

Impact of Economic Crisis on Financial Sustainability of Higher Education Institutes

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Abstract. This paper focused in particular on the impact of economic crisis on financial sustainability of European HEIs. Research shows that crisis has a strong impact on European higher education. There is a sharp cut of public funding in most countries; In private funding, student financial contributions increase significantly and the other private funding decrease; Economic crisis sets the stage for the implementation of full costing in HEIs. Finally, the countermeasures of government and institutes are discussed. Both public authority and universities should make efforts to keep HEIs financially sustainable.

Keywords: economic crisis, financial sustainability, HEIs, Income diversification, full costing.

1. Introduction

The university is no longer a quiet place to teach and do scholarly work at a measured pace and contemplate the universe in centuries past (Skilbeck, 2001) ^[1].

To better fulfill accountability, HEIs must keep their financial sustainable. European HEIs, for example, not only receive public funding from public authorities as their main funding, but also expand funding resources through tuition fees, contract income with private sector, philanthropic funding and income generated by the provision of services. At the same time, full costing is introduced in European HEIs to identify better costs of teaching and research. The financial sustainability is increasing strengthened in European HEIs.

However, the economic crisis changed everything. The crisis gave such a significant hit on the European economy that the succeeding debt crisis forced some countries, such as Greece and Ireland, to accept bailout. Almost all European countries began to carry out the Germany and France-led fiscal policy of austerity which means big cuts of public expenditure. The financial sustainability of HEIs are affected seriously. This paper seeks to map the status of financial sustainability in European HEIs and give a detail analysis of the impact of economic crisis on funding, which is helpful to understand the evolving nature of effects the crisis has left on higher education institutes.

2. Literature Review

Funding of HEIs has been a hot topic of university recently. However, there are not many papers focusing on the issue of income diversification. Most papers study the funding models and methods, the relation between funding and autonomy.

Johnstone(1998)^[2]addressed that, with the massfication of higher education and reform of government on higher education, the student financial contributions and the funding resources from private sectors increased. Income diversification has been a trend of higher education worldwide. Alonso et al (2001) ^[3]tried to explain

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the variation in the degree of adaptation of the Public Research Centers, taking funding strategies of the Public Research Centers as the behavioral variable to be explained, measured by the amount of external funding as a percentage of total R&D expenditures. They found that the research centers which have more autonomy and more need of funding have more interests in getting external funding. Aghion et al (2008) ^[4] made an analysis on the relation between performance, status of autonomy and levels of public funding. Finally they suggested the increasing university funding and autonomy are mutually reinforcing factors to increase performance. An European University Association study (2008) ^[5] analysed the ability of universities to identify the full costs of all their activities and identified a need for support in the development of full costing in Europe's universities. Through this project, it has become clear that full costing brings universities many benefits and is the premise of keeping HEIs financial sustainable.

3. Financial Sustainability of HEIs

3.1. Briefing

As we mentioned in the Introduction, financial sustainability will be a main challenge for HEIs in the future. Only those institutes that have good financial structures and stable income flows will be able to respond to the future challenges and fulfill increasing missions in a global environment.

In general, there are three basic factors that are necessary for HEIs' financial sustainability: 1, sufficient public funding; 2, a reasonably diversified income structure; 3, identifiable and understandable costing (full costing). Among the three pillars, sufficient public funding is fundamental factor and full costing is the premise of financial sustainability. By contrast, diversified income structure ensures that HEIs can get autonomy and self-government to fulfill the accountability.

3.2. Sufficient public funding

As public institutes, HEIs receive the most funding from public authorities, which is called (direct) public funding. Commonly, public funding is divided into block grant, targeted funding and project-based funding.

A block grant is defined as a kind of financial grant which covers several categories of expenditure such as teaching, ongoing operational costs and research activities). HEIs are mainly responsible for internal allocation of funding according to their needs. Targeted funding is a kind of funding, which consists in reallocating funds from block grant to specific funding lines. Usually, targeted funding often aims at achieving specific objective for strategic national priorities. Other funds may be allocated through project-based funding, which mostly are allocated through competitions organized by specific bodies. In a context of constantly decreased block grants, these competitive funding become as an important source of income for HIEs. A simplified modality of public funding is shown in Figure 1.

Non-competitive Funding		Competitive Funding
Block Grant	Targeted Funding	Project-based Funding

Fig. 1: A simplified modality of public funding

European HEIs mostly depend on direct public funding. Although it naturally varies among higher education systems, the most of HEIs heavily relied on direct funds provided from regional or national governments. In 2008, direct public funding accounted for over two-thirds of the average income structure of university ^[6].

3.3. A reasonably diversified income structure

The highly depending of public funding does not mean public funding is the only funding resource. HEIs is exploring income diversification. The term “diversification” can have different meanings, but in the funding context it often refers to the distribution of different funding sources within the overall income structure of a HEI. Usually there are three main resources of funding. They refer to public funding, private funding through student financial contributions (or tuition fees) and other funding sources (or: alternative income resource, other private funding, third party funding). Other funding includes income generated from contracts with the private sector (involving research and education contract), philanthropic funding and income generated by the provision of services.

What should be pointed out is the limitation of private funding. Because the potential to increase private income sources within a short period is limited, a gap caused by cuts in public funding can not expected to be narrowed by private income sources . That means income received from tuition fees and other private funding sources cannot replace public funding and should be treated as an addition of public funding.

The average income structure of European universities is showed in Graph 2.

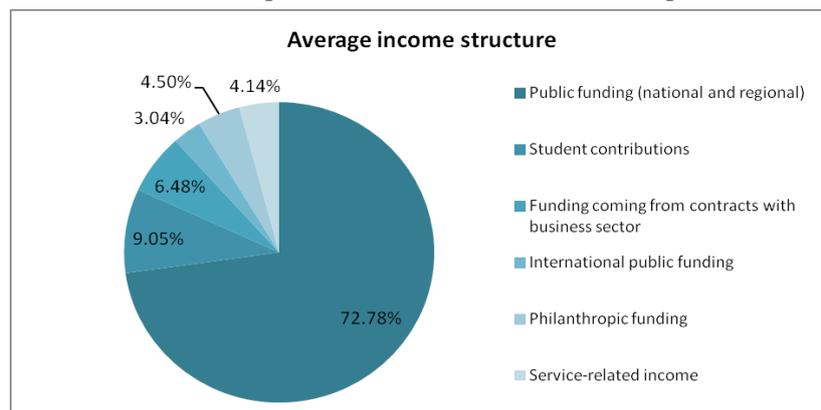


Fig. 2: The average income structure of European universities^[7]

3.4. Full costing

The massification of higher education, increasing accountability and rising costs for human resources are only some of the triggers for high costs that HEIs are confronted with. Despite the generally accepted fact that higher education is seen as an engine of economy recovery, public funding of higher education in most countries come to a standstill. These force HEIs to respond by taking action. The first step is to identify the real costs of their activities. For this reason, European University Association suggest adopting “full costing” to stand for the ability to identify and calculate all direct and indirect costs of a institute’s teaching, research and other activities. In fact, many HEIs in Europe don't conduct appropriate costing, this status has a negative effect on financial sustainability.

There are both internal and external obstacles during the implementation of full costing. The most common institutional barriers include resistance to changing, concerns over time reallocating and a lack of high leaders and management commitment. To overcome these difficulties, it is necessary to persuade the top leaders and key academic and administrative staff to understand the benefit of full costing.

The most common external blocks are a lack of autonomy, legal barriers and a lack of trust between stakeholders. A lack of financial support is also a difficulty because the implementation of full costing is a costly process.

The development of full costing is unbalanced between different countries in Europe. Some countries, such as U.K. and Netherland, have introduced costing system to practice. However, Slovenia and Estonia have not begun to implement full costing.

4. Impact of Economic Crisis on Financial Sustainability of European HEIs

4.1. Impact on public funding

4.1.1. Cuts of public funding

The crisis forced many European governments to implement austerity policy which reduced public funding in higher education. Higher education and research have to compete with other priorities in public budgets, such as security, health, etc, in a environment of constrained resources. It is almost impossible that public expenditure will rise sufficiently to narrow this widening funding gap, that it to say, there are no hope of increasing public funding.

Graph 3 shows the comparison of changing higher education public funding in 25 European countries during economic crisis. In this survey, all 25 involved countries were classified into six main categories by the extent of influent.

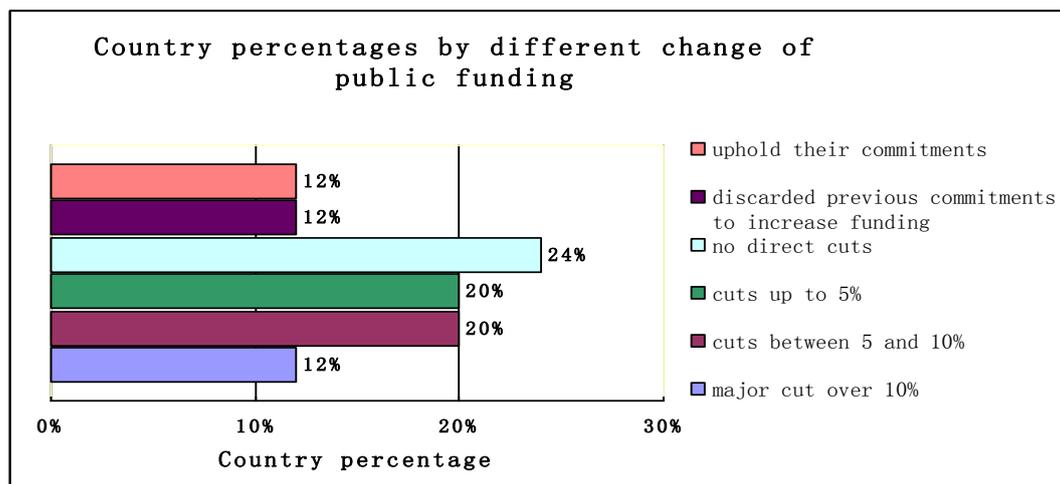


Fig. 3: Comparison of changing public funding in 25 European countries^[8]

We can find from graph 2 that public funding for higher education were cut in more than half of all the countries. In these countries, major cuts in public funding happened in Latvia, where an initial cut of 48% in the beginning of 2009 was followed by a further cut of 18% in 2010, following the recommendations of the International Monetary Fund and the World Bank to significantly reduce public funding of higher education. The cuts have put serious pressure on the Latvian HEIs in the forthcoming years. The same cuts were introduced in Greece (30%) and Italy with a cutting-target of 17%, leaving institutes struggling for existence between rising costs and decreasing funding. So far, no direct cuts have been reported by the Nordic countries, including Norway, Sweden, Finland and Denmark, despite accounts that institutes also face indirect impacts on their funding structure. In contrast, only France, Germany and Portugal have upheld their commitments, or indeed increase investments to higher education. After all, German and France are two leading economies in Euro-zone.

4.1.2. Change of funding modality

The crisis has had different effects on the funding modality of teaching and research of higher education. Firstly, teaching is on average much more affected than research. Because when crisis comes, institutes will be under pressure of growing demand and direct cuts to their teaching budgets. The increasing demand comes from not only the demographic changes, but also rising unemployment levels exacerbated by the economic crisis, which have driven more people into seeking education to increase their competitiveness on the labor market. In many countries this pressure had caused reduced spending per student (per capita), sometimes even in the institutes which have not experienced direct cuts to their budgets. On one hand, because of budgetary limitations, some study programmes have to be closed. On the other hand, the threat of funding cuts has driven some universities in Scotland to seek new income streams by opening new remote campuses. Some institutes even reduce the number of their academic and managerial staff, which will have important consequences on their teaching capacities.

Secondly, the crisis has also affected institutes' research activities. There are big cuts in research funding in many countries. Funding authorities also seem to increasingly use competitive funding tools, a development

fostered and accelerated by their reduced investment capacity. Competitive funding schemes can achieve positive effects like increase quality and stimulate efficiency when introduced carefully, considering only the nature of the complete funding system. But, on the other hand, competitive funding can also endanger institutes' financial sustainability when it does not cover the full costs of an activity, requiring co-funding from institutes' other sources. Even some countries tried to allocate block grant through competitive funding. When a part of universities' block grant funding was transformed into competitive grants in Denmark, some universities were left unable to pay the salaries of all staff, as grants had to be won by individual scientists and therefore bypassed the central university administration. Adding to this uncertainty is also the threat of excessive fragmentation of funding sources. Increasing competitive funding will lead to a decentralized funding structure, which have a negative effect on ongoing operation and financial sustainability because of a great deal of time-consuming application procedure and reports.

In general, in a context of austerity policy and increasing cuts on public expenditure, maybe it is a wise choice to explore other funding resources and decrease costs for HEIs.

4.2. Changing in income structure

With the cuts of public funding, private income sources are becoming more important than ever. However, the impacts of crisis on private funding resources are different. There is a possibility that the percentage of tuition fees will rise and other private funding will be down.

In many countries, the economic crisis has triggered a public debate about private sources coming from student financial contributions. Discussions even demonstrations are taking place about the introduction or increase of tuition fees to help universities reduce the funding gap which has been created by the economic crisis^[9]. Despite the resistance that this has encountered, changes are now taking place. Even in the Nordic countries such as Sweden, Denmark and Finland, where higher education were exclusively publicly funded for long time. Some institutes have now started to introduce tuition fees. These will either be applied to some offered programmes or will be charged to foreign students. In the U.K., where tuition fees are already in place for years, student financial contribution is regarded as one of resources to ensure a sustainable financial future for institutes. As an alternative to raising tuition fees, a graduate contribution scheme is now also being discussed as a way of deferring paying for studies until reaching employment, while achieving greater equity by tying repayments to earnings.

Impact on other types of private funding is beginning to work. With the decreased market demand, many companies reported a low prediction of revenue. In parallel, the cooperating projects were postponed or cancelled. There are difficulties in starting new projects. Furthermore, accounts collected from philanthropic and other foundations which offer another private source of income to HEIs show that their funding base has also been affected by the crisis. In the U.K., the amounts have fallen by one fifth^[10].

While economic crisis results in cuts in public funding, it is also clear that income diversification will play an important role in financial sustainability of HEIs. Therefore, institutes should strive to consolidate the cooperation with private sector: the introduction of tuition fees system is imperative, at the same time, institutes should keep a good relationship with private resources including enterprises and charitable funding, making a good preparation for the coming economy recovery.

4.3. Effect on implementing of full costing

The public and private funding of European higher education get a hit in the economic crisis. For the implementation of full costing, however, economic crisis is a good chance to some extent. With the decrease of funding and increase of costs, it is necessary for HEIs to carry out a stricter cost control than ever. So for struggling institutes it maybe a necessary decision to implement full costing. According to European University Association study (2008), full costing can help institutes optimize the operation, improve the efficiency of the internal allocation of resources, better understanding and making investment decisions.

Of course it is not enough to implement full costing for HEIs by themselves during crisis. The support of governments and university groups are necessarily needed. Examples from the U.K. give us a good experience that the support of government plays a key role in the implementing of full costing. By contrast, full costing has not been introduced into Estonia without government supports. Under this circumstance of

longtime of public funding decrease, it maybe a right decision for governments to support institutes to implement full costing during crisis.

5. Conclusion

This paper focuses on the impact of economic crisis on European higher education. Study shows that the crisis has a significant effect on HEIs. Firstly, many countries have experienced reduced public spending, which has put institutes under significant financial pressures. The teaching of higher education is affected more by funding cut. As a response, funding modality in research increasing adopts competitive funding tools.

Secondly, the study also finds that the crisis has had a broader impact on institutes' income structure through changes of private funding. The introduction of tuition fees is an unchangeable trend. However income from enterprises and philanthropic foundation reduced during crisis. Therefore, the importance of student financial contribution in HEIs' income is increasing.

Finally, this paper suggests that the crisis give a chance for high education to implement full costing. In the context of cuts in funding and rising in costs, HEIs should carry out full costing to optimize operation and improve efficiency. It is the responsibility for governments and university groups to give necessary support during the implementing.

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