmoil, maintaining public HE funding in times of economic crisis has been set as a major challenge particularly in economically most affected countries.

In times of economic crisis countries are increasing the government's deficit in order to boost economic growth, but as crisis makes revenues fall sharply and the burden of the financing of the deficit is increased by borrowing, there is little room to increase government spending, and in addition, the increased public debt caused by high deficits the countries' are faced with the need for fiscal consolidation. The process of consolidation means, *inter alia*, that the expenditure will be directed to 'debt services obligations' and other necessary expenditure and less for other purposes such as education (UMAR, 2010, p. 6; Tilak 2010, p. 4). Under normal circumstances economic factors do not have a decisive influence on the amount of funds earmarked for education, however as the economic situation in countries worsens in the time of economic crisis it worsens also the conditions to finance (Tilak, 2010, p. 29).

Funding cuts in education in times of economic crisis that are driven mainly by the need to consolidate public finances are in contrast with great importance given to education since the Second World War. Both society and individuals benefit from it, which started the global process of providing access to education,<sup>3</sup> particularly in

<sup>3</sup> Trow (1974, p. 61) identified changes and development of the European and American HE after World War II, where by increasing of the number of students began the transition from elite to mass (in the case of Europe) or universal (in the case of America) HE. While growth in the number of individuals included in primary and secondary education has slowed down in the last thirty years (in developed countries it even declined, due to low or negative birth rate), participation in HE was increasing constantly (Eicher, 2000, p. 33). Varghese (2009, p. 9) states that the first prerequisite for growth of HE sector are well-developed previous levels of education and national and international legal basis that allows 'education for

HE (Either, 2000, p. 33; Varghese 2009, p. 8). Today's modern society is often referred to as knowledge-society or knowledge-based economy, which implies that we have entered the era where knowledge plays a central role (OECD, 2008b), thus HE has become one of the most relevant strategic policy areas (Miklavič, 2010).

The knowledge intensity and the globalization of knowledge are increasingly affecting the social and economic environment and thereby fostering creativity and innovation (Van Ginkel, 2006, p. xxiii). Van Ginkel (2006, p. xxiv) justifies the process of knowledge intensiveness of society by producing more and more knowledge, rapidly decreasing the 'self-life of knowledge' and rising the average levels of education.

Accordingly to that, Barr (2009, p. 201) states that HE is important first of all because of the knowledge itself and nowadays also because of its positive effect on economic development, private benefits and social responsibility. In the publication World Economic Forum Global Competitive Index (Van der Ploeg & Veugelers, 2008, p. 103) indicators suggest a positive correlation between HE, innovation and economic growth, which is however different in every country.

Hanushek and Woessmann (2008, p. 1) summarize three links between education and economic growth:

- education increases the stock of human capital, resulting in higher productivity and thus higher production level (the basis for this claim is the neoclassical growth theory);
- education enhances innovation in the economy, creation of new knowledge and technologies (according to the theory of endogenous growth) and
- education enables faster transfer and dissemination of knowledge, processing new information and introduction of foreign technologies for own needs.

Similar conclusions were made by experts of the OECD (2008b, p. 2), that have found that tertiary education (TE)<sup>4</sup> plays a key role in

all. Its expansion was also influenced by better employment prospects for graduates, the growing number of private HEES and possibility of international student exchanges (Varghese, 2009, p. 9). All those changes have led to the restructuring of the budget for education and 'mobilization of additional domestic and external resources for education' (Tilak, 2010, p. 1)

<sup>4</sup> TE, besides HE includes vocational education beyond secondary education as well

ensuring competitiveness of the economy and contributes to social and economic development as it:

- forms human capital by teaching,
- builds a knowledge base by research and development,
- extends and applies knowledge by interaction of knowledge users,
- keeps/maintains knowledge by intergenerational preservation and transfer of knowledge.

It is believed that today more people invest their time and money in education as it was customary in the past (Varghese, 2009, p. 8). There are many empirical studies (Ahčan, Polanec, & Kozamernik 2008; Herbst, 2007, p. 20; Van der Ploeg & Veugelers, 2008, p. 103) that identify private and social returns of highly skilled individuals, resulting in better jobs and higher earnings. The theory of human capital accumulation has become very well established among economists (Chapman & Pope, 1992), as benefits from the accumulation of human capital are not limited to the direct recipient of education, but are spilled-over (as a so-called positive externality<sup>5</sup>) on the others as well (Šuštersič & Pinterič, 2009, p. 88). Due to those economic reasons, HE in Europe receives public financial support (Van der Ploeg & Veugelers 2008, p. 104) and thus greater control from the government (Boarini, Oliveira Martins, Strauss, de la Maisonneuve, & Nicoletti, 2008, p. 277). At the same time, Sianesi and Van Reenen (2003, p. 157) conclude that the impact of the expansion of the education sector depends on the development level of the country (TE has the greatest impact on the economic growth in the OECD countries), while growth is also influenced by the type, quality and efficiency of education.

For European HE area it is common that countries are funding their HE sector, which is in line with European and national objectives and general public policy, involving all HE stakeholders (Santiago,

and is, accordingly to international classification ISCED 97 (1997), marked as 5 (5A, 5B) and 6.

<sup>5</sup> We speak of externalities when a certain market exchange (between provider and consumer) creates benefit or harm to people not involved in this exchange. Those costs or benefits are, however, not fully reflected in the price of goods being the subject of exchange. Classical examples are pollution (as a negative externality) and education (as a positive externality) (Šuštersič & Pinterič, 2009, pp. 88–90).

Tremblay, Basri, & Arnal, 2008, p. 59). Educational (study) activities receive over 70% of funding from public sources,<sup>6</sup> despite encouragement from European HE policies<sup>7</sup> to increase the share of private sources of funding (Eurydice, 2008, p. 47). Even before the financial and economic crisis, in the last two decades HEIs (Higher Education Establishments) faced two contradictory trends (Aleksić, 1999):

- HEIs faced increased demands and expectations from the society,
- at the same time, there was a decline in the amount of available public financial resources.

New requirements and expectations that society has towards HE are primarily reflected in greater involvement of various population groups and in development of post-graduate and lifelong education in order to meet modern requirements of the labour market, to develop new fields of study and to form a creative and innovative science core, which should allow a major medium-term impact on both economic and social development (Aleksić, 1999, p. 130).

The decline in public funding sources for HE activity is the result of an increase in public spending for other public users such as health, infrastructure, public policy and programs for poverty reduction (Salmi, 2009, p. 298), while the continuous expansion of HE systems and the increase of the student population are leading to growing costs for HE thus indicating the need to increase funding sources (Johnstone, 2009, p. 1). Sanyal and Martin (2006, p. 3 and 4) find that in the transition countries the share of public HE funding has started to decline more than in developed countries. Salmi (2009, p. 298) sees the reason for reduced public funding lower public sources also in the fact that in transition economies some segments of economy become private or economy starts to stagnate, which leads to reduction in tax revenue of the government thereby again reducing the availability of the public funding sources.

<sup>6</sup> Public funds for education are provided from taxes and contributions and can be considered from two aspects of funding: funding of educational institutions and the financial support for individuals in the schooling process (Bevc, 1999, p. 143).

<sup>7</sup> We will understand the concept of HE policy as a part of public policies that include ‘decisions or rules of conduct that are binding on the territory controlled by the state authority of this territory (that may be the local, regional, national or transnational political authority)’ (Fink Hafner, 2002, p. 106).

The economic crisis has, due to increased imbalances of public finances, forced many countries to change the already set development strategies and policies (Tilak, 2010, p. 1), also in HE. The countries' responses vary greatly. Since 2009 some European governments have increased and some have reduced public expenditure for HE, due to their national framework, political priorities and countries' economic situation (Eurydice, 2011, p. 41). In doing so, they were faced with the problem of efficient selection of appropriate measures, as some old programs still in progress should have been discontinued and thereby allowing that founding of new programmes or measures would not increase the total government expenditure too much (Murn, 2009, p. 1). At the national level, there are two important indicators by means of which we can observe HE policies' approaches to solving this problem: identifying changes in the amount and structure of budgets for HE and monitoring the governments' decisions on the adoption of a special 'stimulus packages' or other measures for HE sector (Eurydice, 2011, p. 41).

Changes in funding have a big impact on the functioning and future development of HEIs, especially in EHEA (European Higher Education Area), where financial resources are traditionally provided from national budgets. HEIs need stable funding in order to implement their mission and role. However, the decrease of public funds also encourage HEIs to restructure and use a more market-based approach to funds-gathering, improve the (internal) management and increase efficiency, provide for a better selection of services offered, seek for ways of connecting and cooperating with other HEIs, increase transparency of educational and research activities and seek for new sources of funding (Aleksić, 1999, p. 130). The economic crisis has certainly accelerated those changes, whereas our research only identifies trends of changes at the macro level and at the level of a case study. In further research it would be interesting to observe, with a longer time lag, which HEIs have made greater and which smaller steps in changing their activities and development and what is the causal effect of those changes on both society and economy.

In recent years, the trend of cost-sharing between the government and students is gaining importance. Students (and their parents) contribute a larger share of funding for HE, more than it was common only two decades ago, and at the same time students (and their parents) are entitled to a number of social transfers, allocated

from public funds (Salmi, 2009, p. 299; Vincent-Lancrin, 2009, p. 271). Maintaining a social dimension is a very important policy for EHEA (Eurydice, 2011, p. 7). Vincent-Lancrin (2009, p. 275) notes that between 1995 and 2005 in most countries a growing proportion of public funds for HE was intended for student aid.

Salmi (2009, p. 298) notes that even before the crisis, there was an increase in the need for different, more innovative funding mechanisms, that would take into account the given social and economic changes. He determines that over the last two decades two paradigms have appeared in funding methods:

1. lower dependency on public funds and increasing diversification of funding sources and
2. searching for mechanisms for allocation of funds, based on performance and results.

Increased competitiveness for public funds promotes the use of new funding mechanisms that are more competitive and based on results or performance (Adcroft, Teckman, & Willis, 2010, p. 586; Salmi, 2009, p. 304). Funding reforms are directed towards incentives to acquire diverse sources of funding, especially competitive funds, funds from the economy (companies) and donations from the non-profit sector (de Dominicis, Perez, & Fernandez-Zubieta, 2011, p. 1). Therefore we believe that during the economic crisis, conditions of the existing mechanisms for HE funding are no longer sustainable. More and more countries are introducing innovative funding mechanisms that include elements of competitiveness and performance.

The economic crisis along with the need to cut government spending or deficits has brought an additional motive to promote the mentioned changes in HE. On the other hand, awareness of the economic and social impact of HE has been maintained, therefore the national exit strategies emphasise HE as one of the most important factor that may contribute to economic recovery.

Our research was primarily focused on *how has HE funding in European countries changed in the time of global economic crisis depending on their specific economic conditions?* The question refers to attitudes of governments and HE policies towards HE in the changing economic circumstances in their respective economies.

For this reason we focused on studying changes of public funds devoted to HE depending on the impact of the economic crisis on

countries' economies, changes in availability of public funds, adequacy of mechanisms and instruments,<sup>8</sup> their distribution between HEIs, student aid and identifying HEI's responses to those changes and measures.

That is why we were interested in:

1. role and importance of HE and the effects of the economic crisis on it,
2. the characteristics of European national economies and the state of macroeconomic situation before and during the economic crisis,
3. changes in the funding sources and scope of public HE funding and scale of public financing of the HE, changes in share of expenditures on student aid in total expenditure on HEIs, changes in the mechanisms and instruments of funding HEIs and
4. funding of Slovenian HE in relation to the impact of the economic crisis.

In the 21st century HE has faced global economic, political and social challenges which greatly affected its transformation. The problem to provide sufficient, stable and efficient HE funding did not occur along with the economic crisis, but already with the massification of HE and the growth of HE systems (David, 2011, p. 147). In the recent period, this field was given a lot of attention (Tandberg, 2009, 2010; Woodhall, 2007) and the global economic crisis has only further actualised questions about the adequacy and efficiency of public spending for HE.

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<sup>8</sup> By using mechanisms and instruments, policy makers implement certain public policy (Fink Hafner, 2002, p. 106).

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The recent deep and long-term economic crisis greatly challenged European public funding-based higher education systems. This monograph examines how public higher education funding in European countries varied during the economic crisis in relation to how strongly countries were affected by the crises and how much importance they put on higher education funding compared to other users of public funds.

In the empirical analysis, countries are therefore clustered into two groups depending on severity of economic crisis and its impact on their economies and public finances. Empirical analysis has shown that during economic crisis, higher education sector has undergone cuts in public spending as well, but with a certain delay and mainly in economically more affected countries. Changes in public funding were examined by using indicators of public expenditure from public finance statistics, as well as by comparing expenditures per student and the share of expenditure allocated for student aid. We also studied changes in mechanisms and instruments of higher education funding during economic crisis. In many countries, governments introduced more innovative funding mechanisms that include elements of competition and performance. Universities themselves also responded to changed economic and social conditions by efforts to improve their own efficiency and effectiveness.

Our research thus documents how economic crisis had left a great mark on European higher education and also increased the gap between economically less and more affected countries.