

Taking women on boards: a comparative analysis of public policies in higher education

Tanja Klenk, Dominik Antonowicz, Lars Geschwind, Rómulo Pinheiro & Anna Pokorska

To cite this article: Tanja Klenk, Dominik Antonowicz, Lars Geschwind, Rómulo Pinheiro & Anna Pokorska (2022) Taking women on boards: a comparative analysis of public policies in higher education, Policy Reviews in Higher Education, 6:2, 128-152, DOI: [10.1080/23322969.2022.2066014](https://doi.org/10.1080/23322969.2022.2066014)

To link to this article: <https://doi.org/10.1080/23322969.2022.2066014>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 27 Apr 2022.



Submit your article to this journal [↗](#)



Article views: 622



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

Taking women on boards: a comparative analysis of public policies in higher education

Tanja Klenk ^a, Dominik Antonowicz ^{b,c}, Lars Geschwind ^d, Rómulo Pinheiro ^e
and Anna Pokorska ^b

^aHelmut Schmidt University, Hamburg, Germany; ^bNicolaus Copernicus University, Toruń, Poland;
^cUniversity of Toronto, Canada; ^dKTH Royal Institute of Technology, Stockholm, Sweden; ^eUniversity of Agder, Kristiansand, Norway

ABSTRACT

There is growing interest in the underlying mechanisms affecting female leaders in Higher Education (HE). This article compares four countries – Germany, Norway, Poland and Sweden to identify key structural conditions (enablers and barriers) for female representation in academia by studying the regulative framework of government policy. Two research questions are guiding the analysis: first, what (if any) policy instruments are chosen to increase the number of female leaders in HE? Second, to what extent does this choice of instruments mirror either sectorial logic (HE) or national policy styles?

The empirical results of the article show that while processes of policy diffusion are observable at the sectoral level, gender equality policies and instrument choice differ considerably in the four countries under consideration. The article thus concludes that national policy styles need to be understood as enabling and disabling policy factors for gender equality in HE shaping the process of translating diffused models decisively.

ARTICLE HISTORY

Received 22 September 2021
Accepted 5 April 2022

KEYWORDS

Leadership; gender equality;
equal opportunities;
governance; policy
instruments

1. Introduction: higher education governance from a gender perspective

Despite increasing public calls for gender equality and diversity in academia and an increasing enrollment of female students in universities, females are underrepresented in leading managerial roles at public universities (David 2021). Recent studies show that, in every region of the world, (Cheung 2021, 5). This is also true for European countries where gender equality is granted through institutionalized rights. Equal opportunity policies are part of European HE policies. Gender equality is a central value of the EU, being enshrined in the European Higher Education (HE) Treaties, and enacted via a large body of legislation, which also covers the area of research and innovation (European Commission 2019). In the EU-28, in 2016 women constituted only 24% of grade A academic staff, but 58% of graduates at the B.Sc. and M.Sc. levels. In 2017, only 22% of the heads of HE institutions (HEIs) in the region were women (European Commission 2019, 115).

CONTACT Tanja Klenk  tanja.klenk@hsu-hh.de

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

This paper compares four countries – Germany, Poland, Norway and Sweden – regarding the prospects for female academics to pursue an academic leadership career. All four countries have different traditions with respect to both governing HE and equal opportunity policies. The study aims to identify key structural conditions (enablers and barriers) for female representation in academia by studying the regulative framework of government policy. The unit of analysis is policy instruments through which policies are made (Capano and Howlett 2020, 1). Two research questions guide the analysis: First, what policy instruments (if any) are chosen in the four different countries to increase the number of female leaders in HE? And second, to what extent does this choice of instruments mirror either a sectorial logic (HE) or national policy styles and administrative traditions?

Studying the relationship between sectorial and national policy styles is particularly intriguing in the field of HE, with little attention paid to gender issues from a comparative standpoint. Research on HE governance within Europe sheds light on the prevalence of New Public Management (NPM) reforms since the late 1990s. These vary in nature and scope from country to country, but generally speaking pertain to the importance associated with accountability, institutional autonomy and performance management (Enders, Kehm, and Schimank 2015; Hazelkorn, Coates, and McCormick 2018). Accountability and performance management result in a stronger managerial ethos at HEIs. In many countries there is an ongoing transition from elected to appointed university leaders (multiple levels), resulting in a gradual but steady decline of the traditional role undertaken by collegial-based governance structures (Geschwind et al. 2019). When it comes to institutional autonomy, studies show that NPM reforms have a tendency to enlarge procedural dimensions (how) while reducing substantive ones (what), as the policy focus moves towards short-term outputs and mid/long-term societal outcomes (Shattock 2014). Contractual arrangements (between the state and HEIs) centred on performance indicators have become the new *modus operandi* across several European countries (Gornitzka et al. 2014) and the cornerstone for the new social contract between the HE sector and society, brokered by the state (Maassen 2014).

Studies demonstrate that these transformations have had a strong impact on gender relations in HE (Blackmore 2021; Riegraf and Weber 2017). NPM-policy instruments like performance management, while considered to be ‘gender neutral’, often disadvantage female academics since they obscure the gendered processes operating in such contexts (O’Connor 2019, 31). At the same time, policy actors have also started to include gender equality in their interpretations of what is cutting-edge scientific research and thus worth to be funded.

To provide incentives for universities to search for excellent research everywhere, as well as among female academics, governments have enacted policy measures and instruments for gender equality to be used as decisive criteria for budget decisions. NPM’s performance-oriented, meritocratic ethos provides, at least in theory, for the notion of ‘a level playing field’ where under-represented stakeholders, such as female academics, are now in a position to compete for leadership positions alongside their senior male (professorial) counterparts. What is more, the rise of an NPM regime in European HE sets a new normative, managerial premise, namely: that gender aspects are one of the many elements that can be steered (government) and locally managed (university leadership) in the form of proper policies, instruments and incentives. There is ample evidence of the serious

limitations associated with policy and managerial attempts at enacting change, not least when it comes to highly institutionalised sectors like HE (Stensaker, Välimaa, and Sarrico 2012) and rather autonomous domains of social life such as the academic profession (Vukasovic et al. 2012).

Against this backdrop, we are interested in the range and type of policy instruments chosen to improve female representation in HE leadership. If countries support the idea of a gender-balanced university, do they follow a similar approach in terms of instrument choice? Can we thus describe a typical sector-specific path towards equal representation for senior positions? Or are national styles of gender policies in HE preserved?

This paper makes a twofold contribution to the literature. Empirically, it maps the diversity of instrument choice for female representation in academic leadership. Analytically, the article improves our understanding of the causes of the variations between sectors and countries by comparing instrument choice in one policy field in four countries belonging to different administrative traditions. We have organized the rest of this paper as follows: first, Section 2 introduces the policy instrument analysis as our conceptual framework. Section 3 explains the rationale of the country selection (combining the most-similar with the most-dissimilar case study approach) and the data collected (policy documents and regulations). After having presented the empirical results (Section 4), we demonstrate the complexity of the relationship between sectoral and national styles (section five). While we can observe processes of policy diffusion at the sectoral level, gender equality policies and instrument choice differ considerably across the four countries under consideration. This leads us to conclude that national policy styles need to be understood as mediators – either enabling or disabling policy factors – for gender equality in HE, decisively shaping the process of translating diffused models.

2. Policy instruments: types and styles

Public policies are made and goals are pursued through policy instruments (Capano and Howlett 2020, 1). Policy instruments are a set of techniques with which government authorities exercise their power to prompt (or prevent) social change. The type and the style of intervention can vary from minimalistic or even subsidiary intervention to active forms of interferences, from authoritarian, hierarchical types of interventions to more indirect forms of governance relying on information, education, persuasion and capacity building to create conditions that facilitate and encourage desired behaviour.

2.1 Types of policy instruments

Within the broad range of typologies to categorize policy instruments public policy research has developed, Vedung's (1998) trichotomy of carrots, sticks and sermons is a classical one. In this approach, power is understood as an actor's ability to induce or influence another actor to carry out one's directives or any other norms. These can be either exercised by the use of economic means (carrots), regulation (sticks) or information (sermons). By applying these three basic possibilities to structure the relationship between governor and governed within the field of gender equality in HE, our analytical framework differentiates among the following policy instruments:

- *Regulations*: These are the 'sticks' designed to restrict individual or group behaviour by prohibiting activities or by requiring action under designated circumstances. The actual means of this set of policy instruments are formulated rules (e.g. laws, directives and decrees; Vedung 1998, 31). Examples of authority tools in equal opportunity policies are mandatory gender quotas in decision-making positions and/or appointments to senior executive positions; descriptions of recruitment procedures; and representation in formal groups (councils, committees, assemblies).
- *Economic means*: So-called 'carrots', are either in kind or in the form of financial resources. Economic means used as policy tools can be designed in two directions: as incentives to provide policy addressees with additional resources or as disincentives that threaten policy addressees to take resources away. Policy recipients are still granted autonomy to decide on the course of their actions; however, financial or in-kind (dis)incentives encourage them to choose the option preferred by the authoritative body since (Vedung 1998, 32). Competitive grant programmes that foster research on gender issues or financial incentives to appoint women to professorships are examples of economic means designed as incentives to encourage universities to engage in gender issues. An example of economic means designed as disincentives could be the threat to reduce the university budget in case gender action plans are not fulfilled.
- *Information*: 'Policy tools of this category – 'sermons' - focus on the perceptions of policy recipients and thus belong to the indirect forms of governance. Sermons seek to influence recipients by framing particular situations through the use of images, symbols and labels. Oftentimes, the policy frames are related to intangible values (such as justice, fairness, equality, right and wrong). Examples are information campaigns about equal opportunity policies launched by governments. The information category also includes training programmes and educational efforts to enhance knowledge and to overcome the skills gap that hinders the target groups from showing appropriate behaviour. In classifying policy instruments we follow the concept of functional equivalents (Teichler 2014) instead of lexical equivalence. In our study, we categorize identical policy instruments into different categories because they serve different purposes in different systems (Kosmützky and Nokkala 2014).

2.2 Policy styles

While policy instruments are concrete and specified operational forms of interventions of public authorities, the choice of instrument reflects more general political and administrative strategies. There is ample empirical evidence that instrument choice is crucially influenced by national traditions of public administration (Freeman 1985; Howlett 1991). We thus can describe particular national policy styles. These different styles are a result of different instrument preferences. While Rechtsstaats tradition countries favour legal procedures, countries with a social-democratic public administration tradition usually prefer learning and capacity-building instruments due to an organic view of state-society relations that is expressed through a strong commitment to the welfare

state alongside participatory decision-making processes. The national policy style of countries from the Eastern and Central European cluster can be described as an institutional amalgamation of different national traditions due to uncoordinated processes of institutional transfer after the collapse of the Sovietic regime (Mazur 2020).

However, other studies point to the characteristics of the policy field, which are also considered as relevant determinants of instrument preferences. Higher education is a case in point when it comes to the development of a specific sectorial policy style. To transform public HEIs from loosely coupled systems (Weick 1976) into 'complete' organizations (i.e. strategically and entrepreneurial acting entities), governments have (last two decades) followed an NPM-centred approach, which combines incentives with strict authority tools; for example, by introducing performance-based university research funding strategies (Amaral et al. 2010). Despite the widespread adoption of NPM-inspired policies and instruments, cross-national differences persist when it comes to the intensity and the pace of transforming national HE landscapes and their respective HEIs (Nyhagen, Bleiklie, and Hope 2017; Pinheiro and Stensaker 2014). Stated differently, European HE governance dynamics are characterised by convergence rather than hamornisation, largely resulting from deeply embedded historical legacies (Krücken 2003) and the divergent strategic agendas of key actors at the local/national/regional levels (cf. Pinheiro 2015).

From a gender perspective, the transformation of European HE systems and HEIs along NPM-oriented lines is also a complex and ambivalent process. On the one hand, the reproduction of universities as unequal gendered organizations, which Acker (1990) has described as the 'old' governance model of universities as professional bureaucracies, can also be observed in the entrepreneurial university (O'Connor 2019). Like in the model of universities as professional bureaucracies, the making of an unequal gendered organization proceeds through policy instruments and practices of the academic field that are explicitly framed as being based on 'objective criteria' and thus are 'gender-neutral'. However, studies have shown that the interpretation of objective meritocratic principles and the definition of academic excellence, which usually proceed through collegial peer review systems, tend to disfavour women (O'Connor 2019, 31–33; van den Brink and Benschop 2014).

On the other hand, however, it is also an oversimplification to understand the shift from the unequal gendered professional bureaucracy to the entrepreneurially-minded, managerial university (cf. Pinheiro and Stensaker 2014) as a process of mere continuation. Because universities are considered key institutions for fostering social and economic development in a knowledge-based society, policy actors have started to include gender equality among quality criteria. As a result, the new governance structures provide new opportunities for female academics to pursue their career and become outstanding academic leaders. However, since equal opportunity policies are driven first and foremost by economic considerations to fully exploit the available human resources, the modern, managerially-centered university does by no means imply more equity for all female and male scientists (Riegraf and Weber 2017, 107). How gender relations are renegotiated at the level of universities largely depends on contextual factors (Cheung 2021, 6), such as the design of policy instruments that incorporate the political requirement for equality in funding schemes.

3. Contextual backdrop and cases

While there is, as the previous section has shown, a rather large and empirically rich body of literature on national and sectorial policy styles, ‘there are still many analytical ‘black holes’ (Capano and Howlett 2020, 3) in the research on policy instruments. One of the ‘unknowns’ is how sectorial policy styles and national policy styles are related to each other. What can we expect, for instance, if we compare instrument choice in one policy field in countries with different national administrative traditions? Similarities due to contextual features of the policy field? Or varieties due to the limits of translating instruments into different national politico-administrative traditions?

To better understand the causes of the variations in instrument choice between sectors and countries, the paper adopts a comparative case study research design; it examines policy instruments directed towards gender balance in academic leadership in four countries: Germany, Norway, Poland and Sweden. The analysis is based on a wide range of publicly accessible secondary data that have been thematically analysed. Overall, the study draws on a triangulation of several secondary sources (Patton 1999) such as policy documents, legislation, reports, statements or position papers issued by governmental bodies which addressed gender-related issues. The policy documents and regulations collected met one of the following requirements: (a) regulations that might affect the representation (pool of possible candidates) in university academic-leadership positions; (b) policy initiatives aiming to achieve gender balance in academic managerial positions (e.g. targets, special resources available) or (c) social and policy debates regarding gender balance in academia. The time frame of the data collection was the period 2000–2020.

The comparative analysis of four countries is particularly demanding because the studied documents are typically published in national languages. Several scholars (e.g. Vålmaa and Nokkala 2014; Teichler 2014) underline the importance of the social, cultural and political context of HE and point at the powerful role of interpretations that comes from the humanistic tradition of social sciences. Indeed, a comparison of policy instruments in four countries in such politically sensitive field as university governance requires both language proficiency as well as good knowledge about local contexts. This claim is satisfied by a composition of authors who represent all four studied countries. The gender policies in each country were examined separately, but through the analytical lens of a jointly developed analytical framework. The four countries fall into two groups and have both similarities and differences. The research design thus combines a most-similar with a most-dissimilar case study approach (Anckar 2008). In terms of dominant cultural values regarding the societal role of women Germany and Poland are both countries with conservative traditions, which prioritize a male-breadwinner model over gender equality. Despite recent changes in the statutory parental leave policy, the unique income tax system in Germany still highly favours the traditional gender distribution of paid and unpaid work (Beham et al. 2017). In Poland, transformations in the post-communist period since 1989 have even brought about a ‘retraditionalisation’ with shrinking female labour market participation (Siemienska and Domaradzka 2019).

Norway and Sweden, in contrast, are both countries where gender models are progressive and equal opportunity policies rank high on the political agenda. However, while Nordic countries represent a distinct group of high achievers in terms of gender

policies, studies show that their distinctiveness is more pronounced for democratic, rather than economic, equity. The countries with a traditional social-democratic regime hardly perform better than ones with a traditional liberal regime when it comes, for instance, to gender pay gaps (Teigen and Skjeie 2017).

In terms of policy styles, Germany represents the group of countries where administrative culture is strongly shaped by an emphasis on formal processes, rules, directives and stability (Hammerschmidt and Wegrich 2018). Legality (compared to output-orientation), impartiality and equal treatment of citizens are also considered as core values of the political-administrative system. Interestingly, the equal-treatment value is traditionally interpreted without sensitivity to the gender dimension.

The administrative, cultural and policy styles in Poland are more difficult to categorize due to the country's turbulent history, lacking continuity, significant foreign influences and even phases of extinction (Dobbins 2015, 18). Polish public HE provides a particularly interesting case. Overall inspired by the Humboldtian tradition, it seems to fit the continental foundations laid in the 19th and early 20th centuries. The current policy regime, which is characterized by a strong focus on formal processes and administrative law, was established after 1989 (Antonowicz 2015). Similar to Germany, Poland falls in the category of a post-authoritarian (totalitarian) society in which the exceptional role of universities is embedded in national history. Both countries have witnessed several violations of university autonomy throughout their history (Hüther and Krücken 2013; Antonowicz, Kulczycki, and Budzanowska 2020). As a consequence, the particular status of Polish universities as semi-autonomous entities has been strengthened in the second half of the twentieth century. The downside of this development is that state capacity for steering the HE sector and designing HEI's self-governance is considerably low.

The administrative tradition in Norway and Sweden considers the state as an important integrating force within society. The emphasis on a 'social compact' grounded in communitarian traditions, high levels of trust amongst citizens and towards state institutions and the importance of equality and egalitarianism for the society mark considerable differences from the continental European countries. This mindset permeates governance approaches in HE, with HEIs enjoying considerable autonomy in the ways they go about their businesses and with the state adopting a more 'steering at a distance' approach. That being said, Norway and Sweden show substantial differences in the ways universities are governed and managed, including the ways in which professors and leaders are recruited and promoted (Engwall 2014; Pinheiro et al. 2019).

4. Empirical results

Our empirical results are presented in four country portraits. The discussion is organized along with the idea of a double-comparative analysis. In the first step, the results for the most similar countries are compared (Norway compared to Sweden, Germany compared to Poland). In the second step, the two dissimilar groups are contrasted (Germany and Poland versus Norway and Sweden). At the onset, we present the figures regarding female representation in the four countries at both the beginning and the end of the 20-year study period (Table 1).

4.1 Sweden

4.1.1 Regulation

Gender equality has been high on the political agenda in Sweden over the last few decades. Currently, there are more females than males in HE, with technology and engineering as the only areas with more male students. The numbers have also changed regarding academic staff, and there is now an even gender balance from PhD student to senior lecturer (lektor), with 46% women. The only remaining exception is the academic top position – full professor – where women remain a minority (UKÄ 2021). HEIs are led by rectors, formally appointed by the government after an internal selection process.

Since 1993, Swedish HE is to a large degree decentralised and deregulated with significant power discretion at the HEI level. A second wave of reforms was implemented in 2011. At the national level, rules and regulations for the HE sector are laid down in the Higher Education Act (Högskolelagen [nd](#)) and the Higher Education Ordinance (Högskoleförordningen 1993, 100). In the Higher Education Act, the first chapter announces that ‘In the activities of the higher education institutions, equality between women and men must always be observed and promoted’ (Högskolelagen, Ch. 1, §5). More details are provided in the Higher Education Ordinance: In the section on the appointment of university board members, it is declared that members are appointed by the government after a nomination process. The composition of the board should ‘take into account an even gender distribution among the members’ (Högskoleförordningen, Ch. 2 § 7a). In addition, the rector is appointed by the government after a proposal from the university board. Again, the gender equality aspects are explicit: ‘In its work to propose the Vice-Chancellor, the Board shall, as far as possible, produce both female and male candidates. The Board shall report to the Government how the gender equality aspect has been taken into account’ (Högskoleförordningen, Ch. 2 § 8). In the procedure of employment: ‘If a group of persons is to submit proposals to applicants who should be considered for employment as a teacher, women and men shall be equally represented in the group’ (Högskoleförordningen, Ch. 4 § 5).

For a while, and increasingly so, gender equality has become an important part of the national evaluation scheme in Sweden. The responsible agency, the Swedish Higher Education Authority, includes gender equality as one of the main areas in the institutional audits (focussing on quality assurance and enhancement at HEI level) and is currently the dominant aspect of the package of evaluation tools at the national level. There are currently six assessment areas:

- governance and organization

Table 1. Women in senior leadership roles at public universities (in %, 2000 and 2020).

	Sweden	Norway	Germany	Poland
Female academics (all levels), HE sector	2000: 41% 2020: 46%	2000: 35% 2020: 48%	2000: 25% 2019: 36%	2000: 39% 2019: 50%
Female professors, HE sector	2000: 18% 2020: 31%	2000: 8% 2020: 25%	2000: 11% 2019: 26%	2000: 19% 2019: 39%
Rectors	2000: 21% 2020: 40%	2000: 50% 2020: 50%	2000: 6% 2020: 23%	2000: 0% 2020: 11%

Sources: Compiled by the authors based on official figures.

- preconditions
- design, implementation and outcomes
- student and doctoral student perspectives
- working life and collaboration
- gender equality.

Over the years, there have also been thematic evaluations, some of which have focused on gender equality issues.

4.1.2 Economic means

Various incentives for promoting a more equal Swedish HE sector have been discussed over the last few years. Historically, there have been designated initiatives, programmes and calls to finance gender-related research. Currently, there are no separate funding bodies or programmes directed towards gender issues. The strategy has rather been to integrate gender and equality perspectives in each and every call regardless of disciplinary area 'As from 2020, we ask all of you who apply for a grant from us to state whether sex and gender perspectives are relevant in your research and, if so, in which way you will use such perspectives, or why you choose not to do so'.¹

In 2011, the national Equality Delegation (Jämställdhetsdelegationen) proposed that there should be a financial bonus for those university environments that were successful in recruiting female professors. Furthermore, the performance-based allocation of direct state funding was suggested to include a gender equality indicator by the former government. The same government proposed a bonus to HEIs along the lines of the Equality Delegation described above. Neither of these initiatives has actually been implemented. Another policy idea that was implemented was the right to 'summon' professors, i.e. world-class scholars that would be hand-picked with the aim of boosting the quality of research environments. The candidates should be recruited in a fast lane without going through the usual process of peer review. In the state committee report, *Karriär för kvalitet* (SOU 2007, 98), this procedure of 'summoning' was described as an opportunity to increase the share of female professors. However, in the final Government Bill (prop. 2009/10:149), there are no arguments based on gender, but rather the general opportunity to make an important recruitment (UKÄ 2014).

4.1.3 Information

Most Swedish HEIs are state agencies and are accountable to the state in a similar manner as other agencies. Since 1994, Sweden has made use of gender mainstreaming as the main strategy to achieve gender equality goals. This strategy entails that equality issues should be included in everyday work rather than as side activities. The previous Swedish government decided to intensify gender mainstreaming of all state agencies, including HEIs (Peterson and Jordansson 2021). This process started in 2016 and included 33 HEIs that involve the following activities:

- Work against gendered study choices
- Develop content and form of education
- Promote equal career paths
- Promote equal resource allocation

- Develop evaluation and follow-up.

The work was supported and promoted by the Swedish Secretariat for Gender Research based at the University of Gothenburg. The Secretariat arranged lectures, workshops and seminars at HEIs and published reports. Another state body, the Swedish Gender Equality Agency evaluated the gender mainstreaming activities after the first 3 years and found that there are good preconditions for equality work in Swedish HEIs, but also that the work needs to continue after 2019 (Jämställdhetsmyndigheten 2019). Swedish HEIs have taken on this task in many different organizational ways, including gender equality offices, ombudsmen and senior management roles like vice-rectors. This increased capacity has also produced numerous competence development initiatives and faculty training, as well as strategies and policy documents.

Another example, already alluded to above, is how initiatives to change and develop the academic career path have been related to the promotion of gender equality. Hence, a tenure track-like academic career with transparent hiring and promotion criteria has been assumed to be beneficial for gender equality (Henningsson, Jörnsten, and Geschwind 2018).

4.2 The Norwegian case

4.1.2 Regulation

As in Sweden, female enrolments (60%) in HE dominate, a figure that has remained rather stable in the last two decades. Female representation amongst academic staff at all HEIs increased substantially in the period 2000–2020 from 35% to 48% (DBH-NSD 2021). As for full professors, whereas in 2000 females represented 8% of the country's total, this figure grew to 25% by 2020. The same applies to leadership positions (top and middle layers), rising to 55% of the total in 2020 from 43% two decades earlier. As of January 2021, females represented half of all rectors and deans and 55% of vice-rectors at all HEIs (Krono 2021). It is a fundamental aim of Norwegian public policy to improve equal opportunities and to achieve gender balance. Academic institutions are not exempted from this rule, irrespective of the principle of academic self-governance. When it comes to gender equality, HE is one of the many subsectors in which public law is applied to pursue widely shared social norms and values like fairness, equality and accessibility.

Norwegian universities and university colleges are thus subject to national regulations on gender equality as well as specific regulations that apply only to universities. Regarding academic leadership, it is interesting to note that 'Section 28 of the Gender Equality Act,' which regulates gender balance in official committees, also applies to the composition of university boards. Whenever a public body appoints or selects a committee, board, council, tribunal, delegation, etc., the requirements laid down previously (cf. Section 7–6, third subsection) concerning the representation of both sexes must be fulfilled. The rules are as follows:

- If the committee has two or three members, both genders shall be represented (also applies to the appointment and selection of deputy members).

- If the committee has four or five members, each gender shall be represented by at least two members.
- If the committee has six to eight members, each gender shall be represented by at least three members.
- If the committee has nine members, each gender shall be represented by at least four members.
- If the committee has more members, each gender shall account for at least 40% of the members.

In addition, the HE law expects universities and university colleges to develop a systematic and comprehensive approach to gender equality that includes all types of employees, both academic and administrative. Any appointment process requires that due consideration is given to gender equality. Interestingly, in its endeavour to promote gender equality at HEIs, Norway has received critique from European Institutions. Even though gender equality is also a core principle of policymaking in Europe (Rees 2007), the Norwegian government was forced to amend the legislation by the EFTA Surveillance Authority in 2003. The latter claimed that Norway had broken the EEA rule, in particular the equal treatment directive, by allowing several academic positions to be earmarked for women. Following this ruling, paragraph 30 nr. 3 of the HE law was amended in favour of new laws that established more moderate gender quotas.

4.2.2 Economic means

The Norwegian public law secures equal opportunities in employment processes and ensures gender balance in collegial bodies. Even though gender equality is a core public value, and although the majority of students (including doctoral) are female alongside approximately half of all research positions, Norwegian HEIs also suffer from the known 'glass ceiling effect'. As a general rule, the government prefers to steer HEIs from a distance and *ex post* in the form of contractual agreements and other performance-based indicators. This is particularly the case for the universities that enjoy considerable procedural autonomy. Thus the above-described regulative instruments are *not* the dominant approach for promoting gender equality. Instead, incentives are the preferred means. One of the flagship initiatives for equal opportunities is 'BALANSE', an action-based program administered by the Norwegian Research Council (NFR). It combines financial incentives and learning instruments to address the glass-ceiling problem across Norway's research system, which, in addition to HEIs, also encompasses a rather large research institute sector with public and private actors. To disseminate the results, NFR published (fall 2019) posters and flyers with recommendations for 12 actions and incentives for improving gender balance across the board.

Another example of a policy instrument to promote gender equality is the so-called national incentive scheme (*Nasjonal insentivmodell*). This 3-year test project in which seven universities and two university colleges participated started in 2010. Based on the number of women appointed for higher scientific positions in mathematics, science, engineering and technology-related fields, the participating institutions received extra funding. The Ministry of Education and Research (KD) has set aside 10 million NOK for the scheme, with each institution receiving up to 300,000 NOK for each new academic female appointment (all levels) in the relevant fields. Overall, the results of the incentive

scheme are mixed: the number of appointments did not exceed 20 annually, and there are substantial differences between the participating institutions regarding the extent to which the targeted HEIs have taken advantage of this program.

More recently, NFR stated that gender imbalances remain a challenge to be tackled in years to come. While an increase in female researchers and professors could be observed throughout the program (from 20% in 2008 to 37% in 2018), this policy instrument reflects the general problem that women do not seem to reach the top of the academic career ladder. As a result, NFR adjusted its approach and started to combine incentive instruments with regulative policy in the new application round (fall 2020 onwards), namely that research institutions that send in five or more applications must ensure that at least 40% of the project leaders are women. If this criterion is not fulfilled, NFR then requires a local action plan on how to improve gender balance.

4.2.3 Information

In contrast to the Swedish case, gender equality is not yet formally a part of the regular evaluation of HEIs by the National Quality Agency for HE (NOKUT). Moreover, the design of HE evaluations in Norway has more of the character of a learning instrument compared to the regulative approach in Sweden. That said, learning is directly associated with the capacity instruments described below and occurs in the form of regular scientific and policy reports and publications by official agencies regarding the status and developments across the sector, both nationally and internationally. Of these agencies, two play a critical role at the national level: NFR, including its independent unit (Kilden), and the KIF committee. Kilden, which is set up as an independent department within NFR, collaborates broadly with different actors from various research organizations and public administration. It aims to support gender perspectives and gender balance in research and innovation and is also tasked with stimulating public debates on the topic (by spreading and assembling relevant research findings). Established in 2004 as a National Committee for Gender Balance and Diversity within Research, KIF is tasked with working with gender and diversity perspectives in research. In the period 2009–2011, the agency was named the most comprehensive policy-oriented measure for gender equality in research at the national level alongside its Swedish counterpart. The aforementioned agencies and the KD regularly host high-level information and best practices sharing events on the topic of gender equality in science and HE, targeting national and international audiences. At the institutional level, several HEIs have established dedicated research units to investigate the topic in light of strategic imperatives. The existing capacity-building programs have either a regional (e.g. Balance-Bergen) or a national scope (NUPIAL, FRONT (2015–2019), FRONT II (2019–2022)). All these programs combine knowledge building (e.g. funding of gender research) with capacity building components at the individual and collective level through raising awareness and motivation, skill training, mentoring and leadership development, among other actions. Finally, the importance of equality in HE as social value is frequently communicated in policy statements and normatively reinforced through symbolic instruments like prizes. In 2007, KD established the ‘Gender Equality Award’ (2 million NOK), targeting HEIs that had successfully designed and conducted gender equality initiatives. In 2014, the Solberg Government decided to discontinue the Award, but it doubled down in its

commitments to promote gender equality by increasing KIF's funding from NOK 3 million to NOK 5 million.

4.3 Germany

The vast majority of the university leaders in Germany – rectors or presidents – are male (77.9% in 2020). While the share of female leaders has augmented in the last two decades (in 2000, only approx. 6% of all rectors and presidents were female), the figures clearly show the 'leaky pipeline' phenomenon in German HE in grade A positions, which form the pool of candidates for rector and president positions, women are still underrepresented in all fields of science (European Commission 2019; GWK 2019; Lötter 2019).

Gender equality in HE has been an issue on the policy agenda in Germany since the 1980s (Mühlenbruch 2008). Except for symbolic statements, however, no policy instruments have been implemented to date that directly address gender equality with respect to university leadership. The majority of measures aim at increasing the pool of likely candidates for university rectors and presidents by improving gender equality at all stages of academic careers. In terms of instrument types, incentives are prevailing, while authoritative instruments with hard sanctions are largely absent. A change in the design policy instruments over time can be observed. To understand these dynamics of policy design and instrument choice in gender policy in HE, however, a closer look at the fragmented governance of HE in Germany is necessary.

4.3.1 Regulations

Freedom of science, research and teaching is a fundamental right laid down in Article 5 of the German Constitution (Grundgesetz, GG). Universities are thus granted self-administration rights, including the right to decide about their head of the institution. Since 1986, however, the HE laws of the 16 partly sovereign states (Gem: Länder), which are mainly responsible for HE governance, started to prescribe universities to respect equal opportunity goals in their organizational governance systems. The Framework Act for Higher Education from 1986 mandates universities to appoint women representatives and to implement equal opportunity measures (HRG 1986, § 2, Abs. 2). The first generation of equal opportunity instruments, however, was based on the deficit-model (signalling that women 'lack something' (qualification, resources, stamina, appropriate leadership behaviour etc.)) without questioning structural discrimination through institutional and organizational norms, structures and procedures.

It was not until the end of the 1990s that the overall design of gender policies in HE experienced a transformative shift. A paradigm shift in gender policies – from women advancement to Gender Mainstreaming pushed forwards by supra – and international organizations (EU equality strategies, UN Fourth World Conference on Women, Zippel, Ferree, and Zimmermann 2016) – coincided with a paradigm shift in HE governance – from a professional bureaucracy to a managerial NPM model – which resulted in the implementation of new instruments. The new 'mainstreaming' approach comes to light, for example, in revised legal norms regarding female representation in internal university boards and committees. State laws on HE now prescribe an 'appropriate' female representation in all internal boards and committees. However, shared and binding definitions of what is 'appropriate' are lacking: in Bremen, for instance, a share of 40%

percent female participation is considered ‘appropriate’, but in Lower-Saxony, a share of 50% of board and committee members should be female. The majority of states even refrain from defining prescriptive quota as well as from imposing sanctions in case of failure.

Moreover, administrative coordination bodies such as the Standing Conference of the Ministers of Education and Cultural Affairs (Kultusministerkonferenz), the German Science Council (Wissenschaftsrat, WR) and the Joint Science Conference (Gemeinsame Wissenschaftskonferenz, GWK), which traditionally focus on core themes of research and teaching in HE, have developed in recent years, to important actors of equal opportunity policies (e.g. Wissenschaftsrat 1998). Overall, however, regulations prescribing the appropriate female representation in university governance are thus far not used as ‘sticks’ to push universities to take gender equality seriously. The described measures are more like ‘soft’ recommendations rather than ‘hard’ authority instruments.

4.3.2 *Economic means*

Instead of threatening with sticks, state ministries for HE at the national and subnational levels prefer a policy of ‘carrots.’ An important example for new incentives for HEIs is the program for ‘Women Professors’, which is funded by the national science ministry and aims to increase the proportion of female professors at German universities (Bührer and Frietsch 2020). Other important examples for providing HEIs with new incentives to improve female representation are funding schemes such as the so-called ‘Excellent Initiative’ or the ‘Pact for Research and Innovation’. Both programmes, however, are not designed to increase the share of females in top-leader positions directly; they address only improved gender balance in the pool of candidates.

These funding schemes indicate the increasing commitment of the national level to HE governance, which is traditionally rather weak. However, the modes of sharing tasks and responsibilities between the federal levels have become subject to an increasingly critical debate from the 2000s onwards due to growing public concerns regarding the lack of international competitiveness, brain drain and shrinking innovation capacity. Since then, the financial commitment of the German national government to HE has experienced a significant increase, but because of constitutional limitations, financial and personnel resources are never transferred directly to universities. Instead, funding is transferred to the DFG, the national funding agency that organizes and administers the new funding schemes.

The paradigm shift in public administration towards NPM provided the appropriate tools to combine new competitive funding schemes with equal opportunity goals: in line with NPM’s ideas, state ministries started to give universities more leeway to decide about research and teaching profiles. To counterbalance this increase in autonomy and to strengthen the output orientation of universities, however, target agreements and performance management were introduced. The performance-related allocation of funds has become the primary policy instrument to hold the university management accountable for results and is also used to improve gender equality. Gender equality-related indicators such as the appointment of equal opportunity representatives, binding plans for gender measures and the quantitative representation of women at all qualification levels have turned into bargaining chips in target agreement negotiations between universities and state ministries. As a general rule, 5% of the university budget is related to

gender equality goals. It is also becoming more common for economic means to be combined in a hybrid setting with regulations such as obligatory evaluations. Gender equality has become an integral part of the evaluation of all funding applications and documented evidence of implemented equal opportunity measures has become a necessary condition to obtain third party funding in all major funding programs of the DFG. Compliance and public accountability are ensured through obligatory public reporting (DFG 2021). The DFG gender evaluation strategy presented its effects most impressively during the so-called 'Excellence Initiative program' (Zippel, Ferree, and Zimmermann 2016).

4.3.3 Information

Similar to Sweden and Norway, information campaigns and symbolic instruments such as prizes are used to underline the importance of gender equality as a policy goal for HE governance. In addition, training programmes and educational efforts to influence the perceptions of policy recipients, to enhance knowledge and to overcome the skills gap can be found at all levels of the university governance system. These trainings are offered by single universities, by field-level organizations such as the German Association of University Professors and Lecturers and by ministries at the state and national levels. The DFG as the main funding agency has also set up a variety of measures, including a toolkit (issued in 2007) that informs the DFG member-institutions (i.e. universities) about good gender practices or research-oriented standards on gender equality (made public in 2008).

4.4 Poland

Poland is notable for its extremely low proportion of female rectors. Since 1990, only 4% of rectors in HEIs have been females, and among comprehensive universities (traditionally the most prestigious), this number is even lower (2.2%; Antonowicz and Pokorska 2019). The glass ceiling effect that prevents female academic from being promoted to the top managerial-level, becomes even more apparent when the share of female rectors is compared to the overall share of women in academia. The vast majority of graduates are women (63.2%) and almost half of the academics are female (47.5%); among assistant professors, the share of women is even higher (49.9%). At the level of full professors and associate professors, women make up 34.6% (GUS 2021). In Poland, HE policy pays explicitly esteem to ideas of administrative democracy (Frug 1990), and university autonomy. The NPM-wave has not hit Polish HEIs profoundly. Instead, HE governance in Poland reflects ideas of the Neo-Weberian model that is characterized by the principles of the centrality of the state and the enforcement of administrative law (Donina and Paleari 2019). However, the Polish Ministry for education and research is a 'lone coordinator' (Huisman 2009, 2) that tries to influence the behaviour of universities; its influence is substantially limited by the universities' self-governing model (Dobbins 2015; Kwiek 2015). The ministry thus eschews interference into internal university affairs, particularly with regard to electing/appointing its leaders. There are other actors, however, such as the Rectors Conference and General Council for Science and Higher Education (RGNSW), that have strong albeit subtle and indirect influence on HE public policy and that initiate policies, influence the government's agenda and raise issues that appear strategic for HE in Poland.

4.4.1 Regulations

Since the country initiated a democratisation process in 1989, the government has not developed any policy measures to challenge male hegemony in the public realm. The lack of regulations considering gender inequality in HE leadership stems from the combination of two factors: (a) the policy-of-nonpolicy (Antonowicz 2015; Kwiek 2008) in HE and (b) the concept of university as a republic of scholars (Kwiek 2015) which sees the selection of university leaders as an exclusively internal university affair. These two factors, which are strongly interconnected, can be illustrated by the initiative of the Commissioner for Human Rights (RPO) who made an official appeal to the Prime Minister in 2019, urging him to review gender balance in governing bodies of 'public entities' (Pokorska 2019). Universities, however, were not addressed in the initiative even though at the time of his appeal, not a single woman was in power at any public university. Furthermore, the 'republic of scholars' clearly expressed that state inference is undesired when it comes to the question of equal gender representation in university boards. The representative voice of the academic community was well articulated by Prof. Dariusz Rotter, a member of The Council of Science and Higher Education (RGNSW):²

Such matters should not be regulated by the minister from above... science is not a sport. Women who are active in science don't have to be like athletes from the East German Democratic Republic, with a not very well-known gender. Should we force the weaker candidates on the grounds of gender and reject the better ones because we have to keep an eye on parity?

The Minister tried to address the problem of the underrepresentation of women in key national policy bodies and tabled an amendment with the legal requirement that the Council of Science and HE shall seek to ensure appropriate proportion between male and female rectors. In so doing, the Ministry assumed that the simple presence of women in such important policy arenas would gradually change the masculine nature of academic prominence. The Council gave a strong negative opinion, calling these requirements 'discrediting' (Uchwała 43/2010), and eventually the amendment failed to be approved by parliament. The parliament sent a clear message that no specific measures are expected to be implemented in respect to academic leadership and such legal initiative would be considered as an illegitimate interference in institutional autonomy and a violation of academic self-governance, which lays the foundation of universities in Poland.

4.4.2 Economic means

In Poland, universities are neither forced nor encouraged to address the problem of gender balance in leadership positions. Neither the Ministry nor research funding agencies (NCN or NCBiR) launched dedicated streams of funding or other in-kind incentives to support female academics in their career path towards professorship. Only the European Commission provided policy tools through initiatives such as the 'HR Excellence in Research Award' or 'Alliances of European Universities', promoting universities to pay greater attention to gender issues. These tools are effective since many Polish universities generally seek international recognition to get access to European funding, build networks with European institutions through strategic partnerships and obtain European certificates.

4.4.3 Information

In 2009, during her time as a Minister of science and higher education, Barbara Kudrycka attempted to launch a discussion about women as academic leaders. She assumed that the gravity of the situation was dire enough to necessitate political steps, so she raised the issue in a high-profile interview given to one of the major newspapers. The Minister acknowledged that she (as a first female minister) faced a wall of aversion and questions, such as ‘What kind of woman can rule science?’ But what is more interesting is her recollection of the first meeting with the assembly of Rectors’ Conference (KRASP) when the chair of KRASP welcomed her (on behalf of all rectors) saying: ‘Madame, the flower of chivalry of Polish science is woven at your feet’ and she spontaneously replied, ‘You don’t think I’m just gonna stand on the balcony and blow a handkerchief?’ This was one of the most substantial policy statements made by any political leader with respect to gender imbalance in academic leadership. It is also one of the most appealing situations that perfectly illustrates tacit although tangible patterns of academic culture in Poland. Some ideas of endorsements of female academics were occasionally raised and discussed in generic reports on the topic of gender inequality in science as published by international organizations, but these were largely expressed by individual and isolated voices calling for reviewing regulations and procedures that were doomed to fail due to academia’s inability to pressure the Ministry to take bolder steps. Overall, gender equality is not a part of institutional evaluation and insofar has remained outside policy interest. Neither the government nor any other political actor has made any attempt to bring gender equality (even indirectly) into the centre of public policy or even into public discourse. There are no high level events, seminars or programmes organized to support gender equality in academia (Table 2).

Table 2. Comparing national and sectorial policy styles.

	Sweden	Norway	Germany	Poland
National policy style (regarding equal gender representation)	Predominance of regulative instruments (prescribing equal representation)	Predominance of regulative instruments (prescribing equal representation)	Regulation (constitutional law); however, only few and weak instruments for enforcement	No instruments regarding equal representation
Sectorial policy style	Predominance of regulatory instruments prescribing equal representation, enforcement i.a. through national evaluation	Predominance of incentives and regulative instruments (<i>ex post</i> steering from a distance through contractual agreements based on performance indicators)	Predominance of incentives and information, no ‘hard’ regulatory instruments	Policy of ‘non-policy’ But increasing influence from European level (incentives)

5. Discussion and conclusion

What conclusions can we draw from the comparison of policy instruments for gender balance in HE in the four cases presented above? To recall our research questions: empirically, we want to investigate what type of governmental activities to increase female leadership in HE are in place. Analytically, our interest is to better understand how sectorial

policy styles and national policy styles are related to one another. If instrument choice differs widely across the four countries, we assume that national policy styles and administrative traditions influence instrument choice more so than sectorial logics. However, if we find considerable similarities when comparing four distinct countries belonging to different public administration traditions, then we can presume that the choice of instruments follows more of a sectorial logic.

The empirical analysis has shown that there are both varieties and similarities in the selection of policy instruments for gender equality in HE in the four countries. Sweden and Norway share the fact that, although the dominant pattern is a 'steering at a distance' approach, compliance and accountability for gender policies is warranted. Authority instruments (regulations) are combined with incentives (funding) and evaluations. However, non-implementation is not sanctioned directly by the government, but rather left to decentralised agencies who are responsible for ensuring compliance and accountability.

In the two Nordic countries, we have found regulations that explicitly address the question of gender balance in academic leadership (e.g. regulations with respect to the gender composition of university boards). Such a type of instrument cannot be found in Germany or Poland. Female representation in academic leadership in general ranks low on the governments' agenda for HE governance in the two latter cases. In Poland, it is even explicitly absent in public policy. However, while the German and Polish approaches to gender balance in HEIs differ decisively from the Nordic model, there are also distinct differences between Germany and Poland, especially in the last decade. Throughout our research period, Germany experienced a shift from a governance approach that is based on mere symbolic action, soft regulation and symbolic capacity instruments to an approach that combines incentives and regulations and thus comes closer to the approach of the Nordic countries.

However, even though a convergence in instrument choice is observable and gender excellence has developed into an important criterion for competitive funding in three out of four cases, national differences remain. In line with existing research (e.g. Teigen and Skjeie 2017), our results show that, while gender equality is an important dimension of HE governance in Sweden and Norway, there is no distinctive policy profile common in these countries for how to promote economic equity and democratic parity. The two countries adopt different approaches in terms of policy instrument selection. In Germany, again, decentralised agencies that ensure compliance and accountability play a less prominent role; the implementation of equal opportunity measures is instead left to the HEIs, and what's more, non-action is not sanctioned. In Poland, we found no measures addressing the question of female representation in academic leadership positions. University leadership is seen as an integral part of university autonomy, which, in Poland, is an extremely sensitive issue due to historical reasons and is thus not subject to political interference. Gender balance is thus not – and has never been – on the policy agenda. It is not surprising that a similar understanding of gender imbalance is presented by the prominent academic figures who are predominately male professors and were socialized at the university as a 'gendered organization.'

From our empirical analysis, we can conclude that instrument choice and the intensity of intervention in the self-governance systems of HEIs depend, to a large degree, on the value that gender equality is given at the national level. The more gender equality is given

priority at the societal level, the more interventive instruments are chosen, and the more prevalent public regulation is likely to be. Hence, it is possible to place the country cases across a continuum of high, medium and low policy priorities regarding gender-related issues in HE. Sweden and Norway display a *high* priority, mirroring the role that equality and gender play in society more generally. Despite its prominent position within the EU and the fact that the country has been led by a female chancellor from 2005 to 2021, Germany ranks *average*. Finally, Poland, as the representative case for Central Eastern Europe and so-called 'New Europe', was found to attach *low* (or no) priority to gender equality in HE.

As is the case with administrative reforms more generally (Greve, Rykkja, and Lægred 2016), national culture and politico-administrative traditions were found to be crucial for understanding the choice of instruments addressing gender imbalances in academia. This suggests the importance attributed to path dependencies in the context of institutional resilience and persistence (Meyer-Sahling and Yesilkagit 2011). However, our analysis also shows that these national cultures and administrative traditions do change, and that the stimulus for change might stem from developments in the policy fields. In this case, the sectorial logic exerts influence on the national policy styles, as empirically demonstrated in earlier studies from Europe (Smith 2013). Germany provides an interesting case in this respect. Here, we can see that international discourses that have decisively shaped the field of HE in the last two decades have been taken up by the national and sub-national governments. Both the EU/UN discourse on gender mainstreaming in HE as well as the shift towards an entrepreneurial university model (Clark 1998) have left clear marks on the way the national and subnational science ministries try to steer (or at least to influence) organizational processes in HEIs. Due to the concurrence of these two reform debates, female researchers are progressively characterized as strategic resources that might help universities to improve their competitiveness and their hierarchical positioning in the national and global HE market place (Hazelkorn 2009). Thus, equal opportunity measures have been built into HE policy in Germany. The impact of these field logics on the national cultures and traditions, however, remains limited. Overall, gender culture in Germany still follows rather traditional ideas. Moreover, the support for a more progressive gender culture with equal opportunities at HEIs is mainly motivated by the fear of lacking competitiveness, and not, as in the case of the Nordic countries, by a societal culture of inclusiveness and equality.

The Polish case, in contrast, shows that national cultures and policy traditions can also be shielded and preserved from influences emanating from sectorial logics. Even though Polish HEIs have become internationalized, and Poland, as a country, has welcomed ideas from the EU in other domains, no equal opportunity measures to improve gender balance at HEIs have so far been adopted. In short, Poland is a basket case of the phenomenon of 'continuity in change' that is observed elsewhere (Kuchins and Zevelev 2012).

Hence, we conclude from our results that national policy styles prevail over sectorial policy styles. Relations between governments and universities have a strong national flavour and deep historical roots. Since universities are deeply embedded in their national contexts, national policy styles work as enabling or disabling factors in initiating policy measures to overcome discriminating structures and cultures at the university level. The literature suggests that we witness a diffusion of ideas at the sectorial level, and thus an increasing isomorphism in specific policy fields such as HE (Botto 2016). This

argument, however, needs to be interpreted carefully. Ideas might travel, but they are always interpreted in the light of national traditions and thus play out very differently when they are translated into national contexts. History, but also norms and values (of governments on the one hand and of key actors within the field of HE on the other) are important factors in the process of editing and translating global, hegemonic recipes (Sahlin and Wedlin 2008), as is the case of gender equality.

This, in turn, points to the role of path dependencies and institutionalized traditions: as autonomous and self-governing fiduciary institutions (Olsen 2007), HEIs are not easily changed by the introduction of policy instruments. Only when new instruments are embedded in and supported by larger institutional (societal) arrangements, norms and values included, is one likely to find such reinforcing effects. The opposite holds true as well. In the absence of a supportive institutional framework at the macro level, sporadic policy initiatives by certain agents (policy entrepreneurs) are likely to be ignored and hence decoupled from existing structural arrangements, thus preventing diffusion and institutionalization. Attempts at replicating the Nordic experience, where equality amongst the sexes is deeply rooted in the national culture and politico-administrative traditions, elsewhere through a process of historical co-evolution and positive feedback loops while retaining existing institutional arrangements is likely to lead to low levels of change and/or high levels of resistance amongst key actors – not least due to the clash of logics and the threat of institutionalized interests and dominant interest-group coalitions (e.g. ‘old boys networks’) (Peterson 2011).

Finally, we need to point out that despite the emphasis put on gender equality in the Nordic countries, the academic profession is still dominated by male professors, albeit to a lesser degree than earlier and to a lesser extent than in other countries (Pineiro et al. 2015). We hope the approach and findings sketched out in this paper may provide new avenues for future studies in the topic, within and beyond the European continent.

Other sources

The letter of the Commissioner for Human Rights (RPO) to the Prime Minister (31.05.2019), nr XI.801.14.2016.KWŻ.

RADON – Reliable Source of Reports, Analysis and Data on Higher Education and Science in Poland (<https://radon.nauka.gov.pl>).

Notes

1. Considering sex and gender perspectives in your research - Vetenskapsrådet (vr.se)
2. The statement expressed by prof. Dariusz Rotter, a member of The Council of Science and Higher Education (RGNSW) was a response to an interview given by minister Barbara Kudrycka to *Wysokie Obcasy*, the weekly edition of the major national newspaper, *Gazeta Wyborcza*. https://www.wysokieobcasy.pl/wysokie-obcasy/1,96856,6875692,Jak_baba_moze_zaradzac_nauka.html

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Tanja Klenk  <http://orcid.org/0000-0003-2569-3221>
 Dominik Antonowicz  <http://orcid.org/0000-0002-9115-2987>
 Lars Geschwind  <http://orcid.org/0000-0003-2983-5573>
 Rómulo Pinheiro  <http://orcid.org/0000-0002-6627-9644>
 Anna Pokorska  <http://orcid.org/0000-0002-6913-0896>

References

- Högskoleförordningen. 1993. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/hogskoleforordning-1993100_sfs-1993-100.
- Acker, J. 1990. "Hierarchies, Jobs, Bodies. A Theory of Gendered Organizations." *Gender & Society* 4 (2): 139–158.
- Amaral, A., G. Neave, C. Musselin, and P. Maassen. 2010. *European Integration and the Governance of Higher Education and Research*. Dordrecht: Springer.
- Anckar, C. 2008. "On the Applicability of the Most Similar Systems Design and the Most Different Systems Design in Comparative Research." *International Journal of Social Research Methodology* 11 (5): 389–401.
- Antonowicz, D. 2015. "Digital Players in an Analogue World: Higher Education in Poland in the Post-Massification Era." In *Access and Expansion Post-Massification: Opportunities and Barriers to Further Growth in Higher Education Participation*, edited by B. Jongbloed, and H. Vossensteyn, 63–81. New York: Routledge.
- Antonowicz, D., E. Kulczycki, and A. Budzanowska. 2020. "Breaking the Deadlock of Mistrust? A Participative Model of the Structural Reforms in Higher Education in Poland." *Higher Education Quarterly* 74 (4): 391–409. doi:10.1111/hequ.12254.
- Antonowicz, D., and A. Pokorska. 2019. "International Conference on Gender Research; Reading: 24–31, XXI." In *Proceedings of the 2nd International Conference on Gender Research ICGR 2019 Hosted by IpaZIA, the Scientific Observatory on Gender Issues at Roma Tre University, Rome, Italy, 11–12 April 2019*, edited by P. Paoloni, M. Paoloni, and S. Arduini. Reading: Academic Conferences and Publishing International Limited.
- Beham, B., S. Drobnič, P. Präg, A. Baierl, and S. Lewis. 2017. "Work-to-Family Enrichment and Gender Inequalities in Eight European Countries." *The International Journal of Human Resource Management* 31 (5): 589–610. doi:10.1080/09585192.2017.1355837.
- Blackmore, J. 2021. "Governing Knowledge in the Entrepreneurial University: A Feminist Account of Structural, Cultural and Political Epistemic Injustice." *Critical Studies in Education*, doi:10.1080/17508487.2020.1858912.
- Botto, M. 2016. "Policy Diffusion and Higher Education Reforms: Between Market and State Regulation — Where Does Mercosur Stand?" In *Regional Organizations and Social Policy in Europe and Latin America*, edited by A. C. Bianculli, and A. R. Hoffmann, 165–184. London: Palgrave Macmillan UK. doi:10.1057/9781137490353_8.
- Bührer, S., and R. Frietsch. 2020. "How do Public Investments in Gender Equality Initiatives and Publication Patterns Interrelate? The Case of Germany." *Evaluation and Program Planning* 79: 1–11. Article 101752. <https://doi.org/10.1016/j.evalprogplan.2019.101752>.
- Capano, G., and M. Howlett. 2020. "The Knowns and Unknowns of Policy Instrument Analysis: Policy Tools and the Current Research Agenda on Policy Mixes." *SAGE Open* 10 (1): 1–13. doi:10.1177/2F2158244019900568.
- Cheung, F. M. 2021. "The 'State' of Women's Leadership in Higher Education." *International Briefs for Higher Education Leaders* 9: 5–8. <https://www.acenet.edu/Documents/Womens-Rep-in-Higher-Ed-Leadership-Around-the-World.pdf>.
- Clark, B. R. 1998. *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*. Guildford: IAU: Pergamon/Elsevier.
- David, Miriam E. 2021. "Changing Global Gender Involvement in Higher Education Participation." *Oxford Research Encyclopedias*, doi:10.1093/acrefore/9780190264093.013.1304.

- DBH-NSD. . 2021. Database for Statistics on Norwegian Higher Education (Norwegian only; accessed October 3 2021). <https://dbh.nsd.uib.no/index.action>.
- Deutsche Forschungsgemeinschaft (DFG). . 2021. . The DFG's Research-Oriented Standards on Gender Equality. https://www.dfg.de/foerderung/grundlagen_rahmenbedingungen/chancengleichheit/gleichstellungsstandards/index.html.
- Dobbins, M. 2015. "Exploring the Governance of Polish Public Higher Education: Balancing Restored Historical Legacies with Europeanization and Market Pressures." *European Journal of Higher Education* 5 (1): 18–33.
- Donina, D., and S. Paleari. 2019. "New Public Management: Global Reform Script or Conceptual Stretching? Analysis of University Governance Structures in the Napoleonic Administrative Tradition." *Higher Education* 78 (1): 193–219.
- Enders, J., B. Kehm, and U. Schimank. 2015. "Turning Universities Into Actors on Quasi-Markets: How New Public Management Reforms Affect Academic Research." In *The Changing Governance of Higher Education and Research Vol. 43*, edited by D. Jansen, and I. Pruisken, 89–103. Springer International Publishing.
- Engwall, L. 2014. "The Recruitment of University Top Leaders: Politics, Communities and Markets in Interaction." *Scandinavian Journal of Management* 30 (3): 332–343. doi:10.1016/j.scaman.2013.12.005.
- European Commission. 2019. She Figures 2018. <https://op.europa.eu/en/publication-detail/-/publication/9540ffa1-4478-11e9-a8ed-01aa75ed71a1/language-en>.
- Freeman, G. 1985. "National Styles and Policy Sectors: Explaining Structured Variation." *Journal of Public Policy* 5 (4): 467–496.
- Frug, G. 1990. "Administrative Democracy." *University of Toronto Law Journal* 40 (3): 559–586.
- Gemeinsame Wissenschaftskonferenz (GWK). 2019. Chancengleichheit in Wissenschaft und Forschung: 23. Fortschreibung des Datenmaterials (2017/2018) zu Frauen in Hochschulen und außerhochschulischen Forschungseinrichtungen, https://www.gwk-bonn.de/fileadmin/Redaktion/Dokumente/Papers/Druckfassung_Heft_65_23_Fortschreibung_CHAG.PDF.
- Geschwind, L., T. Aarvevaara, L. N. Berg, and J. K. Lind. 2019. "The Changing Roles of Academic Leaders: Decision-Making, Power, and Performance." In *Reforms, Organizational Change and Performance in Higher Education*, edited by R. Pinheiro, L. Geschwind, H. F. Hansen, and K. Pulkkinen, 181–210. Cham: Palgrave Macmillan.
- Gornitzka, Å, B. Stensaker, J.-C. Smeby, and H. De Boer. 2004. "Contract Arrangements in the Nordic Countries: Solving the Efficiency-Effectiveness Dilemma?" *Higher Education in Europe* 29 (1): 87–101. doi:10.1080/03797720410001673319.
- Greve, C., L. Rykkja, and P. Læg Reid. 2016. *Nordic Administrative Reforms*. London: Palgrave.
- GUS. 2021. *Szkoły Wyższe i ich Finanse*. Warszawa: Główny Urząd Statystyczny.
- Hammerschmidt, G., and K. Wegrich. 2018. Public Administration Characteristics in EU28: Germany, Report Prepared for the European Commission, DGEmployment, Social Affairs and Inclusion under the Contract VC/2016/0492 "Support for Developing Better Country Knowledge on Public Administration and Institutional Capacity Building". <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8123&furtherPubs=yes>.
- Hazelkorn, E. 2009. "Rankings and the Battle for World Class Excellence: Institutional Strategies and Policy Choices." *Higher Education Management and Policy* 21 (1): 55–76.
- Hazelkorn, E., H. Coates, and A. C. McCormick. 2018. *Research Handbook on Quality, Performance and Accountability in Higher Education*. Cheltenham: Edward Elgar Publishing.
- Henningsson, M., A. Jörnsten, and L. Geschwind. 2018. "Translating Tenure Track Into Swedish: Tensions When Implementing an Academic Career System." *Studies in Higher Education* 43 (7): 1215–1226.
- Högskolelagen. nd. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/hogskolelag-19921434_sfs-1992-1434.
- Howlett, M. 1991. "Policy Instruments, Policy Styles, and Policy Implementation: National Approaches to Theories of Instrument Choice." *Policy Studies Journal* 19 (2): 1–21.
- Huisman, J. 2009. *International Perspectives on the Governance of Higher Education*. New York: Routledge. doi:10.4324/9780203883358.

- Hüther, O., and G. Krücken. 2013. "Hierarchy and Power: A Conceptual Analysis with Particular Reference to New Public Management Reforms in German Universities." *European Journal of Higher Education* 3 (4): 307–323. doi:10.1080/21568235.2013.850920.
- Jämställdhetsmyndigheten. 2019. "Jämställdhetsintegrering i högskolor och universitet (2019:2)." <https://www.jamstalldetsmyndigheten.se/jamstalldetsintegrering-i-hogskolor-och-universitet-20192>.
- Kosmützky, A., and T. Nokkala. 2014. "Challenges and Trends in Comparative Higher Education: An Editorial." *High Education* 67: 369–380.
- Krono. 2021. "Kvinner styrer universitetene: Kvinner er nå i flertall ved universitetenes faglige ledelse. Høgskolene er langt mer mannsdominert i toppen." ["Women Run Universities: Women are Now in the Majority of the Universities' Academic Leadership. Colleges are Far More Male-Dominated at the Top."] January 13. Accessed January 30, 2021. <https://khrono.no/kvinner-styrer-universitetene/545584>.
- Krücken, G. 2003. "Learning the 'New, New Thing': On the Role of Path Dependency in University Structures." *Higher Education* 46 (3): 315–339. doi:10.1023/a:1025344413682.
- Kuchins, A. C., and I. A. Zevelev. 2012. "Russian Foreign Policy: Continuity in Change." *The Washington Quarterly* 35 (1): 147–161.
- Kwiek, M. 2008. "Accessibility and Equity, Market Forces, and Entrepreneurship: Developments in Higher Education in Central and Eastern Europe." *Higher Education Management and Policy* 20 (1): 1–22.
- Kwiek, M. 2015. "The Unfading Power of Collegiality? University Governance in Poland in a European Comparative and Quantitative Perspective." *International Journal of Educational Development* 43: 77–89. doi:10.1016/j.ijedudev.2015.05.002.
- Löther, A. 2019. "Gleichstellung von Frauen und Männern in Entscheidungsgremien von Hochschulen und Forschungseinrichtungen." In *Chancengleichheit in Wissenschaft und Forschung: 23. Fortschreibung des Datenmaterials (2017/2018) zu Frauen in Hochschulen und Außerhochschulischen Forschungseinrichtungen*, edited by X. Gemeinsame Wissenschaftskonferenz (GWK), 1–21. Bonn. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-65953-0>.
- Maassen, P. 2014. "A New Social Contract for Higher Education?" In *Higher Education in Societies*, edited by G. Goastellec, and F. Picard, 33–50. Rotterdam: SensePublishers.
- Mazur, S. 2020. *Public Administration in Central Europe Ideas as Causes of Reforms*. London/New York: Routledge.
- Meyer-Sahling, J.-H., and K. Yesilkagit. 2011. "Differential Legacy Effects: Three Propositions on the Impact of Administrative Traditions on Public Administration Reform in Europe East and West." *Journal of European Public Policy* 18 (2): 311–322.
- Mühlenbruch, B. 2008. "20 Jahre Gleichstellung an Deutschen Hochschulen. Defizite Sind Auch Quellen des Fortschritts." In *Münchner Uni-Magazin*, 12–13. Ludwig-Maximilians-Universität München.
- Nyhagen, G. M., I. Bleiklie, and K. Hope. 2017. "Policy Instruments in European Universities: Implementation of Higher Education Policies." In *Managing Universities. Palgrave Studies in Global Higher Education*, edited by I. Bleiklie, J. Enders, and B. Lepori. Cham: London: Palgrave Macmillan. https://doi.org/10.1007/978-3-319-53865-5_11.
- O'Connor, P. 2019. "Gender Imbalance in Senior Positions in Higher Education: What is the Problem? What Can Be Done?" *Policy Reviews in Higher Education* 3 (1): 28–50. doi:10.1080/23322969.2018.1552084.
- Olsen, J. 2007. "The Institutional Dynamics of the European University." In *University Dynamics and European Integration. Higher Education Dynamics Vol. 19*, edited by P. Massen, and J. Olsen, 25–54. Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-5971-1_2.
- Patton, M. 1999. "Enhancing the Quality and Credibility of Qualitative Analysis." *HSR: Health Services Research* 34 (5): 1189–1208.
- Peterson, H. 2011. "The Gender mix Policy—Addressing Gender Inequality in Higher Education Management." *Journal of Higher Education Policy and Management* 33 (6): 619–628.
- Peterson, H., and B. Jordansson. 2021. "Gender Mainstreaming in Swedish Academia: Translating Policy Into Practice." *Journal of Gender Studies*, 1–14.

- Pinheiro, R. 2015. "The Role of Internal and External Stakeholders." In *Higher Education in the BRICS Countries: Investigating the Pact Between Higher Education and Society*, edited by S. Schwartzman, R. Pinheiro, and P. Pillay. Dordrecht: Springer.
- Pinheiro, R., L. Geschwind, H. F. Hansen, and K. Pulkkinen. 2019. *Reforms, Organizational Change and Performance in Higher Education: A Comparative Account from the Nordic Countries*. London: Palgrave Macmillan.
- Pinheiro, R., L. Geschwind, E. Pekkola, and H. Foss Hansen. 2015. "Academic Leadership in the Nordic Countries: Patterns of Gender Equality." In *Women's Voices in Management: Identifying Innovative and Responsible Solutions*, edited by H. Syna, and C. Costea, 15–33. London: Palgrave Macmillan.
- Pinheiro, R., and B. Stensaker. 2014. "Designing the Entrepreneurial University: The Interpretation of a Global Idea." *Public Organization Review* 14 (4): 497–516. doi:10.1007/s11115-013-0241-z.
- Pokorska, A. 2019. "Mechanizmy Blokujące Kariery Kobiet w Strukturach Kierowniczych Uniwersytetów." *Nauka* 4: 91–108. doi:10.24425/nauka.2019.131144.
- Rees, T. 2007. "Pushing the Gender Equality Agenda Forward in the European Union." In *Women, Universities, and Change. Issues in Higher Education*, edited by M. A. D. Sagaria, 7–21. New York: Palgrave Macmillan. https://doi.org/10.1057/9780230603509_2.
- Riegraf, B., and L. Weber. 2017. "Excellence and Gender Equality Policies in Neoliberal Universities." *Gender a Výzkum/Gender and Research* 18 (1): 92–112. doi:10.13060/25706578.2017.18.1.351.
- Sahlin, K., and L. Wedlin. 2008. "Circulating Ideas: Imitation, Translation and Editing." In *The Sage Handbook of Organizational Institutionalism*, edited by R. Greenwood, K. Sahlin-Andersson, and R. Suddaby, 218–242. London: Sage.
- Shattock, M. 2014. *International Trends in University Governance: Autonomy, Self-Government and the Distribution of Authority*. New York: Routledge.
- Siemienska, R., and A. Domaradzka. 2019. "Politics of Welfare The Polish Welfare System in the First Decades of the 21st Century." In *The Routledge Handbook of European Welfare Systems*, edited by S. Blum, J. Kuhlmann, and K. Schubert. Routledge. <https://doi.org/10.4324/9780429290510>.
- Smith, A. 2013. "When Sector Meets Territory: The Case of European Union Wine Policy", Territory, Politics." *Governance* 1 (2): 203–222. doi:10.1080/21622671.2013.790302.
- SOU. 2007. *Karriär för Kvalitet [Career for Quality]. Statens Offentliga Utredningar 2007:98*. Stockholm: Fritzes.
- Stensaker, B., J. Välimaa, and C. Sarrico. 2012. *Managing Reform in Universities: The Dynamics of Culture, Identity and Organisational Change*. New York: Springer.
- Teichler, U. 2014. "Opportunities and Problems of Comparative Higher Education Research: The Daily Life of Research." *Higher Education* 67 (4): 393–408.
- Teigen, M., and H. Skjeie. 2017. "The Nordic Gender Equality Model." In *The Nordic Models in Political Science. Challenged, but Still Viable?*, edited by O. P. Knutsen, 125–147. Bergen: Fagbokforlaget.
- UKÄ. 2014. "Jämställdhet i Högskolan Efter Autonomireformen Om hur Jämställdheten Bland Personalen vid Universitet och Högskolor Utvecklats Till Följd av Lärosätenas ökade Frihet och Självbestämmande i Fråga om Läroanställningar." *UKÄ Rapport 2014: 9*. www.uka.se.
- UKÄ. 2021. *Universitet och Högskolor. Årsrapport 2021*. Stockholm: Universitetskanslersämbetet.
- Välimaa, J., and T. Nokkala. 2014. "The Dimensions of Social Dynamics in Comparative Studies on Higher Education." *Higher Education* 67 (4): 423–437.
- van den Brink, M., and Y. Benschop. 2014. "Gender in Academic Networking: The Role of Gatekeepers in Professorial Recruitment: Gender in Academic Networking." *Journal of Management Studies* 51 (3): 460–492. doi:10.1111/joms.12060.
- Vedung, E. 1998. "Policy Instruments: Typologies and Theories." In *Carrots, Sticks, and Sermons: Policy Instruments and Their Evaluation*, edited by M. Bemelmans-Vidéc, R. C. Rist, and E. Vedung, 21–58. New Brunswick, NJ: Transaction Publishers.
- Vukasovic, M., P. Maassen, M. Nerland, R. Pinheiro, B. Stensaker, and A. Vabø. 2012. "Change Dynamics and Education Reforms: Effects on Education, Research, Governance and Academic Profession." In *Effects of Higher Education Reforms: Change Dynamics*, 1–20. Rotterdam: Sense Publishers.

- Weick, K. E. 1976. "Educational Organizations as Loosely Coupled Systems." *Administrative Science Quarterly* 21 (1): 1–19.
- Wissenschaftsrat. 1998. Wissenschaftsrat fordert Chancengleichheit von Frauen in Wissenschaft und Forschung ein, Pressemitteilung, 19. Mai 1998, Bonn.
- Zippel, K. S., M. M. Ferree, and K. Zimmermann. 2016. "Gender Equality in German Universities: Vernacularising the Battle for the Best Brains." *Gender and Education* 28 (7): 867–885. doi:[10.1080/09540253.2015.1123229](https://doi.org/10.1080/09540253.2015.1123229).