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lessons from the Netherlands and Poland**

Rymarzak, Małgorzata; den Heijer, Alexandra; Curvelo Magdaniel, Flavia; Arkesteijn, Monique

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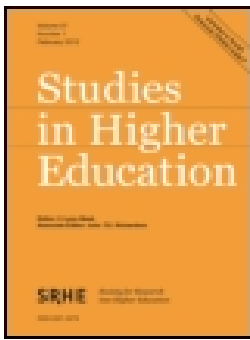
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Identifying the influence of university governance on campus management: lessons from the Netherlands and Poland

Małgorzata Rymarzak ^a, Alexandra den Heijer^b, Flavia Curvelo Magdaniel^b and Monique Arkesteijn^b

^aDepartment of Investment and Real Estate, University of Gdansk, Sopot, Poland; ^bDepartment of Management in the Built Environment, Delft University of Technology, Delft, the Netherlands

ABSTRACT

The purpose of this article is to describe the effects of university governance on campus management based on the examples of the Netherlands and Poland. The study connected theory on campus management with a concept of five dimensions of university governance (autonomy, management, participation, accountability and transparency) into an innovative and coherent analytical framework. Based on a qualitative approach, legal regulations and all public universities' campus goals in both countries were analysed. The results indicate that university governance and each of its five dimensions stir consequences on campus management. This suggests that any university governance reforms should take real estate and facilities into account. Disregarding them can lead to universities' suboptimal decisions and consequently affect (directly or indirectly) their sustainable development, productivity, profitability and competitive advantage. An understanding of the presented conception is crucial for the construction of viable higher education policy and improvement of universities performance.

KEYWORDS

University governance; autonomy; campus management; participation; accountability and transparency

1. Introduction

The idea of higher education, since the establishment of the first universities,¹ is inviolably associated with the physical place (Turner 1984). Currently, campuses – understood as real estate (defined as both buildings and land) and facilities providing settings for teaching and learning, research and associated activities – comprise some of the biggest and most complex environments in the world (Coulson, Roberts, and Taylor 2018, 65). They are miniature cities including academic buildings (with classrooms, information and communication technology (ICT) suites, libraries, laboratories, refectories, coffee shops, social learning areas), outdoor spaces, sports facilities, student accommodation, incubators, entrepreneurship centres and other. Their scale affects not only the productivity and satisfaction of staff and students, their health and well-being, but also higher education institutions (HEIs) in achieving their goals and the development of local community and wider regional economy (Rymarzak and Marmot 2018). This necessitates that a university's physical landscape be a part of higher education policy.

Some governments have reformed their university governance models (both at national and institutional levels) in order to prepare HEIs to operate in a more complex environment, to enable a more effective reallocation of resources and to improve their performance (de Boer, Huisman, and Meister-

Scheytt 2010). However, the introduced university governance changes were not the same everywhere. Their scope and reference to university estates and facilities, the time when introduced, their dynamics and effects differ significantly, depending on the national context, the historical legacy, and other cultural, political and economic factors (Christopher 2015; Austin and Jones 2016, 8).

It is clear that there is no single model or 'one size fits all' approach to university governance, but while some solutions helped universities to adapt their campuses to the changing needs and as a consequence improve their performance, others were counterproductive.

So far, the framework in which universities manage their campuses has only captured limited attention among researchers of the subject. The existing publications focus mainly on the impact of selected university governance dimensions on campus management, including in particular university autonomy (Estermann and Nokkala 2009; EUA 2017; Rymarzak 2018), accountability (Rymarzak and Marmot 2018), participation (Wilkins 2016; Gohari 2017) and regulatory framework for international branch campuses (Yung-Chi Hou et al. 2018).

There are also a few papers which present campus management but from the institutional perspective (den Heijer and Tzovlas 2014; Kamarazaly, Mbachu, and Phipps 2013). There are virtually no publications which present how university governance can support or hinder campus management. The paper explores the legislative changes and university campus goals in the Netherlands and Poland to explain the comprehensive impact of university governance on campus management.

In the following sections, the conceptual framework is presented first. Then the methodology used in the study is described, and finally, the results and propositions for future research are discussed.

2. Conceptual framework

This article is based on a theoretical framework that draws on campus management theory and five university governance dimensions developed by The World Bank (2012, 12) and Quyên (2014). While campus management theory is used to illuminate the general consequences of campus decision making and their influence mainly on university performance, the five dimensions are presented to show campus management direct and indirect dependence on university governance.

2.1. Campus management and university performance

The theory of campus management (de Vries 2007; den Heijer 2011; Beckers, van der Voordt, and Dewulf 2015) is based on Corporate Real Estate Management (CREM) theory (Joroff et al. 1993; Nourse and Roulac 1993; Krumm 1999) which belongs to the stakeholder theory originating in sociology, organisational behaviour, politics of special interests and managerial self-interest (Jensen 2009).

Campus management is to support the university performance in the best possible way, integrating all stakeholders' perspectives in the management process, incorporating location, condition, energy aspects (**physical perspective**), user demand (**functional perspective**), benefits and costs (**financial perspective**), and institutional goals (**organisational perspective**). These four perspectives and related to them 12 campus goals (den Heijer 2011, 97–98) affect respectively sustainable development, users' productivity and well-being, the university's profitability, and competitive advantage (see Figure 1).

Sustainable development can be achieved by *reducing footprint* (e.g. energy use and CO₂ emission) and more efficient space use, periodical refurbishment and sharing facilities with third parties.

An improvement in users' productivity and well-being may be achieved through *supporting their activities* (learning, teaching and research), *improving their satisfaction* and *increasing flexibility* of buildings and furniture by offering an attractive and comfortable physical environment that meets the users' changing expectations.

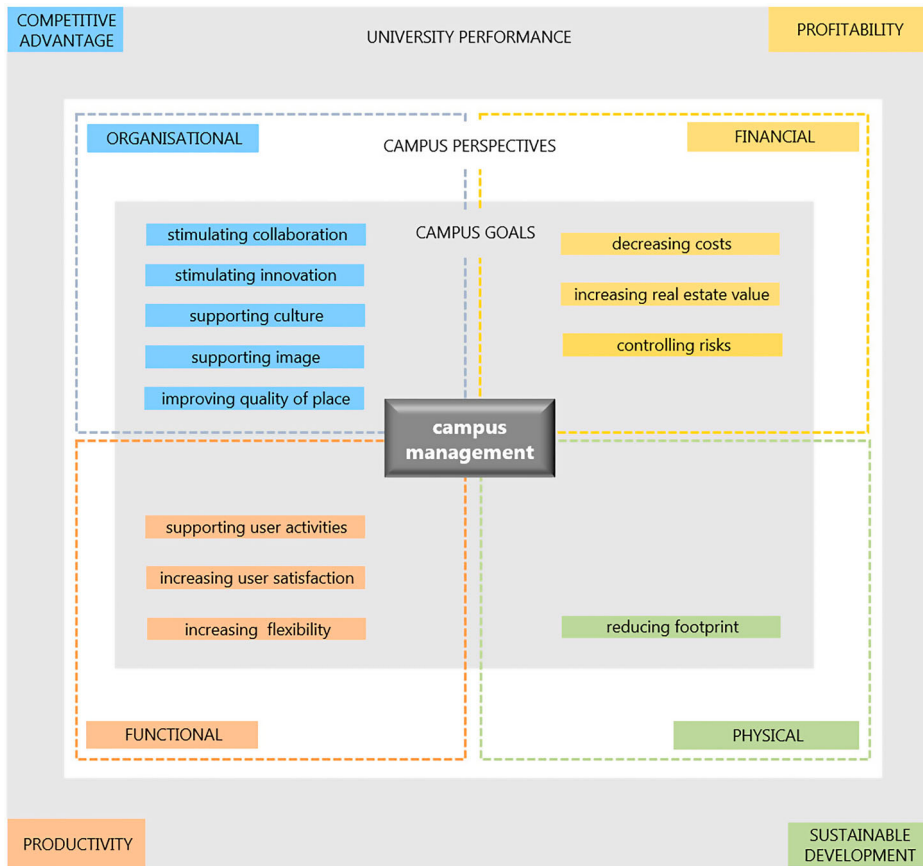


Figure 1. Four perspectives and twelve campus goals and their influence on university performance. Source: Based on den Heijer (2011, 245).

Campus management can add to the profitability of the university directly by *decreasing costs* and/or indirectly by increasing benefits, for instance by reducing unused floor area or by making buildings rentable or marketable to a third party (*increasing real estate value*), or by *controlling financial risks* – for example by making buildings more flexible for other use(s).

The achievement of the university's competitive advantage and its primary goals (e.g. high academic standards, academic excellence, international reputation and status) can be fostered by campus decision making that improves the quality and effectiveness of the primary processes by – for instance – *stimulating collaboration, innovation, supporting culture, image and improving the quality of the place*. Moreover, campus management affects the university's performance. The change of location, demolition or sale of heritage or iconic buildings and the type, size and quality of facilities can have an impact on students' and academics' work, innovation and life. Such decisions also influence public goals, community and social engagement, which exceed the scope of university performance. Nonetheless, campus management depends to a large extent on university governance.

2.2. University governance dimensions and campus management

The literature presents numerous definitions of university governance (van Vught 1993; Marginson and Considine 2000; Hirsch and Weber 2001; Maassen 2003; Shattock 2006; Eurydice 2008; Rowlands

2017). The differences between them stem not only from the views held by their authors and the areas of their academic interest (higher education policy, management), but also from their different approaches to university inputs (resource allocation), processes and structures (systems of decision making) and outputs (performance and contribution to wider social and economic goals).

In higher education research, as Kwiek (2015) points out, university governance is viewed from a narrower or a broader perspective. The narrower perspective concentrates on the arrangements within universities and is presented by the literature of the management of HEIs and by those studies on leadership that focus on senior management roles (Tight 2012, 132–135).

In this article, a broader perspective is adopted, which goes beyond the micro-level of individual academics and the meso-level of institutions to the macro-level of state-university relationships (e.g. Huisman, Maassen, and Neave 2008; Amaral et al. 2009). University governance is perceived as '*a conceptual shorthand for the way higher education systems and institutions are organised and managed*' (Neave 2006) to make decisions about the campuses. Its complete picture is painted by five dimensions (The World Bank 2012, 12; Quynh 2014) concerning: context, autonomy, management orientation, participation and accountability and transparency.

The first dimension in defining the influence of university governance on campus is the **context** in which the university manages its real estate and facilities. It covers the legal framework and the interaction between the university and the state. The government creates a regulatory environment in which universities can act and which should be aligned with the goals and aims for the sector and provides opportunities for universities to meet the expectations of the public (Santiago et al. 2008, 71). The scope of higher education laws in the context of university estates and facilities varies greatly according to the national context and policy priorities.

Generally speaking, in more and more countries, direct state control is being replaced with a more passive, supporting role, in the form of 'steering at a distance', in accordance with the 'new public management' model (Magalhaes, Veiga, and Amaral 2018). The state formulates a coherent policy framework (Goedegebuure et al. 1994; Neave 2012) and acts as the guardian of public interest. By granting more **autonomy** to HEIs, governments try to make them more effective, productive and responsive to the needs of their social and economic environments (see, e.g. Clark 1998; Gornitzka and Maassen 2000; Salmi 2007). Although a majority of systems make it possible for universities to own real estate, there are also systems in which buildings are owned by public authorities or real estate companies, which let the property to HEIs. This is the case with three federal states in Germany (Brandenburg, Hesse and North Rhine-Westphalia), as well as Hungary, Serbia and Sweden (EUA 2017). European universities differ in their autonomy to decide on the number and type of users (students and staff) that can be accommodated, resources (own or borrowed) spent on real estate, and the size and quality of current and future campus, etc.

In addition to the regulatory framework and the corresponding degree of autonomy, the **management orientation** also influences the campus decisions. In Europe, two opposite models of campus management can be recognised: centralised and decentralised. Real estate (owned or not owned by universities) may be centrally managed by public authorities (like in Denmark – The Danish Building and Property Agency) or by public property companies (like in Finland – The University Properties of Finland Ltd, in Sweden – Akademiska Hus, and in Norway – the Statsbygg). In most European countries 'power' is handed over to universities and 'campus management' is carried out decentrally: by individual universities and specially hired campus or estate directors. In their operations, they largely depend on decisions made by collegial bodies, (whose structure may be unitary or dual – traditional or asymmetric), and the general management exercised by the executive head and financial management.

To a growing extent, it is not only chief university managers but also other participants who have an influence on campus management. Their level of **participation** differs depending on the overall framework of the system as well as the type of institution. Participants can roughly be divided into two groups: internal and external. Among the main internal participants are teaching and research staff and students. In turn, among the external stakeholders are public authorities, the community

(potential students, employers, neighbouring communities, citizens), funding bodies as well as others (like designers, construction companies, insurance companies, service suppliers and utilities, food providers).

In general, along with the increasing autonomy of universities, different stakeholders expect more public **accountability and transparency** from them (Meyer 2007). Many authors have stated that an 'audit culture' has been established (Strathern 2000) – also known as an evidence culture, control culture or assessment culture (Gorran Farkas 2013). Universities in most countries have more reporting and transparency obligations, partly as a result of fierce competition for tightened state funds and partly as a result of other public-sector restructurings. In general, however, this does not apply to university estates, although the costs of campus ownership are often the second-highest cost after staff salaries (den Heijer and Tzovlas 2014). Statistics kept in most countries as well as Eurostat, the UNESCO, the World Bank and the European Commission fail to present detailed information about HEIs campuses. While the OECD Centre for Effective Learning Environments (CELE) does refer to real estate, its work mainly focuses on the quality of educational facilities (OECD 2011). Data on HEIs' estates is published only in some of the European countries (Rymarzak and Marmot 2018). There are, nevertheless, substantial differences as to the scope of the information contained.

3. Methodology

This study adopted qualitative document analysis to explore the impact of university governance on campus management in the Netherlands and in Poland. These countries were chosen as contrasting models for European higher education. The Netherlands is perceived as the leader of higher education policy modernisation, that for several decades has been introducing the most 'entrepreneurial' policies of all the countries of continental Europe (de Boer, Enders, and Schimank 2006; Antonowicz and Jongbloed 2015). In comparison, Poland represents a post-communist country and is one of the few exceptions where no major changes had been made to the university governance model until 2010. HEIs have been transforming from inward-looking and academically driven institutions, isolated from concerns of both the society and the economy (Kwiek 2014) only for the last few years.

Table 1. List of documents collected.

	The Netherlands	Poland
Universities regulatory frameworks	<ul style="list-style-type: none"> - WUB (Wet Universitaire Bestuurs hervorming – The 1969 Structure of University Governance Act) (1971) - HOAK (Hoger Onderwijs: Autonomie en Kwaliteit – Higher Education: Autonomy and Quality) (1985) - IVH (Integrale Verantwoording Huisvesting – Integral Campus Accountability) (1995) - MUB (Wet Modernisering Universitaire Bestuursorganisatie – The Modernising University Act) (1997) - MJA3 (Meerjarenspraak – The Energy Covenant) (2008) - WVB (Wet Versterking Bestuurskracht – Enhanced Governance Powers (Higher Education Act) (2016) - RJO (Regeling Jaarverslaggeving Onderwijs – Annual Accounts Regulations) (2007) 	<ul style="list-style-type: none"> - USW (Ustawa o szkolnictwie wyższym – Higher Education Act) (1990, 2005, 2010, 2011, 2014) - UFP (Ustawa o finansach publicznych – Public Finance Act) (2010) - UZFN (Ustawa o zasadach finansowania nauki – The Funding of Science and Research Act) (2010) - UPZP (Ustawa prawo zamówień publicznych – Public Procurement Act) (2011) - UEE (Ustawa o efektywności energetycznej – Energy Efficiency Act) (2016) - RSPD (Rozporządzenie w sprawie sposobu podziału dotacji z budżetu państwa dla uczelni publicznych i niepublicznych – A directive on the manner of dividing subsidies from the state budget for public and non-public higher education institutions) (2016)
Strategic plans of public universities referring to campuses*	- 13 strategic plans	- 73 strategic plans

Note: *Strategies of Applied Sciences Universities were not analysed. One Dutch university (Open University) was also excluded because it is specifically dedicated to online education.

The research was conducted in two main phases on the basis of numerous documents (Table 1). In the first phase, the five dimensions of university governance in the Netherlands and in Poland were described based on the examination of legal instruments.

For the Polish universities, over 180 hours of transcripts of debates, presentations and statements made by officials from numerous HEIs during National Congresses of Science, also served as relevant sources. These nine congresses were held in Poland between October 2016 and June 2017 in preparation for the sweeping changes to be made in Polish university governance.

In the second phase, the general university strategies were retrieved from the institutional websites (13 Dutch and 96 Polish) to collect information on campus goals of universities. Those documents varied in the degree of detail (e.g. number of pages, starting dates and periods covered).

Content analysis was employed to study the strategies. In each strategy document (presented in Dutch and/or English and Polish) individual keywords (nouns, verbs or adjectives), their synonyms or logically interconnected words with 12 campus goals were searched. The content analysis was conducted manually.

The examination of documents (between March and May 2018) resulted in identification of 13 Dutch and 73 Polish university strategies, which a total of 293 text fragments referred to campuses. Those fragments were linked to 12 campus goals and grouped into four abovementioned perspectives (physical, functional, financial and organisational) (Table 2).

4. Results and discussion

The comparative analysis first depicts the five dimensions of university governance in the Netherlands and in Poland. Then, campus goals and universities performance from both countries are presented in the context of university governance models.

4.1. University governance models

4.1.1. Context

The Netherlands and Poland differ considerably when it comes to the overall framework in which universities manage their campuses.

The landmarks in the process of reforming Dutch university governance structures in reference to physical environment, were five initiatives. The first of them – WUB Act was implemented in 1971, the second one, known as HOAK Act introduced in 1985 the well-known concept of ‘steering at a distance’ (van Vught 1997). The subsequent initiatives were: IVH Act, which was introduced in 1995 and concerned campus ownership transfer to research universities, and MUB Act of 1997, was designed to implement the concept of new public management in the Dutch higher education system. It slimmed down the regulatory framework and gave more freedom of decision to university

Table 2. Campus goals of the Dutch and Polish public universities.

Perspective	Campus goals	The Netherlands (<i>n</i> = 13)	Poland (<i>n</i> = 96)
Physical	Reducing footprint (CO ₂ /m ²)	100%	10%
Functional	Supporting users activities	100%	49%
	Improving users satisfaction	38%	33%
Financial	Increasing flexibility	77%	7%
	Decreasing costs	38%	45%
	Increasing real estate value	23%	14%
	Controlling risks	31%	8%
Organisational	Stimulating collaboration	92%	0%
	Stimulating innovation	54%	4%
	Supporting culture	92%	0%
	Supporting image	85%	1%
	Improving quality of place	85%	23%

governing bodies. Campuses since 2008 have also been influenced by the signing by higher education institutions of MJA3 agreements on 'greening the campus', following earlier versions of MJA, whereby HEIs are bound to reduce energy consumption by 30% in 2005–2020 and by 50% before 2030 (VSNU 2008).

In Poland, until 2010, from a campus management perspective, HEIs remained largely unreformed, following the initial radical changes right after the collapse of communism in 1989 when the buildings used by the state-run HEIs became their property. Although within the two decades of 1990–2010 two new laws on higher education were implemented – USW Act, one in 1990, and the other in 2005, the core of the system remained largely untouched until the early 2010s. According to Antonowicz and Jongbloed (2015, 75), the governments applied a policy of status quo or 'non-policy' with regard to higher education. It was not until 2010 that the new higher education law set new trends in HEIs reforms, to make them more entrepreneurial organisations. Also in 2010, the UFP Act was amended, and the UZFN Act was passed, which included the accountability of HEIs. In 2011, the amended USW Act obliged universities to work out and implement their development strategies. These regulations were supplemented by the UPZP Act and other internal regulations like university charters, resolutions of university senates and decisions of the rectors, the deans, the chancellors and the financial directors. Moreover, campus management is also subject to more than seventy other regulations (du Vall 2011, 193–196). Among other issues, since 2016, HEIs have been under obligation to implement and fund energy efficiency projects, like the purchase of low-energy and low operating costs installations, or the improvement of heat insulation of buildings (under the UEE Act).

4.1.2. Autonomy

In both the Netherlands and Poland estates are owned and/or rented by the universities. Nonetheless, universities in the Netherlands have greater power of decision than in Poland. Since Dutch universities became fully responsible for their campuses (in 1995), they can sell their buildings and land as well as invest in new construction projects without any restrictions (den Heijer 2011, 35; Bennetot Pruvot and Estermann 2017). Similarly, they are allowed to borrow money and keep the surplus, which can be used to finance investments.

HEIs are entirely free to decide on their overall student intake (main campus users influencing space utilisation rate), although until 2017 there were *numerus clausus*. Student selection at Bachelor level was co-regulated by the public authorities together with the university sector. At Master level universities had more scope to develop additional criteria for student admission, which remained co-regulated with the ministry (Bennetot Pruvot and Estermann 2017).

Dutch HEIs are also wealthier and have greater investment opportunities, as annual expenditure per student is almost twice as high as in Poland (OECD 2018). Additionally, universities can charge students tuition fees set by themselves for doctoral programmes and for international students at all degree levels. Only fees for national and EU students for Bachelor and Master programmes are determined by the ministry (EUA 2017).

HEI autonomy in Poland was introduced by the 1997 Constitution of the Polish Republic. Its scope was determined in the USW Act; although the autonomy is suggested to cover all the areas, it does not fully cover estates. Polish HEIs can own and manage buildings without restrictions, but they are not allowed to sell them freely. The sale of an asset with a market value in excess of PLN 2 million, besides the consent of the university senate, requires the approval of the President of the General Counsel to the Republic of Poland. HEIs cannot fully and independently decide on the total number of students, which has a significant impact on the facility space requirements and university performance. Since 2011, an external authority approval is needed if HEIs want to increase the overall number of full-time students by more than 2% over the previous academic year. Moreover, according to the RSPD declaration, public HEIs cannot have more part-time students than full-time ones. Besides, since 2017 the Ministry has determined the optimum number of regular students and PhD students per single academic teacher. The HEIs where the ratio fails to fall within the required range of 11–13 students, receive correspondingly lower subsidies.

HEI financial decisions affecting the quality and the quantity of their buildings, are not taken completely independently either. Although HEIs can make investment decisions (construct or buy buildings or decide about the space demand) and borrow money for this purpose on the financial markets, whenever the loan is to be secured by HEI assets received from the state or local government, the application for the loan must be approved by an external authority. Another issue is the borrower's own contribution which can come from the income earned by the HEI, either from the sale of other real property or from tuition fees. According to the USW Act, however, HEIs cannot charge tuition fees to full-time national or EU students at any level. They can charge fees only for special educational services and part-time studies, but the fees cannot exceed the real costs.

4.1.3. Management orientation

In the Netherlands and in Poland, campuses are managed decentrally by the universities themselves. In the Netherlands, their utilisation, development and management depend on the leadership model, which has an asymmetric dual structure. In this leadership model, the Executive Board is the highest governing and management body, in charge of all administrative matters and responsible for general management decisions. The Executive Board is composed of three members, which are appointed, suspended and dismissed by the Supervisory Board. This second body, composed usually of 4–6 members external to the university, supervises, advises and approves the governance and management of the university including management regulations, the institutional plan, the selection of participation systems and the universities' budgets and annual reports. The supervisory board is appointed by the Minister of Education, Culture and Science. Campus decisions to sell and/or buy estates are considered management decisions and therefore in hands of this leadership model.

Besides, most Dutch universities have a facility management and real estate development office or division, which is responsible for the management of campus. These offices or divisions are accountable to the Executive Board and in some universities, they operate under the direct responsibility of members of the Executive Board (e.g. University of Amsterdam, Delft University of Technology).

In Polish HEIs, the senate is the main decision making body, with responsibility for campus management. The leadership model (unitary governance structure) has not changed much throughout the years. The rector performs the decisions approved by the senate, concerning estate, which includes its disposal or encumbrance, or conditions of its lease. Depending on the adopted HEI's financial management, he/she also defines the tenancy terms for external entities (in centralised economy) or external entities and between faculties (in decentralised economy). The rector's powers also include university strategy preparation and implementation (USW Act). In management, the rector is supported by the chancellor, the bursar, deans of individual faculties, and vice-rectors. Chancellors manage the administration and economy of the HEIs to the extent defined by the charter and the rector. Their responsibilities include the management of HEI assets and supervision of technical condition of HEIs' buildings, repairs and investments. Together with the deans and vice-rectors responsible for primary processes and student recruitment, they initiate activities designed to improve the operating capacity of the HEI and campus extension.

4.1.4. Participation

In the Netherlands, since the 1970s, different forms of participation in decision making have experimented. First, there was a joint governance model under the WUB Act in 1970, which shifted to participation in decision making with the MUB Act in 1997. In 2016, the new law on higher education WVB, resulted in higher participation of students in university governance through different committees and mainly in departmental/faculty governance bodies.

Furthermore, Dutch universities seek to strengthen cooperation and mutual trust between the HE sector and the public authorities. Universities physical presence in cities and their importance in the knowledge-based economy make them a strategic partner of municipalities and firms (Curvelo Magdaniel 2016). The involvement of public authorities in campus management is becoming common in

Dutch campus planning, most of them targeted to create lively and well-connected environments attractive for knowledge workers.

In Poland, in line with the traditional, Humboldt, and to a large extent communist rules of the game, HEI authorities are mainly responsible for campus management. However, this is slowly changing: other stakeholders are starting to play a more significant role. The number of students representatives in the senate increased (Antonowicz, Pinheiro, and Smużewska 2014) and cannot be lower than 20% now (USW Act). HEIs are also opening to external partners, as their relations with their environment have become a relevant criterion for their assessment. It was partially imposed by the funding system which assumes that HEIs must rely on non-core and non-state income to meet their needs. Among other things, HEIs are starting to collaborate with other HEIs in order to launch inter-university studies and to utilise their infrastructure in the most efficient way. Moreover, they make their surplus more and more available to external entities. The shortage of public money for the construction of new student hostels or modernisation of old ones was the reason why some HEIs (e.g. Jagiellonian University Medical College) started to negotiate with external investors to carry out such projects as a public-private partnership.

4.1.5. Accountability and transparency

Undoubtedly, greater financial autonomy of the Dutch HEIs was followed by the requests from the Government, the Parliament and the public for their greater accountability. Prior to 1995, there was little comparative information on university campuses. In the Dutch Government library, few reports can be found which cover some of the variables that are relevant for campus assessment. Therefore, universities are obliged to draw an annual report each year, in which they explain and justify how their resources (including estates and facilities) are being used and to what effect. The content of these reports varies from university to university but is based on fixed lines of accountability set out in the RJO Act of 2007. Next to it, since 2000 all Dutch universities have collectively financed research to manage their campuses in more effective and efficient ways. The open access reports (including numerous indicators about students, education, research, staff and finance) published from such research are available at the website of the Association of Universities in the Netherlands (VSNU).

In Poland, two amendments to the USW Act (2011 and 2014) led to increased reporting and accountability requirements. Nevertheless, HEIs are obliged to report to the Ministry of Science and Higher Education (MNiSW), for the purpose of which the POL-on system was created in 2011. Its operation and the scope of data collection are stipulated by appropriate Acts and regulations. The system includes data on students, staff, financial standing of individual units, and since 2013 also the real estate (its space in particular). Most of the data, however, is not generally available (e.g. financial data), or the access to it is significantly limited to other stakeholders. The POL-on estate data gives no information on value, benefits, condition, operation and maintenance costs of the buildings or a degree to which the facilities are used (Rymarzak 2018). Furthermore, the data on the number of buildings and their total area covers the latest six months only. As a result, the data collected by the system bears only limited applicability to comparative, retrospective studies, conclusions and generalisations.

4.2. Campus goals and university performance

Universities in the Netherlands and in Poland have different campus goals (Table 2) and outputs.

In the Netherlands, most universities indicate between 6 (e.g. Erasmus University Rotterdam and University of Tilburg) and 10 campus aims (e.g. University of Twente).

Overall, 'reducing footprint' and 'supporting users activities' are the most common Dutch campus goals. The first aim is mentioned as one of the key elements to support the sustainability frameworks in which all Dutch universities are engaged (already in 2012 they improved energy efficiency by 35% compared to 2009, when MJA3 agreements were signed) (VSNU 2013).

The second goal is deduced from the fact that, in strategic plans, the campuses (sometimes referred to either as infrastructure, estates, buildings and facilities) are explicitly outlined to adequately support education and research. Since the implementation of new public management reforms (the MUB Act), which have driven universities to focus on performance and productivity, the number of publications has doubled and in 2017 universities ranked 15th place in the world (SJR 1997, 2017).

Amongst competitive advantage-oriented aims, the ones outlined in most university documents are: supporting culture (92%), stimulating collaboration (92%), supporting image (85%) and improving quality of place (85%), which is reflected in the words used by universities to describe the future of their campuses. In general, most universities mention the need to invest in state-of-the-art facilities as well as in lively and attractive environments to obtain students and remain competitive in an international context. In 2017 the share of international students enrolments in total student population was 10.7% (while in 1997 it was below 0.7%) (OECD 2014, 2018). Almost all universities have been placed in the first 500 in the global rankings (e.g. ARWU).

Only a few universities explicitly address finance-oriented goals: decreasing costs (38% of all universities, including e.g. Radboud University, Delft University of Technology, University of Twente) and controlling risks (31%, including Vrije Universiteit Amsterdam, Wageningen University and Research). On the one hand, with the campus ownership transfer (the IVH Act), the research university budgets increased by about 77 million euro and between 2002 and 2005 around 40 million in total to provide future reinvestments (den Heijer et al. 2016). On the other hand, insufficient financial resources have forced universities to use campuses more efficiently (in line with the MUB Act) and to keep accommodation costs at a level not exceeding, on average, 12% of their total costs (Algemene Rekenkamer 2018).

In contrast, in Poland most universities concentrate on three aims (supporting users activities – 49%, decreasing costs – 45% and increasing users satisfaction – 33%), although, some universities point out the need to carry out five goals (e.g. University of Economics in Katowice, Gdansk University of Physical Education and Sport). In particular, universities stress the necessity of modernisation or development of campuses to support educational and research processes or their adjustment to the expected number of students and the needs of staff to increase their productivity. Although the number of publications has increased year by year (in 2017 universities ranked 18th place in the world and published 45% more than in 2010, when the USW Act was implemented) (SJR 2010, 2017), the needs to expand the HEIs, stipulated in strategic documents created at the beginning of 2010s (as indicated by rectors) were frequently overestimated. In many cases they referred to the number of students during the major educational boom in Poland, which ended in ca 2006.

In the period of population decline, numerous HEIs strategies (particularly those created recently) highlight the necessity of seeking ways to decrease real estate costs. On the one hand, universities since 2016 have not invested so heavily in their campuses. The share of investments and repairs expenditure in the total HEIs costs since that time has not exceeded 12%, while in 2011 it was over 30% (GUS 2012, 2017). On the other hand, in order to cover the growing costs of maintaining often too extensive campuses (including energy costs that increased from 2011 to 2017 by almost 28%) (GUS 2012, 2018), some of the universities decided to sell part of their unnecessary estates, while others decided to increase the obligatory teaching load for academic teachers, or changed from more intensive forms of education (discussions in small groups) to more extensive (lectures for a larger number of students). These practices intensified in many universities after the introduction of the student-staff ratio. Only few HEIs aim at lowering the maintenance costs of buildings by implementing pro-ecological solutions, thermo-insulation in particular.

Only a mere 10% of universities indicate a reducing footprint goal (e.g. Medical University of Białystok, Poznan University of Life Sciences, Białystok University of Technology). Campus aims to support university competitive advantage are definitely the least popular. This is also reflected in the Polish universities' positions in global rankings, which have not changed significantly since 2010. Only two (out of 96) universities are among the 500 best universities according to Academic Ranking of World Universities (ARWU).

Table 3. Main differences in the five university governance dimensions between the Netherlands and Poland.

Dimension	The Netherlands	Poland
Context	Limited amount of detailed regulations.	Detailed legal regulations.
Autonomy	HEIs can make an independent decision on campuses (without restrictions) and the number of their users. They can charge student tuition fees.	HEIs are not entirely free to decide on the sale of buildings, the number of students and the tuition fees (some restrictions apply).
Management orientation	Decisions in hands of Executive Board and Supervisory Board (asymmetric dual structure).	Senate as a main decision making body (unitary governance structure).
Participation	HEIs strengthen cooperation with external stakeholders.	HEIs start to assign a more significant role to external stakeholders.
Accountability and transparency	High level of public accountability. Open access to HEIs reports with varied content.	Limited accountability, mainly to the government (MNiSW). Basic data available publicly.

4.3. Summary of analysis

The conducted research shows differences in the five university governance dimensions between the countries (Table 3). In the Netherlands the government ‘has steered higher education at a distance’ (van Vught 1997). It has forced HEIs to be more autonomous, and the leaderships (the Executive Board and Supervisory Board) to employ strategic thinking not only in competing for funding but also in more efficient and effective management of university campuses, instead of merely waiting for directives. It has pushed universities towards strategies supporting sustainable development, users productivity and university competitive advantage. Currently, Dutch HEIs are perceived as public entrepreneurs, characterised by high level of accountability and transparency of their functioning, and are open to cooperation with a number of various participants.

In comparison, Polish HEIs must operate on the basis of detailed legal regulations and restrictions, including those related to the sale and financing of estates, as well as recruitment of students and tuition fees. They have less autonomy and weren’t under the pressure to become more efficient in campus management. Lack of proper accountability and transparency has caused the senate to decide on the expansion of their campuses from relatively easily available EU funds, without strategically considering (at the planning stage) the factual future demand for campus (Rymarzak 2018). Due to the growing costs of maintenance and the changes in the funding system, as well as deepening population decline, brain drain, increasing competition, HEIs have been forced to reduce costs, collaborate with external partners and seek opportunities to increase users productivity.

5. Conclusions

University governance and its models have been extensively discussed both by researchers and practitioners for many years. So far, little has been known about its role in campus management. By drawing on five dimensions of university governance as well as theory about campus management, this paper shows how these theories could be connected to provide an innovative and coherent analytical framework and analyse the influence of university governance on campus management. Although the paper gives an overview and a description for only two countries, where universities are the owners of their campuses, it signals that university governance can support or hinder university performance. It confirms that in both investigated systems, each of the five dimensions directly or indirectly has affected campus management and university outputs. This suggests that any university governance reforms should take into account real estate and facilities, which are closely interrelated with other university resources like people and capital – upon which teaching, research and innovation depend. Not taking campuses into account can negatively influence estate’s condition, functional suitability, aesthetics, the staff and students’ well-being, as well as the university’s financial condition, and the local, national and international image of the university.

Given that university governance can determine the scope of autonomy (from full ownership to rental model) and ways in which the campus is managed (centrally or decentrally) it may consequently influence the institutional performance in higher education.

An understanding of the presented conception can be crucial for higher education systems that are searching for more effective university governance models, which help universities to improve their outcomes and adapt campuses to the changing needs. It can contribute to the construction of a viable higher education policy. Therefore it would be desirable to conduct further research both in their theoretical aspects and applications.

Note

1. In this paper we have used the terms 'universities' and 'higher education institutions' (HEIs) as synonyms, applying very often the terms used in the literature cited. In fact, there are differences in the concept of higher education systems in individual countries.

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ORCID

Małgorzata Rymarzak  <http://orcid.org/0000-0001-8877-5414>

References

- Algemene Rekenkamer. 2018. *Vastgoed bij universiteiten Twintig jaar na overdracht van eigendom*. Den Haag: Algemene Rekenkamer.
- Amaral, Alberto, Guy Neave, Christine Musselin, and Peter Maassen, eds. 2009. *European Integration and the Governance of Higher Education and Research*. Dordrecht: Springer.
- Antonowicz, Dominik, and Benjamin Jongbloed. 2015. *University Governance Reform in the Netherlands, Austria, and Portugal: Lessons for Poland*. Warsaw: Sprawne Państwo Program EY.
- Antonowicz, Dominik, Rómulo Pinheiro, and Marcelina Smużewska. 2014. "The Changing Role of Students' Representation in Poland: An Historical Appraisal." *Studies in Higher Education* 39 (3): 470–84. doi:10.1080/03075079.2014.896182.
- Austin, Ian, and Glen Jones. 2016. *Governance of Higher Education: Global Perspectives, Theories and Practices*. New York: Routledge.
- Beckers, Ronald, Theo van der Voordt, and Geert Dewulf. 2015. "Aligning Corporate Real Estate with the Corporate Strategies of Higher Education Institutions." *Facilities* 33 (13/14): 775–93. doi:10.1108/F-04-2014-0035.
- Bennetot Pruvot, Enora, and Thomas Estermann. 2017. *University Autonomy in Europe III: The Scorecard 2017*. Brussels: EUA.
- Christopher, Joe. 2015. "Internal Audit: Does It Enhance Governance in the Australian Public University Sector?" *Educational Management Administration & Leadership* 43 (6): 954–71. doi:10.1177/1741143214543206.
- Clark, Burton. 1998. *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Oxford: Pergamon-Elsevier.
- Coulson, Jonathan, Paul Roberts, and Isabelle Taylor. 2018. *University Trends: Contemporary Campus Design*. New York: Routledge.
- Curvelo Magdaniel, Flavia. 2016. *Technology Campuses and Cities: A Study on the Relation Between Innovation and the Built Environment at the Urban Area Level*. Architecture and the Built Environment: Delft.
- de Boer, Harry, Jurgen Enders, and Uwe Schimank. 2006. "On the Way Towards New Public Management? The Governance of University Systems in England, the Netherlands, Austria, and Germany." In *New Forms of Governance in Research Organizations: Disciplinary Approaches, Interfaces and Integration*, edited by Dorothea Jansen, 137–155. Dordrecht: Springer.

- de Boer, Harry, Jeroen Huisman, and Claudia Meister-Scheytt. 2010. "Supervision in 'Modern' University Governance: Boards Under Scrutiny." *Studies in Higher Education* 35 (3): 317–33. doi:10.1080/03075070903062849.
- de Vries, Jackie. 2007. *Presteren door vastgoed, onderzoek naar de gevolgen van vastgoed ingrepen voor de prestatie van hogescholen*. Delft: Eburon.
- den Heijer, Alexandra. 2011. *Managing the University Campus: Information to Support Real Estate Decisions*. Delft: Eburon Academic Publishers.
- den Heijer, Alexandra, Monique Arkesteijn, Peter de Jong, and Evi de Bruyne. 2016. *Campus NL: Investeren in de toekomst*. Delft: Delft University of Technology.
- den Heijer, Alexandra, and George Tzovlas. 2014. *The European Campus – Heritage and Challenges: Information to Support Decision Makers*. Delft: Delft University of Technology.
- du Vall, Michał. 2011. *Modele Zarządzania Uczelniami w Polsce*, Report, Uniwersytet Jagielloński: Poland.
- Estermann, Thomas, and Terhi Nokkala. 2009. *University Autonomy in Europe I: Exploratory Study*. Brussels: EUA.
- EUA. 2017. *University Autonomy in Europe III. Country Profiles*. Brussels: EUA.
- Eurydice. 2008. *Higher Education Governance in Europe. Policies, Structures, Funding and Academic Staff*. Brussels: European Commission, Education and Culture DG.
- Goedegebuure, Leo, Frans Kaiser, Peter Maassen, Lynn Meek, Frans van Vught, and Egbert de Weert. 1994. "International Perspectives on Trends and Issues in Higher Education Policy." In *Higher Education Policy: An International Comparative Perspective*, edited by Leo Goedegebuure, Frans Kaiser, Peter Maassen, Lynn Meek, Frans van Vught, and Egbert de Weert, 315–48. Oxford: Pergamon Press.
- Gohari, Savis. 2017. "Interactions of Actors' Interests and Power in the Governance System the Case of Co-location of University Campuses in Trondheim, Norway." *Journal of Engineering Technology* 4 (2): 35–42. doi:10.5176/2251-3701_4.2.190.
- Gornitzka, Åse, and Peter Maassen. 2000. "Hybrid Steering Approaches with Respect to European Higher Education." *Higher Education Policy* 13 (3): 267–85. doi:10.1016/S0952-8733(00)00012-X.
- Gorran Farkas, Meredith. 2013. "Building and Sustaining a Culture of Assessment: Best Practices for Change Leadership." *Reference Services Review* 41 (1): 13–31. doi:10.1108/00907321311300857.
- GUS. 2012. *Higher Education Institutions and their Finances in 2011*. Warsaw: Statistics Poland.
- GUS. 2017. *Higher Education Institutions and their Finances in 2016*. Warsaw: Statistics Poland.
- GUS. 2018. *Higher Education Institutions and their Finances in 2017*. Warsaw: Statistics Poland.
- Hirsch, Werner, and Luc Weber. 2001. *Governance in Higher Education: The University in a State of Flux*. London: Economica.
- Huisman, Jeroen, Peter Maassen, and Guy Neave, eds. 2008. *Higher Education and the Nation State: The International Dimension of Higher Education*. Bingley: Emerald Group Publishing.
- Jensen, Michael. 2009. "Value Maximization, Stakeholder Theory, and the Corporate Objective Function." In *U.S. Corporate Governance*, edited by Donald Chew and Stuart Gillan, 3–25. New York: Columbia University Press.
- Joroff, Michael, Marc Louargand, Sandra Lambert, and Franklin Becker. 1993. *Strategic Management of the Fifth Resource: Corporate Real Estate*. Cambridge, MA: Industrial Development Research Foundation.
- Kamarazaly, Myzatul Aishah, Jasper Mbachou, and Robyn Phipps. 2013. "Challenges Faced by Facilities Managers in the Australasian Universities." *Journal of Facilities Management* 11 (2): 136–51. doi:10.1108/14725961311319755.
- Krumm, Peter. 1999. *Corporate Real Estate Management in Multinational Corporations: A Comparative Analysis of Dutch Corporations*. Nieuwegein: ARKO Publishers.
- Kwiek, Marek. 2014. "Universities and Knowledge Production in Central Europe." In *Universities in the Knowledge Economy: Higher Education Organisation and Global Change*, edited by Paul Temple, 176–94. London and New York: Routledge.
- Kwiek, Marek. 2015. "The Unfading Power of Collegiality? University Governance in Poland in a European Comparative and Quantitative Perspective." *International Journal of Educational Development* 43 (2015): 77–89. doi:10.1016/j.ijedudev.2015.05.002.
- Maassen, Peter. 2003. "Shifts in Governance Arrangements. An Interpretation of the Introduction of New Management Structures in Higher Education." In *The Higher Education Managerial Revolution?*, edited by Alberto Amaral, Lynn Meek, and Ingvild Marheim Larsen, 31–53. Dordrecht: Kluwer Academic Publishers.
- Magalhaes, Antonio, Amelia Veiga, and Alberto Amaral. 2018. "The Changing Role of External Stakeholders: From Imaginary Friends to Effective Actors or Non-interfering Friends." *Studies in Higher Education* 43 (4): 737–53. doi:10.1080/03075079.2016.1196354.
- Marginson, Simon, and Mark Considine. 2000. *The Enterprise University: Power, Governance and Reinvention in Australia*. Melbourne: Cambridge University Press.
- Meyer, Luanna. 2007. "Collegial Participation in University Governance: A Case Study of Institutional Change." *Studies in Higher Education* 32 (2): 225–35. doi:10.1080/03075070701267269.
- Neave, Guy. 2006. "Governance, Power and Coordination". *IAU Horizons: World Higher Education News*, February, 11.4–12.1: 4.
- Neave, Guy. 2012. *The Evaluative State, Institutional Autonomy and Reengineering Higher Education in Western Europe*. London: Palgrave Macmillan.
- Nourse, Hugo, and Stephen Roulac. 1993. "Linking Real Estate Decisions to Corporate Strategy." *The Journal of Real Estate Research* 8 (4): 475–94.

- OECD. 2011. *Designing for Education: Compendium of Exemplary Educational Facilities 2011*. Paris: OECD Centre for Effective Learning Environments.
- OECD. 2014. *Factbook 2014: Economic, Environmental and Social Statistics*. Paris: OECD Publishing.
- OECD. 2018. *Education at a Glance 2018*. Paris: OECD Publishing.
- Quyên, Đỗ Thị Ngọc. 2014. "Developing University Governance Indicators and their Weighting System Using a Modified Delphi Method." *Procedia – Social And Behavioral Sciences* 141 (2014): 828–33. doi:10.1016/j.sbspro.2014.05.144.
- Rowlands, Julie. 2017. *Academic Governance in the Contemporary University*. Singapore: Springer.
- Rymarzak, Małgorzata. 2018. "Incentives for Polish Higher Education Institutions to Improve Real Estate Efficiency." *Journal of Corporate Real Estate* 20 (3): 214–27. doi:10.1108/JCRE-10-2017-0040.
- Rymarzak, Małgorzata, and Alexi Marmot. 2018. "Higher Education Estate Data Accountability: The Contrasting Experience of UK and Poland." *Higher Education Policy*. doi:10.1057/s41307-018-0109-5.
- Salmi, Jamil. 2007. "Autonomy from the State vs Responsiveness to Markets." *Higher Education Policy* 20 (3): 223–42. doi:10.1057/palgrave.hep.8300154.
- Santiago, Paulo, Karine Tremblay, Ester Basri, and Elena Arnal. 2008. *Tertiary Education for the Knowledge Society*. Report, OECD Publishing.
- Shattock, Michael. 2006. *Managing Good Governance in Higher Education*. Maidenhead: Open University Press.
- SJR. 1997. "International Science Ranking." Scimago Journal & Country Rank. Accessed April 17, 2019. <https://www.scimagojr.com/countryrank.php?year=1997>.
- SJR. 2010. "International Science Ranking." Scimago Journal & Country Rank. Accessed April 17, 2019. <https://www.scimagojr.com/countryrank.php?year=2010>.
- SJR. 2017. "International Science Ranking." Scimago Journal & Country Rank. Accessed April 17, 2019. <https://www.scimagojr.com/countryrank.php?year=2017>.
- Strathern, Marilyn, ed. 2000. *Audit Cultures: Anthropological Studies in Accountability, Ethics and the Academy*. London: Routledge.
- The World Bank. 2012. *Universities Through the Looking Glass: Benchmarking University Governance to Enable Higher Education Modernization in MENA*. Report The World Bank, March.
- Tight, Malcolm. 2012. *Researching Higher Education*. Maidenhead: Open University Press.
- Turner, Paul. 1984. *Campus: An American Planning Tradition*. Cambridge, MA: MIT Press.
- van Vught, Frans. 1993. *Patterns of Governance in Higher Education Concepts and Trends*. Paris: UNESCO.
- van Vught, Frans. 1997. "Combining Planning and the Market: An Analysis of the Government Strategy Towards Higher Education in the Netherlands." *Higher Education Policy* 10 (3/4): 211–24. doi:10.1016/S0952-8733(97)00014-7.
- VSNU. 2008. *Gemeenschappelijke verklaring van de Minister voor Wonen, wijken en integratie, de HBO-raad en de VSNU over de toetreding van hogescholen en universiteiten tot de Meerjarenafspraak energie-efficiency (MJA3)*. Utrecht: VSNU.
- VSNU. 2013. *Meerjarenplan Energie-efficiency Nederlandse Universiteiten 2013–2016*. Utrecht: VSNU. Accessed April 17, 2019. <http://vsnu.nl/files/documenten/Domeinen/Governance/Sectormeerjarenplan%20Energie%20efficiency%20Nederlandse%20universiteiten%202013%20-....pdf>.
- Wilkins, Andrew. 2016. *Modernising School Governance: Corporate Planning and Expert Handling in State Education*. London and New York: Routledge.
- Yung-Chi Hou, Angela, Christopher Hill, Karen Hui Jung Chen, and Sandy Tsai. 2018. "A Comparative Study of International Branch Campuses in Malaysia, Singapore, China, and South Korea: Regulation, Governance and Quality Assurance." *Asia Pacific Education Review*. doi:10.1007/s12564-018-9550-9.