

Some Reflections about Performance-Based Funding and its effects in European Higher Education

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1. Introduction¹

Higher education institutions have been facing tight competition for funding, alongside pressures to become more efficient in their use of public funds. One major development in public funding has been the introduction of performance-based funding (Herbst, 2007; Biscaia 2020a), with funding becoming an instrument to promote institutional competition (Jongbloed & Vossensteyn, 2016). Nonetheless, whereas in the past competition was mainly a consequence of scarcity of funding, nowadays it has become an instrument for fostering a multidimensional and multilevel competitive environment in public Higher Education (HE) (Bogt & Scapens, 2012; Waltere et al., 2011).

In this text, we analyse briefly the dissemination of performance-based funding in European

HE and discuss its main institutional effects in teaching, research, and in the internal dynamics of institutions. We start by presenting the dissemination of PBF across European higher education and its main characteristics. Then we reflect briefly about the main institutional effects of the dissemination of PBF in education, in research, and in organizational behaviour and dynamics.

2. Performance-Based Funding in Europe - Varieties and Commonalities

The combination of increased financial needs and limited resources led to the development of alternative approaches for financing HE systems, with governments increasingly valuing output over input criteria (Jongbloed, 2020a). This tendency has been reflected in the development of perfor-

mance-based funding - a type of funding allocation that varies according to the performance of the institution being funded.

Table 1 presents the scope of Performance-Based Funding that is normally used in the literature. There are other funding mechanisms that are based on performance, such as competitively awarded funding, typically seen in research projects: or the so-called “Excellence funding”, in which a few institutions are granted funds in order to attain a flagship status within their national system and with internationalization purposes (Biscaia, 2020b). However, these are considered separately from performance-based funding, as they are out of the core funding attributed to institutions.

Within core funding mechanisms, Performance Contracts and Formula-Funding are the main instruments to apply PBF in a system. However, when a funding formula is considered, only the criteria re-

Table 1 – Types of Performance-Based Funding and Other Funding Systems

Performance-Based Funding	Input-Related	Competitive Funding
<ul style="list-style-type: none"> • Performance Contracts • Funding Formula (Output Indicators) • Assessment Exercises 	<ul style="list-style-type: none"> • Incremental Funding/ Historical level • Funding Formula (Input Indicators) 	<ul style="list-style-type: none"> • Projects and Grants • Excellence Schemes

lated to performance should be considered as PBF. This separation is often important, but is not consensual within policymakers and governments. It is not uncommon in various official reports to see formula-funding being treated as Performance-Based Funding; and in many systems it is difficult to assess the actual weight of performance-based funding as a part of the core funding in a system precisely because there is no harmonization between the definitions and procedures that are used in each country. This confusion also complicates the process of estimating the effects of Performance-Based Funding on a set of systems.

Similar to many of the developments associated with the emergence of New Public Management and the neo-liberal reform of the public sector, the use of PBF in European HE goes back to the early eighties with the introduction of performance contracts in The Netherlands (Jongbloed & Vossensteyn, 2001; Geuna & Martin, 2003). The first PBF system at the national level was introduced in the UK in 1986 with the Research Assessment Exercise (Hicks, 2012). This was followed a few years later by several other European countries (Poland in 1991, Slovakia in 1992, The Netherlands in 1993, Finland in 1994, and Denmark in 1995).

The introduction of PBF has been made through various forms – funding formulas, performance contracts and quality assessment processes. Though most countries introduced it through formula components, there has been an increasing shift towards the usage of performance contracts (Jongbloed, 2020b). Another important element for the analysis of the in-

roduction of PBF in European HE has been the type of criteria and indicators adopted. Although the initial application to the funding of HE was often focused on research, its scope has also become more widespread in the last two decades.

The introduction of PBF systems may also differ in the weight of funding that is actually distributed based on performance indicators. As explained previously, the information available is rather limited about the actual weight of PBF in total funding. Nonetheless, the weight of PBF in the overall funding of public HE differs significantly, ranging from a marginal role in some systems to a much more significant one in other systems.

3. Analysing the Effects of Performance-Based Funding Systems

3.1. Effects in Performance

Despite the dissemination of PBF in European higher education, we still have limited knowledge about its effects in education and in research. Regarding the latter, the evidence seems to be more positive. Among potential positive effects, it has been mentioned the effects in the growth of the number of publications, of PhD candidates and graduates, and of researchers (Bence and Oppenheim, 2004; Laudel, 2006). Moreover, it was observed an increase in the concentration of resources towards more research-intensive institutions (Marques et al., 2017). This synergy between competition and concentration of funding is perceived differently, with some stakeholders welcoming it and others criticising

due to its potential negative effects on the degree of institutional equity and diversity (Hicks, 2012).

By contrast, the influence of PBF in teaching is less apparent. In fact, it is striking the limited knowledge about the impact of PBF in higher education. Although several European countries have introduced output criteria related to student progress and graduation, there is hardly any significant study that can help us to understand the actual impact, positive and negative, of this type of policies. In the case of Denmark, one of the European countries where this type of output-orientation has been more significant in the funding of HE, the so-called taximeter model had a small positive effect on student performance since there was no significant evidence for changes in drop-out rates and completion rates (Jongbloed and Vossensteyn, 2016). The perceptions about the effects in teaching tend to be more sceptical than those identified in research. In fact, using the ‘number of students’ as an input indicator for funding seems may lead some HEI to increase the number of students beyond their capacity and to play down their grading standards, with the purpose of getting extra students and graduates and, consequently, additional funding (Frølich, 2011).

Some lessons may be drawn from the multiple studies on the topic focused in the US, the country where this type of funding has been used more extensively. Several studies have found that performance funding policies were not significantly related to improvements in the number of degrees awarded (Umbricht et al, 2017). Student outcomes were related to student profiles, institutional char-

acteristics, and state environments but were not enhanced by performance funding policies (Rutherford and Rabovsky, 2014). The limited effect of these incentives for graduation outcomes may be due to the need for some years in operation to produce a visible impact (Tandberg and Hilman, 2014). This would require a degree of continuity and stability in policies.

The emphasis on performance and in selectivity has also raised serious concerns regarding possible perverse effects of linking funding to performance in higher education and research. Hicks (2012) acknowledged that this type of mechanisms could have a strong effect, though it was likely to enhance the control of professional elites, compromising relevant values such as equity and diversity, and reinforcing inequalities among institutions and individuals. This has been noted for several European countries (see Good et al., 2015; Hamann, 2016; Cattaneo et al., 2016; and Grisorio and Prota, 2020). Alongside an improvement in the overall performance of the system (and all institutions), there may be as well an increase in the disparity of performance, widening the landscape and quality and effectiveness of all institutions in the system (Sörlin, 2007; Teixeira et al, 2014).

3.2. Effects in Institutional Dynamics

One of the major goals of PBF was to promote significant internal change in HEI, so that institutions may be in a better position to improve their performance. However, It is difficult to assess the internal effects of PBF in institutional and individual behaviour. The

difficulties in assessing the impact of those funding mechanisms at the institutional level has been reported for research, namely given the lack of relationship between funding systems for research and publication performance (Auranen and Nieminen, 2010; and Bogt and Scapens, 2009). Evidence from countries such as Switzerland, Netherlands and UK, have not confirmed that researchers place resource allocation as a key factor in the educational and research potential of universities (Liefner, 2003). Overall, the introduction of a funding scheme rewarding performance in itself may not be enough to change individual practices and it may be necessary to add significant individual incentives (such as linking individual performance to reward mechanisms), for significant changes to occur (Butler, 2010).

In some cases, HEI have internalised the system, namely by adapting the criteria used in the funding formulas for regular evaluations of the academic staff, and deciding their promotions and awards according to those benchmarks (Hammarfelt et al., 2016; Aagaard, 2015). Thus, PBF has also impacted internal dynamics at the organisational level. On the one hand, low-performance departments tended to view PBF as an incentive to improve their outputs. In some other cases, these developments have created greater internal tensions, with the institutional leadership often under pressure to close or reduce non-profitable departments. On the other hand, better performers have strengthened their position within the internal allocation process.

The replication of these criteria at the institutional level does not

ensure by itself the improvement of the quality of the institutions and/or their individual units. Although PBF may increase the efficiency of HEI (or its parts), we should not take for granted that it will affect all the institution. Moreover, HEIs may improve their performance according to certain quantitative criteria without significant improvements in their quality and effectiveness, i.e., individuals and institutions may adapt their behaviour to what is being measured, without substantively improving their teaching and research. This may lead to the emergence of tactical or short-term behaviour (Ma & Ladisch, 2019).

The existing evidence also indicates a mixed situation. Although authors such as Frølich (2011) and Mathies et al. (2020) have argued that a funding system rewarding performance may be an important instrument to steer HEI and increase publications patterns in international journals, other authors such as Butler (2010) expressed concerns about tactical behaviour regarding co-authorship, self-citation or citations clubs that may increase research output and impact in rather artificial ways. As noted that by previous studies, institutions may tend to focus more in obtaining results within a short timeframe, potentially neglecting long-term projects, focusing on less selective publications, and disregarding publications that may be less valuable for their measured performance (Butler, 2010; Waltere et al., 2011). This short-term bias may be detrimental to the long-term development of research, innovativeness of teaching, and the social contribution of research (Bogt & Scapens, 2012).

Finally, there were also concerns about institutional diversity and the fact that PBF may foster institutional isomorphism. It was argued that not all institutions should be required to deliver the same outputs, as they could be more socially relevant by adopting different roles in the system. For instance, smaller/regional institutions could be of a greater value to the system and their local communities if they focused on their regional role, instead of trying to compete on the same goals with the leading institutions in the system (Box, 2010).

4. Concluding Remarks

Over the last two decades we have observed a growing popularity of Performance-Based Funding in European higher education through a variety of processes and criteria. Despite the evidence about the growing importance of PBF, it is striking the limited knowledge about the real impact of these funding mechanisms. To a certain extent the major effect that PBF is having is in changing the culture and attitudes in higher education. There is a growing acceptance of these mechanisms and the internalisation of a discourse emphasising performance assessment and competition in HEI. Furthermore, this type of funding mechanisms is promoting increasing competition and legitimising a reality of growing differentiation or even stratification in many systems, which may foster inequalities among institutions, fields of study, academics, and students.

The dissemination of PBF also raises relevant issues regarding the diverse missions that HEI are expected to fulfil. Due to the focus

on certain aspects of performance and certain ways to measure that, there is the risk that this will create important distortions in European higher education systems. For instance, regarding education and training, this is clearly played down by most current PBF systems expect for formal achievement and credentialism (by focusing on number of graduates or credits completed), regardless of the quality and relevance of learning. In the case of research, most of the indicators used tend to focus on bibliometric indicators with limited or no attention to the economic or social relevance of that research. Although these are dimensions that are more difficult to be measured, they should not be discarded and PBF should broaden its scope to include them. Overall, the current PBF systems seem to be driving HEI towards reputation-seeking behaviour, rather than to a more developmental approach that is congruent to their institutional mission and priorities.

These concerns reinforce the importance of improving our knowledge about the impact of PBF at the system and institutional levels, both in education and in research outcomes. We also need to have more knowledge on how different HEI are responding to these changes and what types of institutions may seem more permeable to them. This is not only very relevant from a research point of view, but also from a policy one, so that the concerns with performativity may be balanced with other objectives in an integrated regulation of the higher education system. ■

1. This is an adapted shorter version of previous work developed with Vera Rocha.

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