

# Incentives and Power: An Organizational Perspective

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**Abstract** Over the last years new incentives for professors were introduced into the German university system in order to strengthen the external motivation and the productivity of professors. At the same time a critical reflection has begun, in which the effects on internal motivation and deficiencies concerning the measurement and the overall effects on the science and higher education system were discussed. In addition to these criticisms, we will argue from an organizational perspective. From that perspective, incentives are a central aspect of power in organizations. This allows us to put incentives in a broader perspective, in which also other forms of power in higher education organizations come into light. Such forms are the power over resources, careers, and, ultimately, membership. The article argues that due to the specificities of the German university system and its organizations, the nexus between power and incentives is rather weak as compared to other systems. However, such a structure is not per se problematic. It generates a specific set of advantages and disadvantages with regard to the missions of universities in a knowledge society and some critical side-effects of a strong nexus between power and incentives can thus be avoided.

## 1 Introduction

In the past decades, higher education in Europe has undergone significant reforms (Paradeise et al. 2009; de Boer et al. 2007b; Krücken et al. 2013). Many of the changes made pertain to the governance of higher education, the expansion of organizational management capacities, the courses offered and modes of financing. In addition to targeting organizational and structural aspects of higher education, the reforms are also laid out to affect the motivational structures of academic staff. In this regard, strategies involving new incentive structures linked to performance have been introduced. Attempts to set incentives in the form of remuneration and

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resource allocation amongst professors are particularly pertinent. While traditionally in science studies, recognition from academic peers was considered the most relevant incentive for researchers as part of an intrinsic motivational framework (Hagstrom 1965; Luhmann 1992; Merton 1973), current reforms aim to introduce more extrinsic motivational structures. These reforms are therefore at least implicitly accompanied by the suspicion that academics have been deliberately underperforming and aim to mobilize productivity reserves in universities.<sup>1</sup>

The reforms are somewhat controversial. It has been postulated that an increased emphasis on external incentives is likely to undermine academics' intrinsic motivation. Such effects are widely discussed in the crowding out theory of motivation (e.g., Frey and Oberholzer-Gee 1997; Osterloh and Frey 2000). Other researchers point out that measuring academic performance is generally highly problematic with possibly unforeseeable effects on the academic system as a whole (e.g., Maasen and Weingart 2006; MacRoberts and MacRoberts 1996; Martin and Whitley 2010; Osterloh and Frey 2009; Espeland and Sauder 2007). The academic system could be affected if academics increasingly set out to tailor their projects around the new performance criteria (e.g., Osterloh 2012). According to critics, this could lead to a mainstream research culture (Münch 2006; Lee 2007) built around determining the smallest possible unit of content fit for publication (Butler 2003).

In the literature, the effects of monetary and non-monetary incentives are mainly considered in regard to effects at the level of the individual researcher, research groups and/or to the academic system as a whole (e.g., Stern 2004; Jansen et al. 2007; Heinze et al. 2009; Bruneau and Savage 2002; Partha and David 1994; Sutton 1984; Merton 1973; Hagstrom 1965). The effects at the internal organizational level of formal scientific organizations are hardly analyzed. Among other reasons, this is surprising because a great deal of monetary incentives and resource allocation takes place within the organization 'university'. Effects on the organization are therefore to be expected. If the analysis of incentives focuses on the internal organizational level, then the incentives are part of the power structure of the organization. In this case, the organization positively sanctions desired behavior. The capacity to enact positive sanctions comprises only one aspect of an organization's power structure; the potential to enact negative sanctions makes up the other side of the coin. The aim of this paper is to place the effects of newly enacted incentive structure reforms in relation to the power structures in German universities. Our organizational perspective is of particularly relevance because most of the recent reforms with regard to the scientific system in Germany are indeed organizational reforms of universities (Hüther 2010). Research on organizational change indicates that the success of such reforms strongly depends on the power structure within the organizations (e.g., Royston and Hinings 1996; Hannan and Freeman 1984; Cyert and March 1963). Therefore, the capacity of changing the German scientific system and the internal power structure of

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<sup>1</sup> The discussion shares many parallels with that currently underway in regard to the public sector as a whole (Frey et al. 2013).

universities are heavily intertwined. Furthermore, our perspective relates the discussion of incentives in the social system of science to a central issue in organizational research: the issue of power in organizations.

Generally, it can be said that in comparison to universities in other countries, German universities traditionally exercised hardly any power over their operational core, the academic staff (Paradeise et al. 2009; Hüther and Krücken 2013). Consequently, academics could hardly be obligated to adhere to organizational goals. Before giving evidence of the increasing importance of organizational goals, one should stress that for a long time the traditional power structure was seen as an advantage of the German system as compared to other national system, in particular at the end of the nineteenth and the beginning of the twentieth century, when the success of German academia had been recognized world-wide (Ben-David 1971; Flexner 1930). One could argue that the high autonomy of professors and their major orientation towards the scientific community instead of their formal university setting better suits creative research and, ultimately, scientific progress as compared to planning via organizational goals (Partha and David 1994; Krücken 2008). However, for at least three reasons a stronger role for the university as an organization vis-à-vis its professorial members can be witnessed since the mid 1990s.

First, with the expansion of higher education the teaching function of universities is becoming of ever-increasing importance. Currently, a bit more than 50 % of the relevant age cohort study at German higher education institutions (BMBF 2014). In this, a global trend towards the massification of higher education is expressed (Trow 2010; Schofer and Meyer 2005). Organizational goals and structures are of paramount importance in the realm of teaching, while the research function of universities is based on research networks and scientific communities, and to a far lesser extend it is bound to the university as an organization.

Second, one can see that the goals of universities have been multiplied over time (Schimank 2001). While the traditional missions of universities consist in teaching and research, in addition to these two missions universities are currently expected to promote the direct transfer of knowledge and technology (Krücken 2003), to integrate women, people from lower social classes and migrants (Shils 1991) and to offer continuing education (Wilkesmann 2010).

Third, as Brunsson and Sahlin-Andersson (2000) claim, there has been a trend since the 1980s towards constructing public sector organizations as complete organizations with identity, hierarchy and rationality. The organizational form of the arena, in contrast, is losing ground. The traditional German university is prototypical for this organizational form, in which „members perform their tasks relatively free from control by the local leadership. Instead, they (. . .) are controlled by, external parties“ (Brunsson and Sahlin-Andersson 2000, p. 734). Arenas can be regarded as highly functional, for example, in the field of knowledge production. Nevertheless, they are losing legitimacy in their broader socio-political environments. Therefore, the organizational form of what Brunsson and Sahlin-Andersson (2000) call ‘complete organization’ is gaining importance among universities (Krücken and Meier 2006; de Boer et al. 2007a), health care organizations (Preston

1992; Reay and Hinings 2005; Bode 2010) and public organizations as such (Pollitt and Bouckaert 2004).

The three reasons have led to question the adequacy of the German university model as one cannot simply assume that university professors are intrinsically motivated to pursue teaching in an era of mass education as well as additional organizational goals, which both are in open conflict with the research function of universities. While the functionality of a relatively weak organizational power structure within universities has proven its fruitfulness for research as individual researchers are internally motivated to carry out this task, it is doubtful whether such a power structure is adequate for the pursuit of mass education and additional organizational goals. In addition, the legitimacy of the arena model, which underlies the traditional German university, has been questioned in a variety of organizational sectors.

One possible reaction to the processes described above is to establish stronger linkages between university professors and the organization and, thereby, changing the power structures within universities. We assume that exactly this happened by the introduction of performance-related pay and restricted resource allocation. The rationale is based on the assumption that such new incentive structures enable the organization to create the motivation to further their multiple and in part new organizational goals. The reforms can also be interpreted as one aspect of the transformation of universities into ‘complete organizations’. In addition to the classical steering bodies of the higher education system—the state on the one hand and academic self-organization on the other—the organization and its leadership are now assuming additional steering functions (Krücken and Meier 2006). However, significant limitations are also clearly visible, which we will discuss in this paper.

To illustrate the changes to the power structures in Germany, the article focuses on three central formal power structures in organizations: the promotion or hindrance of careers within the organization (personnel power), the possibility of exclusion from the organization (organizational power) and the provision of resources to and remuneration of individuals (resource power).<sup>2</sup> In the following, these power structures will be analyzed not so much in terms of their coercive nature, but in terms of their potential to create motivation for desired behavior. It is, however, necessary to define what we mean by organizational power within the framework of this article before we concentrate on the various power structures.

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<sup>2</sup>For more details on these three power structures in German higher education institutions see Hüther and Krücken (2011, 2013).

## 2 Power in Organizations

Power is one of the fundamental and central concepts in organizational research. There is, however, no scientific consensus on how power should be defined or which methods should be used to examine power phenomena in organizations (Diefenbach et al. 2009). Whereas classic texts on organizational research focus more strongly on formal power (Blau and Scott 1969; Mayntz 1968; Luhmann 1964; Etzioni 1964), within the last two decades the focus has shifted towards informal power, self-disciplining and legitimation of power (Clegg et al. 2006, pp. 290–319; Diefenbach and Sillince 2011; Kärreman and Alvesson 2004; Brown and Lewis 2011). There is no doubt that these recent developments in the analysis of power in organizations are highly relevant. Nonetheless, in the following we will use a more traditional understanding of power with a strong focus on formal power. We do this because our interest is the motivational effect of power in universities. Since there is hardly any research available in this area we use formal power structures as a starting point.

Our definition of power is as follows: in a social relationship, power exists when it is mutually assumed that one actor has control or influence over something the other actor desires. The base and the degree of power are therefore determined by the desires of the subordinate and the importance of the desire (Emerson 1962). As Scott noted: “The power of superordinates is based on their ability and willingness to sanction others—to provide or withhold rewards and penalties (. . .) what constitutes a reward or a penalty is ultimately determined by the goals and values of the subordinates in the relation” (Scott 1981, p. 276). In organizations such as universities we can find many power relations based on many desires. Nevertheless, important parts of the power relations in organizations are typically attached to formal positions and the ability to sanction subordinates. Usually a superordinate decides over who can remain within an organization and therefore has organizational power. A superordinate also decides over careers or can at least exert considerable influence through his or her assessments of the subordinates’ performance. Furthermore, in most cases a superordinate decides over resource allocation and performance-related pay. In the following we will use the example of German universities to examine whether the university as an organization really has the sources of power to decide about who stays in the organization and may pursue a career, and the allocation of resources and performance-related pay.

### 2.1 *Personnel Power*

In numerous organizations the actions of members are among other things influenced by the fact that their superordinates can affect their careers within the organization. Members are therefore motivated by the prospect of having a career (Luhmann 1980). German universities cannot apply this motivational instrument

that Luhmann (1980) called *Personalmacht* (personnel power) to most of the academics working within their structures.

First of all, it is important to consider the career tracks of German academics. It is striking that after a professorship<sup>3</sup> has been attained, no further career steps within the German academic system are intended. There is, however, a distinction between professorships (C2 to C4 or W2 to W3<sup>4</sup>). The C4 or W3 professorships come with a higher salary and more resources. But the organizations cannot exploit these differences for motivational purposes because moving from a lower into a higher professorship within one university is usually impossible. This is due to the German *Hausberufungsverbot*. The *Hausberufungsverbot* is a traditional part of the German academic system and means that members of the university issuing the call usually may not or should not be considered for the open position. On the one hand, this ban is backed by law, although exceptions are possible. On the other hand it is enforced by informal norms provided by the shared convictions of the professors who view it as a legitimate means to prevent patronage. The combination of formal and informal rules means that in practice to accept a call or to move into a higher graded professorship means to change university. In other words, the market for professorships in Germany is an external labor market (Musselin 2005).

This has consequences. Although the desire to have a career within the academic system is an important source of motivation for academics, decisions about careers are not made within their particular work organization. In the German case, this means that the organization is not able to motivate its academics to pursue those of its goals that do not coincide with those of the academic system. Career prospects can hardly be utilized to motivate professors to excel at teaching or fully engage in academic self-administration. The German *Hausberufungsverbot* leads to career prospects and ambitions being channeled into motivation for research and reputation building, which are the overarching criteria for a successful career in the academic system. In addition, research is far more visible and easier to evaluate for other universities that decide about careers, in contrast to teaching and participation in academic self-administration.

The situation for the vast majority of positions below the professorship is slightly different. Here, promotion within the organization from graduate student to a post-doctoral position is possible and common. An internal labor market, characterized by patronage, can be clearly seen. It starts with professors recruiting their graduate students from within their student body. Recruiting postdoctoral staff is also characterized by personal contacts, and staff associated with the professor's own chair are often preferred (Enders and Bornmann 2001; Enders 2008). It should be noted that personnel power does exist at the level of the professorship. By offering career prospects, professors can motivate their staff to commit to a wide range of

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<sup>3</sup> For reasons of simplicity we will not consider the Junior Professors because they hardly figure in the German system. Only 4 % of professors are Junior Professors (Statistisches Bundesamt 2013).

<sup>4</sup> In contrast to other systems, this distinction is usually not directly visible to outsiders. Normally one can not find this information on the professors' websites or their business cards.

behaviors, including behaviors that further the academic career of the professor more than those of their staff. The explanation is that the dependency of the staff on the professor relates to their prospects for further qualification and therefore their chances of remaining within the academic system at all. The professor's support is mandatory for both a doctorate and a habilitation. In Germany, the doctoral and habilitation phase traditionally has little structure (Röbken 2007) and the still prevalent "master-apprentice model" (Bosbach 2009) not only influences age, the type of support etc. but also the power structures and sources of motivation within the university. For the staff, there is personal loyalty towards the professor and not the organization. Put bluntly, the professor has something to offer and can therefore be a central force for external motivation.

Overall, it can be said that German universities as organizations cannot motivate their operational core of academics by means of career incentives. They can neither hinder nor help careers. As we have shown in our introduction there were historically good reasons for the rather weak power structure within German academia, in particular with regard to the research function of universities. However, in many other university systems around the world we find different power structures.<sup>5</sup> There are either clearly structured internal career paths within a university (e.g., USA, UK) or there is at least no strict house ban on internal calls—or if there is, it is not as rigidly enforced by informal norms as in Germany (e.g., France, Italy). Not only professors are affected by these career paths, but also the vast majority of the staff with academic duties in higher education (Hüther and Krücken 2011, 2013). Internal career paths towards a professorship are therefore possible in a number of other national university systems. If such an internal career is possible, those who pursue it will, to a much greater extent, be subject to an organizational logic. The organization can thus utilize career prospects and ambitions as incentives but also as negative sanctions to motivate desired behavior. This will make it possible to include behaviors not centered on the academic system (in particular, publications), but around the multiple other goals of the organization (such as the development of further education programs, the provision of additional services for students or regional economic cooperation).

The effective prevention of careers within universities in Germany is also a unique feature in comparison to other professional organizations. Sociological profession theory suggests that in contrast to other occupational groups, professionals are more likely to pursue careers between different organizations (Scott 1966). However, this does not mean that the organizations in question do not try to break this logic, at least partially. Internal careers of medical doctors in hospitals for example, are quite common. The same applies to large law firms with their distinctive internal career patterns (Heinz et al. 2005). The complete renunciation of this organizational power instrument within the German university system is thus neither typical in an international comparison of higher education systems nor in

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<sup>5</sup> See, for example, Musselin (2010), Enders (2000b).

comparison with other professional organizations, business firms or public administration.

## 2.2 *Organizational Power*

In addition to personnel power, there is a second source of power in most organizations based on the power to exclude members: organizational power. According to Luhmann (1980), organizational power is characterized by the power of organizations to exclude members if they fail to meet the minimum standards of the organization. Minimum standards include the acceptance of the formal rules within an organization or refraining from actions which are counterproductive to the organization's goals. Organizational power is therefore a means to shore up at least the basic motivation of the members to pursue the organization's goals. But here as well, German universities can hardly use this source of power to motivate their academics.

Let us take a look at the professors first. It becomes obvious that organizational power as a foundation for motivation cannot be utilized. There is no procedure for "how a professor could be fired even if he or she is lazy, incompetent or no longer needed" (Dilger 2007, p. 109).

The reason for this is that the vast majority of professors in Germany have life tenure with a special civil servant status. Furthermore, freedom in research and teaching is guaranteed by the German constitution in Article 5, paragraph 3. This freedom is closely connected with the German tradition of the independence of professors (Baker and Lenhardt 2008). Due to the traditionally high status of professors in the German system and the highly detrimental effects of the Third Reich on the individual autonomy and the freedom in research and teaching German professors are protected by the constitution, also vis-à-vis the organization in which they are embedded. This leads to a strong, secure position of professors toward their organization which makes it extremely difficult to dismiss a professor. A credible threat of exclusion from the organization is therefore nearly impossible. The organization's leadership would have to take recourse to risky legal action in order to assert its organizational power which, considering the high costs in terms of time and personnel and the uncertain outcome, only happens very rarely. Summing up: Organizational power is not relevant to professors. The organization has no credible sanctions at its disposal and therefore cannot generate motivational effects.

Organizational power is also ineffective towards the great majority of other academic personnel. As with personnel power, organizational power over academic staff rests with the professors. Professors, not deans or university management "hire and potentially fire" (Dilger 2007, p. 103) junior academic staff. It is therefore professors who decide about the inclusion or exclusion of junior members of the organization. The fact that professors and not institutes or faculties are the gate keepers for academic careers up to the level of the professorships is a result of the traditional German chair structure with its emphasis on professorial independence.



We also find here, as before with personnel power, that power and the resulting motivational possibilities are concentrated in the hand of professors.

Overall, it can be said that organizational power as a means of motivating behavior plays no part in the German system at the organizational level. Although we can assume that academics do not want to be excluded from the organization, this decision is not made by the organization: neither for the professors who usually have life tenure, nor for the young academics with their fixed-term contracts. This lack of organizational power at German universities is unique in international comparison. Firstly, the special employment status as a civil servant and the resulting general lack of grounds for dismissal of professors does not exist in many countries. If it did, as in Sweden (Askling 2001), it has since been abolished. In the Netherlands and Great Britain professors can be excluded from the organization (de Weert 2000; Fulton 2000). In the American system, a strengthening of organizational power can be observed. Latest figures show that the tenure-track system is declining and short-term contracts, which do not have to be renewed, are on the rise at higher education institutions.<sup>6</sup> Whereas personnel power through the career incentives offered by the tenure track was prevalent in the 1970s in universities in the USA, today the use of organizational power by the use of short-term contracts has become easier. Similar developments can also be observed at British universities (Kreckel 2008; Fulton 2000).

It has been shown above that neither personnel nor organizational power plays a part in supporting the motivation of professors in Germany. In relation to the academic staff below the level of professor, the chair holder has access to both sources of power. Since the professors are not firmly bound to the multiple organizational goals it is at least questionable whether professors motivate their staff towards the organization's goals. This is a severe problem for the university because it cannot orientate its members towards its multiple goals (e.g., teaching, academic self-administration, knowledge transfer), nor does it have the power to enforce such an orientation.

### 2.3 *Power over Resources*

Since German universities have hardly any career incentives or sanctions, the question arises of whether there are alternatives to these typical sources of power in organizations. A central alternative is the power over resources. In this case, power is built up by the allocation of resources in order to give incentives both to

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<sup>6</sup>The number of tenured academics in the USA declined from 65 % in 1980/1981 to 49 % in 2007/2008 [cf. National Center for Education Statistics (NCES)]. According to Chait (2002, p. 19) the number of part-time professorships nearly doubled from 22 % in 1970 to 41 % in 1995. According to Donoghue (2008) this trend is particularly dramatic in subjects like humanities from which no immediate economic utility can be expected, or at higher education institutions that are orientated toward profit and/or training.

single members or to organizational units (Hüther and Krücken 2013). In the following we will concentrate on the individual level of academics.

At the individual level, the recent changes to professors' remuneration and fixed-term funding are of particular relevance in Germany. In principle, both of these reform measures strengthen the organizational potential for exercising power. Following our previous line of argumentation, the innovation is that granting or withdrawing funding and bonuses is delegated to the university as an organization and are no longer the object of negotiations between the professor and the relevant state ministry, as was the case in the traditional system. In principle, as Musselin (2013) stated, these reforms change the relationship between academics and their university. This becomes especially apparent with performance-related pay that can be granted for exceptional achievements in the fields of research, teaching and/or academic self-administration. Incentives are therefore possible for behavior that is central to the organization but that is not necessarily of equally high importance to the academic system.

However, problems are recognizable with both the remuneration and the fixed-term funding. First, it should be noted that in the German case both sources of power can potentially only be exercised over certain groups of members. The new dynamic of the remuneration and funding structures is initially only applicable to professors; other academic staff is not directly affected. A direct motivational effect can therefore only pertain to the professors. Indirectly, the new incentives could reach other academic members via the professors if they use their organizational and personnel power according to the incentive systems.

Second, there are limits to the efficacy of the application of variable remuneration and funding structures that are primarily related to differences between subjects and disciplines. Performance-related pay will not be an attractive incentive to professors who have sources of income from outside the university. This can quite often be the case in medical, law or engineering departments. Precisely the same differences apply to the fixed-term funding of chair resources. Classic liberal arts and humanities subjects, in which research is chiefly individual research, are more independent in this respect than more strongly networked sciences that, like most of the natural sciences, require significant human and material resources in order to be able to conduct research at all (Jansen et al. 2007). Therefore, we can assume that performance-related pay and resources will only be sought after by some professors for whom they can then work as motivational incentives. However, motivational effects will not or only hardly be possible among professors who do not seek the incentives or do not think they are important.

In addition, negative sanctions, such as reducing funding and other resources, are limited by law. Professorial resources cannot be reduced at will because the constitutional right to freedom of research and teaching guarantees minimal resources for a professor (Seidler 2004; BVerfG 2010, p. 114). Negative sanctions can therefore only be applied in a limited way. Not only the resources but also the remuneration of professors is guaranteed by the constitution. In 2012 the constitutional court ruled that the regulations governing performance-related pay of professors were unconstitutional because the basic salary without the incentives was

too low (BVerfG 2012). The federal states that have already drafted new laws have incorporated a higher basic salary but a lower performance-related bonus (HRK 2012). It is to be expected that the motivational effects of performance-related pay, which has been questioned in the literature cited in the introduction, will further diminish in the future.

A further point is important: incentives—as opposed to sanctions—are expensive. If the rewards are really meant to be motivating, they have to be paid out. Incentives cost money and demand flexible financial resources. Both areas, performance-related resources and performance-related pay, face problems. When performance-related pay was introduced, the overall amount of money for the salary of professors was not increased. No extra funding for incentives was provided, which means that possible performance-related bonuses are very small. It can be assumed that there is not enough money for incentivizing professors. If this is the case, the possible motivational effect diminishes because despite good performance no or only a very small amount of performance-related bonuses are available. However, as we assume a particular strong intrinsic motivation among professors, such incentivizing strategies can negatively affect this motivational base as research on the crowding out phenomenon has shown consistently (e.g., Frey and Oberholzer-Gee 1997; Osterloh and Frey 2000).

Incentives based on resources face a similar problem. First, it is necessary to mention that the German university system is comparatively underfinanced (OECD 2012, p. 244). Again this leads to the question of whether incentives can be a credible strategy for motivation if finances are tight. Second, it is doubtful that within the German system the universities have sufficient freely disposable funds for incentives. In recent years, so called global funds have been introduced to increase flexibility in the allocation of funds. However, in practice the new flexibility has little effect because, for example, existing personnel plans at universities still dictate how most of the funds are used (Schubert and Schmoch 2010). Overall, it can be seen that the attempts to introduce motivational incentives by means of positive sanctions via resources in Germany are limited by a lack of funding. Due to legal restrictions on negative sanctions, funds can rarely be generated by negatively sanctioning low performing professors and departments.

In accordance with the literature on motivation in academia cited in the introduction, we can say that the reforms so far have been unilaterally directed at bolstering the organizational level by means of allocating financial resources so that economic capital becomes the dominant steering medium. It could be objected that in academia and higher education money is the wrong steering medium because it is not capable of affecting the behavior of academics or academic self-organization (Minssen and Wilkesmann 2003; Luhmann 1992). Even if this is not true, the effect of incentives in the academic system is different than, for example, in business firms. Since in the academic system reputation is the more important currency than money, we can assume that money will only have a steering influence if reputation is simultaneously increased. This would also explain, for example, why financial incentives for better teaching have been more or less ignored by professors in Germany (Wilkesmann and Schmid 2012).

### 3 Summary and Discussion

Overall, it can be said that German universities traditionally had only very limited means to motivate academics to achieve the multiple goals of the organization. Universities could exercise neither career incentives nor threats of exclusion. In international comparison, the strong emphasis on academic freedom marks a significant weakness of the organizational level with respect to the individual academic. Despite the many reforms in Germany, there is still a considerable weakness of both personnel and organizational power. The newly introduced incentive systems have, however, strengthened the organizational level because decisions about the level of remuneration and resources are made within the universities. The organization can better motivate academics to pursue its multiple goals. Incentives therefore change the power structures within universities to the benefit of the organization and its leadership. From this perspective the new incentives can be viewed as one aspect of how German universities are becoming actors in their own right.

But the article has also shown that there are severe problems associated with incentives based on remuneration and resources. In agreement with the literature on motivation cited in the introduction, it is doubtful whether professors actually pursue the incentives offered or deem them relevant to themselves. If the incentives are not pursued or are not important to the academics, the power they could give to the organization and its leadership is limited. Consequently, the motivational effect also has to be viewed as limited. In addition, incentive systems are cost intensive and for an underfunded system in which the option to impose negative sanctions is severely restricted by the constitution and public sector employment legislation, as in Germany, they can hardly be considered an appropriate means of motivation.

We would like to address two pertinent issues resulting from our analysis. First, what comparative advantages and disadvantages do result from the peculiar power structure within German universities? Second, what are sensible options in order to strengthen the organizational level vis-à-vis its individual academic members?

Let us begin with the first question. The weakness of the organizational level with respect to the individual academic might be considered as strength with regard to the pursuit of the universities' research function as academic freedom is a precondition of scientific creativity. The strong individual orientation at trans-organizational and trans-national research networks and scientific communities goes hand in hand with a weak organizational level. However, with regard to other goals of universities (e.g., mass education, continuing education, knowledge and technology transfer) the current power structure might be more problematic. The internal motivation to pursue such goals in many cases is rather low. As such motivation is not cherished by the wider scientific community and the weak organizational power structure can hardly motivate either, universities might systematically fall short of such goals and, ultimately, lose legitimacy. Here, a more nuanced discussion on the multiple goals and related means of universities is needed. Furthermore, one should add that the effects of attempts at strengthening

the organizational level of universities become increasingly visible in a variety of European countries (Paradeise et al. 2009). Such effects to a large extent include unintended effects (e.g., Capano 2008; Mignot 2003; Enders et al. 2013). To give just one example: In Great Britain, the strengthening of the organizational level vis-à-vis its individual academic members between 1992 and 2007 has led to a decrease of their organizational commitment, and the percentage of universities professors who contemplate leaving academia for good is the highest in international comparisons (Jacob and Teichler 2011, p. 49, 142). Taking such an unintended effect into account might advice caution on shifting the power balance between the organization and its academic members.

With regard to the second question we would briefly like to discuss two concrete options to strengthen the organizational level vis-à-vis its individual academic members: the shift from a chair to a department system, and the introduction of tenure track positions. Both options are vividly discussed, and partially also implemented in Germany.

One might strengthen the organizational level by shifting to a department system as it has been done in a variety of national systems before (Neave and Rhoades 1987; Enders 2000a). In this case, the dean, not the university leadership will be strengthened. For the German system, we expect strong resistance among professors who will lose some of their power vis-à-vis the dean and little efforts among the deans to exercise their power. Though the formal power structure of the dean has increased in most higher education laws of the states in Germany (Hüther 2008), empirical studies show that this increase is hardly reflected in changing practices among deans (Scholkmann 2011). Furthermore, the new power structure is also limited by legal constraints as the Constitutional Court recognizes the individual level of the professor as the most important one when it comes to the defense of academic freedom, while the organization and organizational units like departments are rather seen as a possible threat to such freedom (Baker and Lenhardt 2008; BVerfG 2010). Another way of strengthening the organizational level and its power is the introduction of tenure track positions. This allows for organizational careers up to the level of the full professor. In the terminology we employed in the article ‘personnel power’ can be exercised and the role of the organization and its leadership becomes more important as compared to the traditional system. Multiple organizational goals can be connected more easily to the career trajectories of individual within their university setting. However, also here one must expect a variety of unintended effects, which result from introducing an entirely new career system within a university system that for a long time had been based on the premise that academic careers do not take place within the work organization, but outside.

At the end of our article we would like to point out some relevant future research perspectives. Combining our perspective from power and organizational theory more closely with the perspective of motivational theory on the topic could yield a very interesting perspective for future research that goes beyond this article. The focus would be on both the relationship between the individual and the organization and also on the effects of incentive strategies on the academic system as a whole. In

general, manifold unintended effects might result from different reform efforts aiming at shifting the power balance between the organization and the individual that are worthwhile to explore (Krücken 2014). An additional perspective would be to widen the notion of power we chose. As we focused mainly on formal aspects of exercising power, one should also try to incorporate informal aspects of power. University organizations in particular are characterized by manifold mechanisms for exercising power that are not tied to formal rules but are very important in creating desired behavior. The same is true for the aspects of self-disciplining and legitimation of power emphasized by the more recent power concepts which we mentioned in the beginning of Part 2.

The article also highlights that an international comparative perspective on power structures would be desirable for research on universities. Whereas changes in the overall governance structures have been well studied, hardly any material on the power structures on the organizational level is available. This would be particularly important to better assess the preconditions and effects of the new incentive systems. In the German case, for example, we cannot find any amplifying effects between the three observed power structures. This is due to the extreme weakness of both organizational and personnel power. However, the article also showed that organizational and/or personnel power is stronger in other higher education systems. The question of the type of interaction between the power structures and its influence on the effects of the new incentive systems is, in our opinion, a central question for future research.

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