



In the Shadow of Celebrity? World-Class University Policies and Public Value in Higher Education

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The growing popularity of the concept of world-class universities raises the question of whether investing in such universities is a worthwhile use of public resources. Does concentrating public resources on the most excellent universities improve the overall quality of a higher education system, especially if definitions of excellence and world-class are made by external ranking organizations? This paper addresses that question by developing a framework for weighing up trade-offs between institutional and system performance, focusing on the potential system-wide improvements which world-class university programmes (WCUPs) may bring. Because WCUPs are in a relatively early stage of their development, systemic effects are not yet clear. We therefore analyse the *ex ante* reasons that policy makers have for adopting WCUPs to see if they at least seek to create these systemic benefits.

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The Global Policy Rhetoric on Excellence in Higher Education

The rise of world-class university programmes (WCUPs) has been extensively documented in the literature, although primarily as an empirical phenomenon (e.g. Altbach and Salmi, 2011; Shin and Kehm, 2013), in response to an emerging set of league tables creating institutional rankings of criteria. Some countries that felt underrepresented in those lists (Ritzen, 2010) created special programmes to raise national rankings performance by building new universities and upgrade existing higher education institutions (HEIs). This paper looks at three examples. France undertook a series of reforms focused on strengthening institutional research and improving infrastructural quality of the national ‘top universities’ (see Cremonini *et al.*, 2013). Germany initiated the Excellence Initiative to promote ‘world-class



science' at German universities. Finland's Aalto merger broke radically from earlier higher education policy by creating a 'world-class university' (Välilmaa, 2012, 27). All these policies specifically emphasized institutional rather than systemic empowerment¹, and in their implementation they were certainly focused on particular institutions. But at a rhetorical level, the policy makers implied that improved positioning in some universities in global rankings would produce wider benefits for the system, for example supporting its international visibility, investments, recruitment and profile. There is an assumption that resources spent on higher education are better spent on a few world-class universities than elsewhere in the system. But there is scant evidence on whether this is empirically justified.

This paper contributes to emerging debates exploring how higher education works as systemically converting inputs into desirable outputs. We regard national policy initiatives targeted on particular universities as only being efficient insofar as they improve aggregate system outputs (cf. Ederer *et al.*, 2008; Filippakou *et al.*, 2012; Williams *et al.*, 2012). From this perspective, WCUPs make a normative claim — that the same amount of public money spent on select institutions produces a greater public benefit. But at the same time, it is possible to envisage ways in which WCUPs create system problems, reducing inclusiveness, accessibility and flexibility (Teichler, 2007 in Kehm and Pasternack, 2009; Kehm, 2013). We therefore seek evidence whether excellence policies are likely to create systemic improvements or will be dominated by these negative side effects.

Drawing on the Institute of Higher Education Policy's (IHEP, 2005) classification of higher education benefits, we hypothesize that WCUPs could conceivably drive system upgrading in five areas, attracting external resources, private internal resources, raising academic standards, creating new programmes and reputational benefits. But there is a clear dissonance between these potential systems benefits and institutional improvements necessary to improve individual league table positions, covering aspects such as institutional research performance. This creates a clear problem that WCUPs targeting ranking systems might fail to deliver system benefits, and in this paper, we explore whether policy makers are able to satisfactorily deal with this system/institution dissonance.

The relative youth of these programmes makes it too soon to observe these policies' systemic effects; thus, we focus here on policy makers' expressed intentions rather than outcomes. We analyse three countries' WCUPs in terms of the programme intentions to identify whether these policies' implementation is *targeting* mainly institutional benefits or rather wider systemic benefits. Understanding the orientation of policy makers provides a first step in understanding the broader question of whether WCUPs will improve higher education quality more generally, and whether they are worth their scarce resources in these difficult times.

The Essence of a Good Higher Education System

The idea of a ‘higher education system’ may intuitively refer to a group of universities in a coherent administrative territory (Filippakou *et al.*, 2012), but we use the idea more restrictively as a set of interlinked institutions delivering a set of outputs (see also Collini, 2012, Chapter 1). We begin by defining a good higher education system as one that maximizes its returns (however defined) by creating knowledge and ensuring society, in its intrinsic diversity, is served by a populace with a variety of skills, educated at different yet complementary levels. Thus, the system should be ‘diverse’ (e.g. through horizontal and vertical differentiation, and possess mechanisms to support inter-institutional student mobility), and managed on some level to improve public and private benefits over time.

WCUPs are national schemes supporting individual institutions to enable them to reward talent, to provide excellent learning and research environments, and to develop favourable governance features leading to strategic vision, innovation and flexibility (Salmi, 2009). The goal of WCUPs is to build ‘national champions’ that might create spill-overs improving the higher education system in its entirety. Although WCUP support is predominantly financial, it can also take other forms: creating new legal entities through mergers (e.g. establishing Aalto University — and the 2006 Danish restructuring of its university and research system, cf. Ministry of Science, Technology and Innovation of Denmark, 2009, 13) does not necessarily entail direct public funding.

Higher education confers private and public benefits (IHEP, 2005 for review). Private economic paybacks are the most evident, including higher salaries, better working conditions and increased employability (OECD, 2012a). Non-economic private benefits are just as important, for example increased health, engagement in society, and life expectancy, while decreasing chances of being a victim of crime or incarcerated (McMahon, 2009). Research (and valorization) also yields private benefits — winners of research grants and awards accrue status and reputation that are intrinsically rewarding and may lead to licensing deals creating jobs or spin-off companies that produce private profits.

However, universities also produce significant public benefits (McMahon, 2009). The Organization for Economic Cooperation and Development’s (OECD) (2012a) calculates that across its 30 member countries, each additional graduate creates a net \$70,000 of public benefits. Public benefits may be economic (e.g. higher tax revenues, greater productivity, increased consumption, increased workforce flexibility and less reliance on government subventions) or social, such as less crime, and more social cohesion and democracy. Higher education policy makers are increasingly stressing the university’s wider contribution to socio-economic development (Sadlak and Cai, 2009, 15; European Commission, 2010; Wildavsky, 2010, 95).

Table 1, taken from IHEP (2005), summarizes higher education’s most important private and public benefits.



Table 1 The array of higher education benefits

	<i>Public</i>	<i>Private</i>
Economic	Increased tax revenues Greater productivity Increased consumption Increased workforce flexibility Decreased reliance on government financial support More research and innovation	Higher salaries and benefits Employment Higher saving levels Improved working conditions Personal/professional mobility Status/reputation resulting from research outputs Financial benefits resulting from research outputs
Social	Reduced crime rates Increased charitable giving/community service Increased quality of civic life Social cohesion/appreciation of diversity Improved ability to adapt to and use technology	Improved health/life expectancy Improved quality of life of offspring Better consumer decision making Increased personal status More hobbies leisure activities

Source: IHEP (2005, p. 4).

We use this concept of ‘benefits’ as the starting point for operationalizing a higher education system as a process converting inputs (e.g. government funding) into outputs (its benefits). We rationalize public support for HE — in light of the currently dominant paradigm of new public management in higher education — as being based on the system’s effectiveness (Bergan *et al.*, 2009) and efficiency (see, *inter alia*, Kickert *et al.*, 1997) in producing public benefits. A ‘good’ public intervention produces these public benefits most efficiently both directly and indirectly (including public benefits accrued from recycled private benefits such as increased salaries or additional taxation; see Cremonini *et al.*, 2013 for a broader discussion). Therefore, a ‘rational’ WCUP justifies its public funding by improving the efficiency of the system in producing its public benefits. Both systems and public benefits differ, and so the question of the ‘goodness’ of a WCUP is at least partly related to systemic inefficiencies (despite being inspired by a common rhetoric focused on rankings).

A Conceptual Framework to Understand the Benefits of World-Class University Policies

In a recent public lecture, Dirk van Damme, OECD’s Executive Director Centre for Education Research and Innovation (cited in Cremonini *et al.*, 2013), pointed out what he called the limits to competition between universities to produce socially

optimal outcomes. The need for increased collaboration between universities to achieve collective societal ends is a more pressing problem than encouraging efficiency in quasi-markets. Building on this argument, it is important to consider these societal benefits produced by the higher education system to understand how a WCUP creates different outcomes by shifting the system.

We are explicit that we have used here a policy rationality approach which does not concern itself with ‘political’ considerations that produce normative policy goals (e.g. conservative *vs* egalitarian discourses, or seeking symbolic prestige). Our theoretical underpinning is a ‘means–ends rationality’ whereby resources can be reallocated to improve outcomes. This paper’s framework emphasizes particularly, but not solely,² measurable economic benefits of WCUPs. Although ‘rational’ WCUPs are expected to improve the system’s efficiency by increasing both its economic and its social benefits (see Table 1), economic measures provide the most effective way to analyse WCUPs, because of their inherent quantifiability (in principle).

Indeed, a recurrent justification for WCUPs is that resources concentrated on a few top institutions are efficient in light of the positive spill-overs for society that will (it is claimed) ensue. But this argument highlights a public policy problem: while WCUPs’ private benefits are clear (Salmi, 2009), there is much less evidence that WCUPs improve the operation of the system as a whole, and there are countervailing worries that WCUPs might introduce new barriers into national higher education systems by encouraging competition rather than co-operation (e.g. Teichler, 2007 in Kehm and Pasternack, 2009; Kehm, 2013). At the same time, the public resources for WCUPs must be drawn from somewhere, and if they are not at least as marginally efficient as the current system efficiency, then they will actually reduce overall system efficiency.

To understand how a WCUP might raise system efficiency, we note that as with any public funding scheme, efficiency may be regarded in terms of additionality (i.e. the production of outcomes that would not have happened without the intervention, Tyler *et al.*, 2009). A good (efficient) WCUP should bring additional private resources into the higher education system, which are then recycled through the system and produce additional public benefits creating ‘additionality’. In Figure 1, adapted from Cremonini *et al.*, 2013, we present this as a systems analysis, and show that a WCUP can improve the functioning of the system as a whole in different ways (the black arrows in the figure highlight the points in the higher education system process where a WCUP is expected to add value, contributing to the total public benefits). Firstly, it might attract more private funding into the system. Secondly, it might lead to individual processes within the system such as the education, the research and the business engagement, functioning more effectively. Thirdly, these processes might produce greater direct societal benefits. Fourthly, greater private benefits might be recycled into greater public benefits (*ibid.*, p. 103)

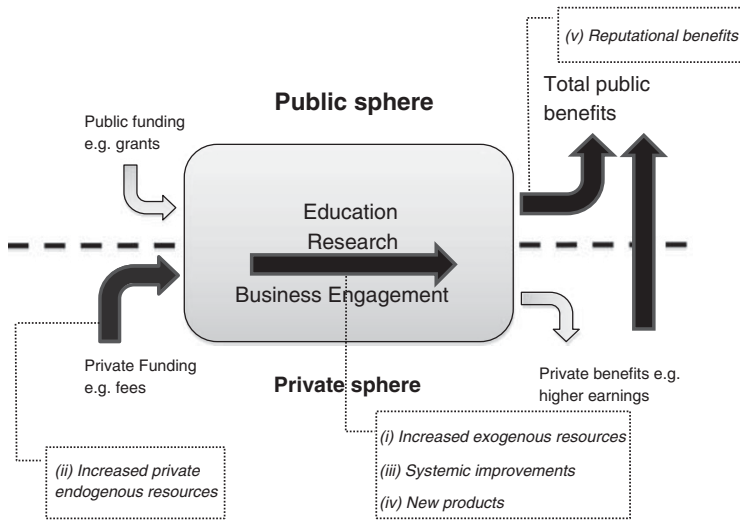


Figure 1. A systems model of investment in the higher education sector and the possible contribution of a WCUP in increasing the system’s efficiency.

Source: Cremonini *et al* (2013).

We contend that WCUPs can create public value (i.e. additionality) in five areas, which fit in the system improvement processes presented above:

- (1) *Increased exogenous resources*: the attraction of additional staff, students and research funding from outside the country/higher education system which spill over to other HEIs.
- (2) *Increased private endogenous resources*: greater private resources that would have either not been spent in the country’s universities, or gone to other universities, go into the sector, which spill-over to other HEIs.
- (3) *Systemic improvements*: the presence of a world-class university improves the functioning of the higher education system in terms of differentiation and produces more efficient use of public resources, by for example reducing drop-out rates.
- (4) *New products*: by creating new globally competitive higher education products (such as Graduate School trajectories), the sector is more competitive in export terms, attracting more students as a whole.
- (5) *Reputational benefits*: all national universities benefit from a higher external awareness/reputation from the presence of one or more world-class institutions in the system.

Therefore, in this paper our argument is that if WCUPs are to be efficient, they will have clearly identified and targeted (some of) these system improvement

benefits. And as we expect a rational WCUP to target these dimensions (or at least some of them), we propose to classify WCUPs according to how strongly they promote each of these dimensions. The next sections analyse three university systems where there have been serious efforts to concentrate resources around WCUPs, and classify their focus on addressing the five dimensions.

World-Class University Policies In Practice: Three European Cases

Presentation and analysis of the cases

Our concern in this paper is whether WCUPs are an efficient use of public resources, and ideally this would be undertaken as an *ex post* comparative analysis. However, given the relative novelty of WCUP approaches, and the long timescales for producing these benefits, data is not readily available to definitively answer this question. Therefore, in this paper, we take a ‘next-best’ approach by considering these policies’ *ex ante* intentionality, whether they have been constructed to create system-wide additionality, or are just targeting institutional benefits, improving the rankings of a limited sub-set of their universities.

To achieve this, we look at three Continental European countries (Germany, Finland and France) which adopted WCUPs, and analyse the initial policy intentions, and in particular how seriously they have targeted each of those five areas of potential system benefits identified above. These three cases were chosen because all three countries felt that improving league table positions for their universities was important to improve their system’s visibility and felt that some form of WCUP was a way to do this. For each country, we judged the *expected* impacts in three levels (absent, limited and core). Because of the study’s exploratory nature (and its consequent focus on ‘intentionality’) we did this through subjective assessment of the policy. The levels refer to the degree to which implementation is taking place, defined as follows:

- *Absent*: rhetoric is observed, but implementation effort (e.g. by devoting resources) is absent or negligible.
- *Limited*: symbolic arguments and targets are stressed but few resources (especially funding) are deployed in line with the goals and targets.
- *Substantial*: coherent priority, objectives, targets and resources are devoted to the achievement of the policy’s goals.

In the remainder of this section, we provide an overview of each WCUP in its national context. The data presented here is primarily secondary (cf. Cremonini *et al.*, 2013; Kehm, 2013) with a specific focus on the intentions and focus of the particular policy interventions. This has been matched with a degree of analysis of policy documents from education Ministries, from the involved universities, from press reports and other sources as referenced. These sources were combined to create



a single narrative for the national policy intentionality, which was then analysed to understand policy makers' intentions in establishing these programmes.

Finland

The key WCUP in Finnish higher education materialized in Aalto University, a large-scale merger that was part of wider reforms across the sector (Labi, 2011). A number of institutional mergers have taken place in recent years — some to rationalize the university network in regions, others to address specific situations or fields of study (Dobson, 2008).

However, the 'mega-merger' of Helsinki School of Economics, University of Art and Design Helsinki and Helsinki University of Technology, which resulted in Aalto University, was a conscious effort to promote the international reputation of Finland's higher education (cf. Aula and Tienari, 2011). Cited as 'Finland's version of the "Harvard Here" syndrome' (Dobson, 2008), Aalto university represents a 'radical change in (traditionally status-free) [Finnish] higher-education policy' (Välilmaa, of the University of Jyväskylä, quoted in Labi, 2011). Moreover, Aalto's ambitious fund-raising campaign, backed by generous government subsidies, was meant to help catapult it to 'the list of top universities in the world' (Tawast, director of the effort, quoted in *ibid.*).

Aalto's basic capital of €700 million was accumulated in three stages in 2008, 2009 and 2010 through a State endowment of €500 million and donations worth €200 million from business, industry and other donors. This endowment would be additional to its core funding as a public university. The Finnish government incentivizes corporate donations to HEIs through a tax deduction scheme and these donations were heavily skewed towards Aalto university, which received about 66% of the total €318 million (Myklebust, 2012).³

Aalto and other merger programmes complemented the longer-standing Finnish government Centres of Excellence programme (Academy of Finland, 1997; Davies *et al.*, 2006), which are inter-institutional initiatives focusing on topical research (Academy of Finland, 2011).

The Finnish policy on Aalto University was underpinned by three key arguments. First, it was expected to improve educational infrastructure — particularly for entrepreneurial training. The mergers were intended to address unmet demand for higher education in specific fields and should create critical mass for research and innovation. According to foreign evaluators (Veugelers *et al.*, 2009, 147):

The reform of the Finnish university sector and the creation of Aalto University present an important and timely opportunity to create world class infrastructure for entrepreneurial education, training and research accessible to both Finnish and collaborative foreign interests involved in growth oriented and new knowledge based enterprise.

Second, Aalto University was justified in terms of systemic improvements. Expected efficiency gains include *inter alia* simpler rules and policies, less overlapping in teaching, joint research and joint financial management (Ahonen, 2008). And: ‘One idea behind the university reform and especially the creation of multi-disciplinary Aalto University may be seen to better promote innovative entrepreneurship (as well as innovation)’ (Viljamaa and Lahtinen, 2011, 15).

Third, promoting the global reputation of Finland and its higher education system played an important role. For example, the ministry of Education and Culture (see: <http://www.minedu.fi/OPM/Koulutus/artikkelit/Innovaatioyliopistohanke/index.html?lang=en>) emphasized:

Aalto University’s special national mission will be to employ research and education to support the success of Finland in the international economy. At the same time, the university will make a positive contribution to Finnish society, its technology, economy, culture and international appeal.

The head of Aalto’s Financial Planning, Ahonen, stressed (2008, slides 9; 25–26):

The national task of the University is to support Finland’s success by means of high-level research and teaching. The University supports in a positive way the Finnish society, its technology, economy, culture and international interest towards it. [...] The purpose of this merger is not to save money but to create and support excellence.⁴

However, on the other two dimensions of our Framework there are mostly implicit expectations. For instance, increased exogenous resources such as additional staff and students were stressed less than efficiency, reputation and more endogenous resources. Hence, as is shown in Table 2, the strongest claim in Aalto is its role in creating endogenous resources, systemic efficiency and reputational benefits. Innovative products are deemed weak because the fact that Aalto itself is a ‘new product’ fits within an overall reform agenda that does not change the types of education on offer.

The Finnish policies are likely to produce many effects in the long term but already today attention is being drawn to several trends, such as (see, e.g., Kivistö and Tirronen, 2012, 80 ff.):

- The increasing vertical stratification among universities.
- The emphasis on non-budget supplementary public and private funding.
- The ‘corporatization’ of universities (i.e. universities as independent legal persons with more financial responsibility and managerial leadership).
- The increasing diversity in university boards.
- The contractual liability and strategic government steering (e.g. performance measurement and more emphasis on strategic dimensions).
- The focus on research capacity.
- The strengthening of public-private cooperation.



Table 2 Assessment of intended benefits, Finland

<i>Dimension</i>	<i>Description</i>	<i>Assessment</i>
Increased exogenous resources	Aalto has gained prominence over time, which led, for example, to new international scholarships being provided (e.g. through the Fulbright programme).	Absent
Increased private endogenous resources	The investments gone into Aalto do show awareness of the public benefits this initiative can produce. The merger is considered a unique opportunity to improve educational infrastructure (particularly for entrepreneurial training). Aalto, as other mergers in the country, was meant to address an unmet demand for higher education in specific fields as well as to create critical mass for research and innovation — with the intended result that money that would not have been spent in the higher education system, can be spent in the higher education system.	Substantial
Systemic improvements	The Aalto merger is particular because it was justified by the call for WCU but it is also typical, being part of larger governance and funding reforms. The Finnish higher education sector is undergoing a number of institutional mergers to rationalize the system (create critical mass, e.g. in sparsely populated areas).	Substantial
New products	Aalto is itself a new product but does not change the types of education on offer. However, it does intend to lead to new types of research and innovation outputs (more interdisciplinarity).	Absent
Reputational benefits	Intends to be an answer to the ‘Harvard here’ syndrome. It seems to draw its legitimacy from its international success <i>vis-à-vis</i> global players not only in academia, but also in private business (see Hanna-Mari Aula and Janne Tienari; from Aalto state in their article that ‘the making of the new Aalto University seemed to draw its legitimacy from success in the international arena and <i>vis-à-vis</i> global players not only in academia, but also in private business’).	Limited

France

WCUPs also formed part of France’s broader reform agenda, initially aimed at reducing inequality of access to the highly selective *Grandes Écoles*. By late 2007, its emphasis switched from increasing access to elite institutions to upgrading more universities to be ‘élite’: reforms under President Sarkozy included the ‘Law on the Freedoms and Responsibilities of Universities’ (LRU), introducing marketization and competitiveness in the sector, freeing universities from central government control, introducing output-based public funding, and holding them accountable through a new inspection and evaluation apparatus.

The markedly poor performance of French institutions in the first 2003 Academic Ranking of World Universities triggered key WCUPs in France — a process that ran



in parallel with the LRU. A new policy of research concentrating and profiling was introduced starting the mid-2000s (Harfi and Mathieu, 2006), including the *Pôles de recherche et d'enseignement supérieur* (PRES [Centres of Research and Higher Education]), *Opération Campus*, and the *Initiatives d'excellence* (IDEX [Excellence Initiatives]).

The PRESs group a variety of actors and stakeholders (Aust *et al.*, 2008) into public entities for scientific cooperation (*établissements publics de coopération scientifique*, or ECPS), which allow universities to award degrees and other qualifications separately, while their research work carries the name of the PRES. By 2011, there were over 20 PRESs involving almost 60 universities, engineering Grandes Écoles, Institutes of Political Studies, private business schools, public research institutes and other bodies, alongside research and teaching hospitals.

Opération Campus, launched in early 2008, was mainly justified with the need for infrastructural refurbishment. Government funding was made available in a competition. As of late 2011, 12 campuses were selected for improvement. The total investment amounted to €5.3 billion with Saclay Campus at the peak of the system with funding for €850 million. *Opération Campus* expressly sought to transform a limited number of campuses (and a larger number of universities, as some campuses are shared by more than one institution) into internationally visible 'shop-windows' of French higher education and research excellence.

Third, in late 2010, the Ministry of Higher Education and Research announced IDEX, which rewards cooperation among universities, Grandes Écoles, and private sector regarding excellence in research, robustness of management plans and intensity of linkages between the public and private partners. The funding is of €7.7 billion for 5–10 'Excellence Centres' (*Pôles d'excellence*).

The French policies are perhaps the clearest example of the aspiration to solve a systemic problem, namely the segmentation between the élite Grandes Écoles and the mass universities, through policies seemingly designed to promote institutional excellence. It was to this segmentation that Valérie Pécresse, then Minister for Higher Education, ascribed the poor performance of French universities in the first global university league tables in 2003 (Ritzen, 2010).

The French WCUP was part of an attempt to neo-liberalize the French state, and included a familiar vocabulary of calls for international standards and global ambitions. The 'ARWU crisis' of 2003 provided the rationale for the state to intervene. Hence, Operation Campus appeared to develop out of different logics and rationales without a clear driving ambition, using the 'excellence card' as a pretext for setting off necessary long-term change (though the call for reputational benefits is very strong indeed).

Moreover, the PRESs are meant to foster sustainable new research centres (i.e. 'new products', to use this paper's framework; cf. also Cremonini *et al.*, 2013, 113).

The desire to increase endogenous and exogenous resources remained limited in the policy. More foreign students have been studying in French HEIs over the years



but this is a development that can only partially be attributed to, and justified by, recent WCUPs (the reforms since the 1990s and the Bologna Process also had to do with it). Internal resources, on the other hand, have not as yet been flowing prominently from private funders, even though the French WCUP created an environment where the government was willing to invest in research, believing it offered promising returns (Marshall, 2012) (Table 3).

The question of the French WCUPs' impact to date faces two fundamental problems. Other than time lag, French higher education policy faced a series of impediments that led to general activity being often contested, not least because of the change in presidency in 2012. The new administration instigated a review of the Plan Campus; a large-scale consultation culminated in a policy report to the Prime Minister (Le Déaut, 2013). But in late 2012, universities were still vocal in their rejection of the adverse effects of the reforms. For example, university presidents sent an open letter in November 2012 to the new Minister pointing out their concerns (see <http://www.sauvonsluniversite.com/spip.php?article5809>). In particular, minister Fioraso took advice from a study into the requirement for all universities and PRESs to engage in public-private partnerships for the development of new infrastructures. The Peylet Report advised a more flexible and less dogmatically neo-liberal approach to the funding of Plan Campus projects, facilitating effectively a 're-launch' in March 2013 of a range of initiatives aimed at improving student success-rates in higher education and at increasing the national and international 'attractiveness' of French universities.

Germany

Breaking with its long-standing belief in a homogeneous university system, in 2005 Germany launched the Excellence Initiative. This policy sought to improve the international standing of German universities and to provide targeted funding on a competitive basis to selected (parts of) institutions to enable them to compete on a global scale and catch up with the world's leading research universities through three funding tracks:

- Clusters of excellence (local networks), which should contribute to participating universities' strategic planning and to accelerate the process of setting thematic priorities at universities. Thirty-seven Clusters of Excellence received funding for 5 years, each receiving on average €6.5 million per year. This track did not support whole universities but certain groups and units.
- Graduate schools: 39 Graduate Schools were selected to receive on average of €1 million per year, for 5 years. These two tracks covered over 50% of the funding available in the Excellence Initiative.
- Institutional strategies to promote top-level research (support for excellent universities as a whole). Nine universities and their Institutional Strategies were funded for 5 years, with each receiving up to €13.5 million per year.

Table 3 Assessment of intended benefits, France

<i>Dimension</i>	<i>Description</i>	<i>Assessment</i>
Increased exogenous resources	There has been an increase in the internationalization of France's higher education system since the late 1990s (see Vincent-Lancrin, 2009). But the extent to which WCUPs in France were intended to contribute to this (in addition to extant reforms with a national logic as well as those driven by the Bologna process) is dubious. Arguably, the internationalization of French higher education was not as explicit a goal of the WCUPs as, for example, system improvements and the creation of sustainable mergers.	Absent
Increased private endogenous resources	There was an ambition to encourage the inflow of private resources into the universities to partially fund the investments in infrastructure from private sources.	Substantial
Systemic improvements	In France, WCUPs were concerned with (much needed) university refurbishment and with reducing segmentation and inequality in participation between selective <i>Grandes Ecoles</i> and the mass university system.	Substantial
New products	In France, most universities have joined into one of the 10 university urban confederations across the country (the PRESs), into which substantial sums are being invested. They are public entities for scientific cooperation, which have a common identity and may award degrees and other qualifications.	Limited
Reputational benefits	The ARWU crisis was clearly a moment that allowed the government to advance a new administrative paradigm into the French Higher Education sector. At the same time, having raised expectations of transformation, the ministry found itself pulled towards WCUPs (and indeed much higher funding for the sector) as part of an attempt to complete that transformation.	Substantial

In June 2009 the Federal and State governments approved continuing the Excellence Initiative for another 5 years (2012–2017). A further €2.7 billion in public funds were put to tender and in June, 45 graduate schools, 43 clusters of excellence and 11 institutional strategies received endowments see (also for the official Call in English): http://www.dfg.de/en/research_funding/programmes/excellence_initiative/general_information/index.html.

The Excellence Initiative has been criticized for its neglect of teaching quality. Also for this reason, the *Stifterverband*⁵ announced its Excellence Initiative for Teaching worth €10 million (€5 million plus a further €5 million from State coffers), which ran between 2009 and 2012, but this has been criticized for being insufficient in relation to the billions for the Excellence Initiative (see Gardner, 2012).

Contrary to Finland and France, Germany has been somewhat of a pioneer in supporting institutional excellence through a well-targeted policy initiative



(as opposed to an initiative embedded in general reforms). The Excellence Initiative's rationale was to promote the country's global reputation in research. The *Deutsche Forschungsgemeinschaft's* (DFG [German Research Foundation]) see: (<http://www.excellence-initiative.com/> and <http://www.excellence-initiative.com/excellence-initiative>). stated unequivocally:

The Excellence Initiative promotes outstanding research at German universities. Its objective: world-class science. [...] Politics and science joined together [...] to strengthen cutting-edge research and to make German science and research more visible in the scientific community. [...] to raise the visibility of German science and research vis-à-vis our [Germany's] international competitors. [...] the Excellence Initiative pursued a path of inequality and of funding elites.

Hence, first and foremost additionality was expected to originate from reputational benefits. The rules of the competition wanted to steer towards bringing more (private) endogenous resources into the system and decreasing reliance on public funds. Strategic partnerships were intended, *inter alia*, to enhance the likelihood of obtaining private funding, crucial to meet the eligibility requirement of sustainable institutional action. The Excellence Initiative was intended to stimulate collaboration between universities, research programmes, and private R&D; German universities and other public research organizations were both incentivized to form strategic partnerships (e.g. with the Max Planck Institutes) that were intended to lead to increased research publications and higher academic reputation. Though not the key argument for initiating the programme, such developments were also justified in terms of their system efficiency gains.

Finally, an important aim of the Excellence Initiative was to create 'new products' in the form of graduate school trajectories, through the funding track for Graduate Schools. Although graduate trajectories, in the form of Research Training Groups funded by the German Research Council, existed in Germany since the late 1980s,⁶ the Excellence Initiative transforms this tradition through stricter selection at entry and greater diversity among the schools — which are untraditional avenues in German academic practice (traditionally doctoral students are university researchers whose work leads to a doctorate) (Table 4).

Soon after it was launched, there have been calls (e.g. from the Brandenburg Academy of Sciences, 2009) to assess the Excellence Initiative's effects on the system. Although it may be too soon to judge definitively, it has been noted (see The Brandenburg Academy of Sciences, 2009; Hartmann, 2010; Labi, 2012; Kehm, 2013) that vertical differentiation of the university system and concentration of resources increased; that teaching lost ground to research, and that visibility abroad of German universities improved (attracting more foreign donors and investments according to Huber, president of Ludwig Maximilian University, quoted in Labi, 2012).

Table 4 Assessment of intended benefits, Germany

<i>Dimension</i>	<i>Description</i>	<i>Assessment</i>
Increased exogenous resources	Germany's Excellence Initiative is mainly concerned with research (although an excellence initiative for education has recently been initiated). It aims at making Germany a more attractive research location, thus attracting investments and partnerships from abroad.	Absent
Increased private endogenous resources	By including the 'sustainability' of candidate projects in the evaluation criteria, the Excellence Initiative aims at decreasing over time the reliance on government endowments and at supporting strategic partnerships and new forms of income-generating activities.	Limited
Systemic improvements	The Excellence Initiative legitimizes otherwise unlikely institutional reforms (but they were not stated as explicit programme goals)	Absent
New products	Germany's Excellence Initiative funds universities that establish graduate schools, supporting a new kind of product in the traditional German higher education landscape.	Substantial
Reputational benefits	When German politics and science joined together in 2005 to launch the Excellence Initiative, they set themselves a formidable goal. Their aim was to organize a competition to sustainably strengthen research at Germany's universities and to raise the visibility of German science and research <i>vis-à-vis</i> our international competitors. These were ambitious goals indeed, especially since it meant a departure from a long-cherished — and fatally wrong — conception that all universities are equal and hence should be treated equally. Instead, the Excellence Initiative pursued a path of inequality and of funding elites	Substantial

Rankings or System Benefits? What Policy Makers Wanted from WCUPs

As pointed out throughout this paper, an increasingly widespread belief posits that a limited number of elite universities are key to improving national higher education systems — the celebrity of the few embracing many more in its 'shadow'. Governments of the three European countries explored in this paper recognized shortcomings in their national higher education systems and decided that some form of WCUP was necessary to address them and create public benefits. French policy makers wished to address segmentation and inadequate infrastructures; Aalto was meant to contribute to rationalizing the Finnish system through mergers, governance and funding reforms; and Germany's Excellence Initiative purported to resume the country's fading image as a research powerhouse in the face of an increasingly 'anglo-saxonized' global higher education landscape.



Hence, at the level of intentionality policy makers identified systemic problems but according to our analyses did not seem to consider WCUPs' fitness for tackling them. That visibility and system improvements do not ineludibly go hand in glove is evident from countries that are well represented in the rankings notwithstanding the absence of WCUPs. For instance, the Netherlands has less-than-average (OECD, 2012b, table B4.1) egalitarian funding for higher education yet shows up with almost all research universities in the global rankings' top-200. Governments might claim to implement excellence initiatives based on objective criteria. Detractors might counter that they are simply emulating the model most successful in global rankings — large, science-dominated research universities. As was mentioned earlier in the paper, the prevailing rhetoric on WCUPs focuses heavily on rankings — today's most trendy (and controversial) proxy for institutional reputation — which adopt a limited mix of indicators overly reliant on research and with primarily private benefits. This creates a dissonance between reasonable ends (systemic improvement) and deficient means (improving rankings), which in turn puts into question the potential success of policies founded on such a false causality. van Vught and Ziegele, 2012, 4) argue that

rankings tend to be presented as if their collection of indicators reflects *the* definitive quality of the institution; they have the pretension, in that sense, of being guided by what is in reality a nonexistent theory of the quality of higher education.

At the same time, one should not underestimate the allure that rankings have on policy makers all over the world (e.g., see Hazelkorn, 2011). Governments have increasingly adopted global rankings' indicators into their own performance measurements or used rankings to set targets for system restructuring and allocating funds (e.g. in terms of accountability, transparency, and internationalization policies). Hence, if well-designed, rankings could have positive impacts both on government decisions on investment allocations within the system and on institutional improvement — for example in internal strategic decision making (van Vught and Ziegele, 2012, 77). Thus, the traits of today's rankings are at least partly to blame for faulty reform policies.

Rational WCUPs that delivered the system improvements that policy makers really wanted should not start from league tables that use a very limited set of indicators. Under these conditions, a WCUP is not an efficient policy instrument for higher education when viewed from the level of the system (quite the reverse, the dissonance between ends and means — addressing specific system shortcomings with WCUPs targeting private rankings — transpires). However, when we look at the *intentionality*, WCUPs can be efficient policy instruments for higher education systems, because they are meant to address specific system problems.

This dilemma must be addressed for instance starting by acknowledging openly that WCUPs can — and should — differ according to the context wherein they are embedded and that, hence, a one-size-fits-all rhetoric is ill-founded, if the moneys spent on WCUPs are to contribute to higher education reforms in different settings.

Policies for Creating System Improvements

In view of this dissonance it seems that the policies described above lack the necessary scope to enhance performance, leaving open the question as to what policy makers should do to target system improvement.

We argue that a more realistic understanding of what is to be achieved, which agnizes the coherence of the whole system and how policy interventions affect that system, is necessary. Our contention fits in a long-standing body of theories that point out that a system is defined by the dynamic interaction between its components, and that where interaction is wanting there are separate systems (e.g., see von Bertalanffy, 1950). Indeed, current WCUPs may actually induce additional barriers, reduce the system-character of higher education, limiting the potential for spill-over, and hence reduce the public benefits.

For example, promoting excellence in research is expected to improve also teaching performance and — hence — bridge the teaching–research divide. But, if research performance alone is targeted a top-tier institution might benefit at the expense of others (e.g., it might be abetted in enacting necessary management changes) and the divide in the system might in fact crystallize as feared for example in Germany (see Kehm and Pasternack, 2009).

Instead of looking at research performance, WCUPs might target — explicitly — more private investments in research. In reality, policies such as Aalto and the French initiatives do go in the direction just outlined but remain ‘trapped’ in the ongoing rhetoric and jargon that are so popular (‘world class’, ‘élite’, ‘accountability’, ‘efficiency’, ‘competitiveness’, etc.). More clarity would raise awareness that world-class universities can create positive effects on the higher education system only if the initiatives support the ‘university eco-system’ — a system where differentiation does not translate in the dominance of one kind of institution at the expense of others but supports dynamic inter-relations and which is able to absorb the spill-overs (i.e. more exogenous and endogenous resources, system improvements, new products and better reputation).

Ultimately, we are not arguing that improving in the rankings is *per se* undesirable, but that system improvement is the most important object if policy makers wish to be rational. WCUPs might lead to rankings improvements, but this is incidental — not fundamental. Pursuing rankings might make sense where arguments other than efficient government prevail (e.g., international prestige or ‘appearing strong in the world’), which are often culturally determined and unrelated to educational improvement. Therefore, it is necessary to consider the basket of policies that can induce system improvements, wherein WCUPs are but one which addresses certain parts of the system.

Notes

1 This is evidenced by the importance policy makers attach to higher ranking positions for their countries’ universities (though to varying degrees). For example, in 2004, discussing the decisions about the second



round of the Excellence Initiative, the German Minister of Education stated (translation by authors), 'For Germany to compete internationally with elite universities like ETH Zürich, Stanford or Oxford we need lighthouses that are visible from afar' (cited in Wiarda, 2012). Moreover, according to the 'Research in Germany' portal (which is the central information platform of the initiative to 'Promote Innovation and Research in Germany' by the Federal Ministry of Education and Research), 'the Excellence Initiative especially supports measures that make universities internationally successful and carry the promise of leading positions in international rankings' (see <http://www.research-in-germany.de/main/research-landscape/29482/research-ranking.html>). Similarly, whenever universities drop in international rankings, policy makers seem to be alarmed and call for action. Like in Finland where, in its 'Strategy for the Internationalisation of Higher Education Institutions in Finland 2009–2015', the Ministry of Education worries that '[the Finnish] ranking in international competitiveness and development of information society comparisons has taken a downturn. The risk is that Finnish higher education institutions are losing their position as an interesting cooperation partner'. It is therefore not surprising that the Aalto experiment is often considered driven by the need for more high-ranking Finnish institutions. Ian Dobson, for instance, in his article in the *University World News* (October 2009), suggests that '[...] there are hopes the Aalto experiment will lead to Finland having another high-ranking university [...]'. In France, although official statements explicitly linking WCUPs to rankings (and particularly Shanghai's Academic Rankings of World Universities (ARWU)) are well-camouflaged by rhetoric criticising its methodology, it is clear that the ministry is sensitive to the rankings. For example, in July 2010, higher education and research minister Valérie Pécresse took time during a visit to China to 'lobby' the team responsible for the ARWU, specifically explaining how the PRES (Centres of Research and Higher Education, see the section 'France') mergers of smaller universities would provide higher quality of research and teaching (see, e.g., Bertherau, 2010). In July 2011, four PRES were visited by an ARWU delegation at the invitation of the ministry, who stressed that this was intended to support excellence and the visibility of French universities worldwide. In 2012 Geneviève Fioraso, the new Research and Higher education minister, was quick to emphasize the new administration's reluctance to using the ARWU as a driver of French policy on higher education and research, underlining her support for the nascent U-Multirank.

- 2 For example, an important dimension this paper considers is 'systemic improvement' (see below), which covers, *inter alia*, the question of how comprehensive the higher education provision is (e.g. the mergers in Finland were meant also to create critical mass to cater for more students).
- 3 For more detailed information, see Aalto's *Annual Board Report and Financial Statements*, at: http://www.aalto.fi/en/about/reports_and_statistics/auf_toimintakertomus_ja_tilinpaaotos_en_a4_2.pdf.
- 4 Interestingly, the focus on direct revenues is underplayed in this statement, suggesting that reputation is the main drive of the whole endeavour, at least for insiders.
- 5 *Stifterverband* (literally 'Donor's Association') is the business community's innovation agency for the German science system. See: http://www.stifterverband.info/ueber_den_stifterverband/english/index.html.
- 6 Research Training Groups are constructed as temporary research units at universities (4.5 to 9 years max) and mainly aim at improving the integration of doctoral students into collaborative research. Doctoral students and professors jointly work on an overarching, often interdisciplinary research programme and each single dissertation is regarded as an element contributing to this overarching programme. They also offer a study programme providing training in different topics in line with the research programme. They include a (interdisciplinary) team of supervisors instead of a single supervisor, and are based on competitive access (see Kottmann, 2012).

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