3

Ideational Background of Global Knowledge Governance

Introduction

This chapter tracks the ideational background of global rankings in knowledge governance with empirical examples mainly from the European Union (EU) and the OECD, focusing on the discourses that have contributed to the development and convergence of different policy-specific rankings. At present, the indicators can be understood as an instance of global policy discourse on competitiveness (Erkkilä 2014; Erkkilä and Piironen 2013). The rise of indicators can also be linked to the discourses on the knowledge-based economy, evidence-based policy, and good governance, all highlighting the role of knowledge in economic performance and government efficiency. We see that the use of indicators has helped shape an emerging field of global knowledge governance that is somewhat incoherent conceptually, drawing from several policy discourses. There are two different ways for policy discourses and indicators to interact (cf. Godin 2005, 17). In the first, policy indicators may give rise to policy discourses and concepts, making them global concerns of governance. In the second,

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an emerging policy discourse can lead to perceived need to measure it, sparking new measurements, but rising discourses can also revive existing measurements that are discussed under a new label.

We begin our analysis with the rise of knowledge-based economy in the 1990s, which was closely linked to the use of statistics by the OECD. The debate on knowledge-based economy is a case where a new policy concept together with previously existing measurements helped to create a policy concern about science and technology in the economic performance of states. In the domains of democracy and economic performance, the first global indicators relevant to knowledge governance appeared already in the 1970s, but they were rather marginal until 1990s, when the emerging discourses of competitiveness and good governance drew them into spotlight.

Since the early 1990s, there was a conceptual shift from "democracy" to "good governance". This also took place with a change of producers of the comparisons. While academic scholars made the measurements of democracy, the new rankings on good governance were produced by international organizations and nongovernmental organizations (NGOs) (see Chap. 4). The shift "from democracy to good governance" implies a new perception of institutions as a central element of state performance. This is also apparent in the measurements of economic performance—in terms of national competitiveness and innovation—that have grown in scope, now encompassing various aspects of governance, including education and access to government information.

Emerging in the early 2000s, global university rankings share most of the ontological assumptions of the previous rankings and are ideationally aligned with them. Moreover, their reading is done against the predominant narrative of economic competitiveness constructed by the rankings of good governance and economic performance of states. The global university rankings have sparked a discourse on the "world-class university", where knowledge and higher education become perceived as central elements in how states fare amid economic globalization. Recently, such rankings have been complemented by those of innovation that assess the role of knowledge and education in the global competition for innovations, wealth, and well-being. These rankings are

clearly ideationally linked with the previous ones. Generally, the indicators are also linked to the trend of evidence-based policymaking and related demands for expertise.

Global rankings are based on an atomistic ontology that constructs reality as economic competition between states, regions, and institutions. Owing most notably to rankings of national competitiveness, this economic reductionism concerns most of the rankings available, and issues such as higher education and good governance are now also perceived through the lens of economy. We could just as well perceive them as matters of social mobility and democracy. This is due to current ideas of institutional economy that now also influence the perceptions of higher education drawing on codifications of good governance. This chapter summarizes the main ideational elements of the above rankings, showing their similarities and ideational overlap. We will begin by setting our analysis of rankings and knowledge governance within the framework of evidence-based policymaking that has come to define developed countries' governance over the last two decades.

Evidence-Based Policymaking and the Globalization of Numeric Knowledge

Although there is nothing new in attempting to base decision-making on best possible knowledge, including statistics, it is fair to say that research, expert assessment, and statistics have now been adopted globally as its basis (see Chap. 2). The recent trend for governing through evidence was strengthened in 1999 when the Blair government published a White Paper, *Modernizing Government*, which institutionalized the discourse and practice of *evidence-based policymaking*, first in the United Kingdom and soon after in foreign and international arenas.

Since 2001, the European Commission has been committed to an evidence-based impact assessment of all major legislative proposals (European Commission 2001; Lee and Kirkpatrick 2006). The most sought-after type of information for purposes of policy planning, monitoring, and evaluation is quantitative time-series data, which

often allow international comparison and benchmarking (Arndt and Oman 2008). Comparative knowledge is now commonly recognized as a useful tool for improving policy outcomes and a resource for public communication—whether for purposes of justifying reform, collecting plaudits, or scapegoating. There is also growing demand on global comparative assessments.

It is assumed that international policy coordination—for mitigating problems that individual countries are not able to deal with alone—has amplified the demand for internationally oriented knowledge (Haas 1992, 1) and is helping to carve out political spaces for multilevel governance (see Hooghe and Marks 2003). Within the EU, for example, the increased use of the Open Method of Coordination—first introduced to coordinate employment and social, education, and culture policies—has applied indicator data in its benchmark type of steering (European Commission 2006). In a similar fashion, the enormous databases of various international organizations such as the World Bank and OECD can be justified as vital tools for international management.

But if international cooperation and coordination play a role in the increased demand for indicator data, so does international competition. Globalization is often identified as a significant cause of accelerated competition between various *economic* entities. With the presumed competition comes the need to enhance economic performance, acquire best practices, and—simply—to give an appearance of being successful. This line of thinking sees states compete with one another in a similar fashion as corporations do (Krugman 1994, 29). Inherent in this thinking is the need for comparison to benchmark one's position, quality, quantity, and performance in relation to others (see below).

Statistics are increasingly being produced in the international context for the purposes of supranational governance. Oded Löwenheim (2008, 256) has argued that an important function of statistical comparisons is to reproduce hierarchical structures of international system not only by subjecting states to (self-)evaluate their politico-administrative conduct by standards set in the industrial West, but also by constructing a representation of states as ethical actors capable of enacting responsible policies. As such, unit-level comparisons help to sever the discursive linkages between powerful international actors and a wide

variety of political, social, and economic problems, which come to be treated as "domestic" and responsibility for their alleviation foisted on national governments.

While we are not suggesting that the use of numerical techniques is merely aimed at the promotion of private interests, we nevertheless believe that there is reason to put more emphasis on the interests and tactical considerations of index producers when looking at the production of governance data. A need for new actors to establish themselves as experts on the governance field seems to be an important supply-side incentive, as many actors wish to engage in producing quantitative data (Kauppi and Erkkilä 2011; Espeland and Stevens 2008; Arndt and Oman 2008, 10–11). Governance indices form a fast-evolving field of expert knowledge where international governmental organizations (IGOs) and NGOs are most active. While some are more established than others—the World Bank relies less on public visibility than Transparency International—all urge to be recognized as experts on their field.

One means for attaining such credibility is to produce seemingly neutral numerical knowledge, which helps to legitimate their existence and resourcing (cf. Marcussen 2002, also Gieryn 1983; Gieryn 1999, 23). At the same time, however, quantified assessments represent a type of information that is costly to collect, effectively making the circle of experts engaged in this activity somewhat exclusive. This restrictive effect is furthermore strengthened because it is "difficult for new initiatives—to gain attention, because the most-widely used indicators are well-established and dominate the market" (Arndt and Oman 2008, 11).

The use of indicators is also part of a "modernization" agenda of public governance (Buduru and Pal 2010, 516; OECD 2005) and higher education (see below). Rooted in the New Public Management (NPM) reforms of the 1990s, the modernization discourse has since come to embrace numerical methods of evaluation, auditing, and performance management (Power 1999; Hood and Margetts 2007). These have been actively promoted and circulated transnationally (Sahlin-Andersson and Engwall 2002), also with the help of comparative data. The chart below shows how the references to university rankings and governance indicators have risen since the early 2000s, coinciding with the drive for evidence-based policymaking (Fig. 3.1).

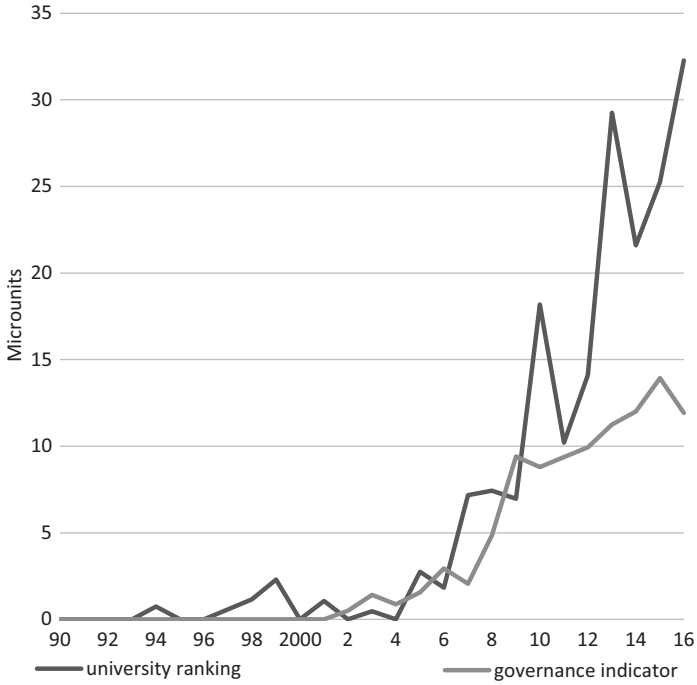

Fig. 3.1 References to university rankings and governance indicators in Web of Science and Scopus.[1]

Since the 1990s, there has been a surge in global rankings and indicators (see Chap. 4). The first popular measurements of global scope emerged already in the 1970s. Published in 1972, the Freedom House's *Freedom in the World* dataset was the first of its kind to measure the state of democracy in countries. Economists were also early applicants of growing base of international data as first methodologies to measure competitiveness of business enterprises and national states were produced in the 1970s and 1980s. The field of global ranking remained rather static until the mid-1990s, when the good governance indicators started to emerge—possibly aided by the mainstreaming of distance-cutting technologies such as the Internet. By the end of 2010, international rankings, scorecards, and benchmarks were everywhere. Policies are justified, monitored

and their impacts assessed in terms of numeric knowledge. Among the relative newcomers also university rankings and indicators of innovation have entered the scene.

But to understand the rise of indicators in knowledge governance, we need to take into account their ideational influences and the discursive environment in which measurement operates. In the following, we will discuss the policy discourses that are linked with the rise of global rankings and indicators. We will begin with the 1990s debate on knowledge-based economy and move on to the discourses on competitiveness, good governance, and world-class university. Our examples primarily cover European policy developments.

Knowledge-Based Economy

The concept of the knowledge-based economy is closely linked to the debate on information society and the major transformations it was to cause for industrial production, organization of labor, and welfare (Castells 1996; Castells and Himanen 2002; Lash 2002). Other related concepts are New Economy or Information Economy, where production was to be revolutionized by the new digital technology and information as a commodity (Zysman and Newman 2006). Figure 3.2, showing references to the key concepts in OECD documents, demonstrates the rise of these discourses in the mid-1990s (in percentage of all documents). As the aggregate line of key words ("all") shows, these discourses have been on retreat since about 2010, but they have nevertheless been important in framing knowledge governance as an economic activity, where the state has a rather limited and specific role as the facilitator of new digital economy (Ottaviano and Pinelli 2004; Zysman 2004).

Discourses and concepts such as New Economy and knowledge-based economy are closely linked to statistics. According to Godin, the international statistics used to measure the rise of Information and Communications Technology (ICT) gave rise to the discourse of New Economy in the 1990s (Godin 2005). In the case of knowledge-based economy, the concept was being actively promoted by the OECD that started producing indicators on the matter in the mid-1990s. The related

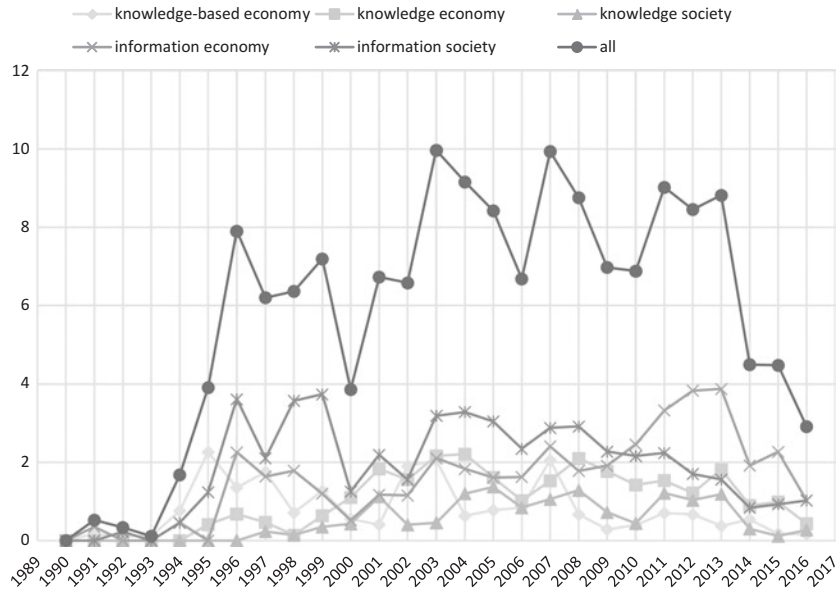

Fig. 3.2 References to knowledge-based economy and related concepts in the OECD documents (percentage of documents). Source: OECD Official Documents.[2]

concept of the knowledge economy had been already coined in the 1960s, acknowledging the national economic importance of science and technology policies, but the OECD's promotion of knowledge-based economy brought the issues back to agenda in the 1990s. The rise of the knowledge-based economy was also supported by peer concepts such as "national innovation systems" that was initially coined to bring in institutions to econometric models. Godin argues that knowledge-based economy became an umbrella concept that subsumed the insights of national systems of innovation, information society, and new economy (Godin 2005). It helped to revive the topics of science and technology policies, but this came with the help of active promotion of the OECD, now backed up by statistics. While the indicators were not novel—in fact the statistics used by the OECD mostly already existed earlier—they were now packaged under a new label that was appealing to policymakers (Godin 2005, 23–24).

As we saw above, the notion of the knowledge-based economy has also brought in state institutions to the assessments of national economic performance. This brings to light an inbuilt tension in the debate. Like most of the information society theorizing, the new economy literature often tends to be dismissive of history, portraying the "emergence" of "digital" or "e"-governance (Forlano 2004). Moreover, this "revolution" (Garson 2004) is seen as bringing major changes and advances in enhanced efficiency, public sector performance, and democratic responsiveness (West 2005).

But the ahistorical perspective is misleading in understanding the knowledge-based economy and governance. From the perspective of information, the rise of the modern state was closely linked to establishing census and statistics, and historically nation-states have been responsible for the accumulation of most of the information resources that the new economy is to build on. The public sector creates and manages vast data sources that are often seen important for digital services. Such historically accumulated data sources include registries on citizens, companies, and real estate, as well as cartographic and meteorological information, which are prime examples of data resources that have traditionally been produced by states. Through digitalization these are increasingly seen as crude material for value-added digital services created by private companies (Blakemore and Craglia 2006).[3]

By the end of 1990s, there was a realization that openness of public administration is a favorable feature of governance in terms of economic competitiveness and performance. Implicit in the attempts at increasing central government's steering capacity in the "information society" (Holliday 2001, 317; Tiihonen 2000), this shift has become most apparent in attempts at imposing new practices of accountability that are based on measures of budgetary transparency and in the attempts allowing the reuse of public information for economic activities. This has also raised global interest toward states' information policies. For instance, the UN e-Government survey includes an e-Government readiness/development as well as e-Participation index. These measure the availability and accessibility of government information and online transparency from the perspective of deliberation (see Chap. 5).

The policy implications of the above discourses can be seen in EU policies on public sector information (PSI). In 1998, the European Commission released a Green Paper on PSI, which portrayed public information as a market commodity. The Green Paper had its ideational roots in the New Economy theorizing, and it was motivated by the perceived competitive advantage of the United States where most of the public information was produced free of user charges, unlike in Europe (European Commission 1998, 28). The Green Paper referred to "reuse" of "PSI". As a result, public information got conceptualized as a "good", either "public" or "market based", as later stated in European Commission's directive on the commercial reuse of PSI (2003/98/EC). The European Commission's policy shared the NPM reforms' presupposition of the applicability of market logic in public information management.

Shortly after the debate on public information in March 2000, the EU launched its Lisbon strategy. According to the strategy, EU was to become "the most competitive and dynamic knowledge-based economy in the world" by 2010. From the perspective of knowledge, the Lisbon strategy mainly considered problems in accessing information and lack of new technologies (mainly Internet) as potential obstacles for becoming a leading knowledge-based economy (The European Council 2000). The strategy also introduced the "education systems" firmly to the policy agenda. This mainly referred to primary and secondary education, but it also singled out research and development and introduced European Area of Research and Innovation. The strategy also called for benchmarking national research and development policies and use of indicators to measure performance, leading to the launch of European innovation scoreboard in 2001 (see Chap. 6).

Interestingly, the Lisbon strategy did not make a single mention of higher education and only mentioned universities in the context of creating a "high-speed transeuropean network for electronic scientific communications" (The European Council 2000). But by 2011, the European Commission had singled out "European higher education" and higher education institutions as a key development area for European competitiveness (European Commission 2011, 2). This shows how the issue of higher education and research has gained in importance in the economic

strategies of countries as well as the EU over the past decade. It is also important to notice that this trend coincides with the rise of global indicator knowledge.

Concerning measurements, the debate on the knowledge-based economy is interesting, as the concept was largely promoted with the help of statistics on general aspects of the information society. But the knowledge-based economy is also linked to measurements of access to government information (see below for good governance), the global university rankings, and measurements of innovation (see Chaps. 4, 5, and 6). On the whole, the "knowledge-based economy" discourse has made way for the debate on "competitiveness". This has come with the help of competitiveness indicators that have received much media attention since early 2000s.

Competitiveness

"Competition" is without doubt one of the most policy-relevant words of the early 2000s due to its frequent use (cf. Krugman 1994, 28–30; Sum 2009, 184). It now frames conduct in all spheres of life, be they private, cultural, social, political, or economic. Most people are (at least unconscious) social atomists, since we often assume that entities are "separable if distinguishable" (Weissman 2000, 2). Moreover, many believe that a competitive environment is necessarily implied and thus competition cannot be escaped. Some liberalists also believe that competition between separate entities will ultimately benefit all. Whatever the case may be, maximization of competitiveness has come to define and justify some of the most important policies and policy reforms in Europe (compare Cerny 1997; Hall and Soskice 2001): all things that want to prosper or survive must compete. We call justification of any concrete policy based on this truism "competitive logic"—a logical deduction from the ideology of competition.

According to Sum (2009, 187), the Reagan administration raised the idea of economic competitiveness in the 1980s by establishing Commission on Industrial Competitiveness (1983) and Council of Competitiveness (1988). A similar development was ongoing in the

OECD, where the work around the theme intensified in the 1980s and was reinforced in the 1990s, coinciding with the European Commission's interest in the topic (Sum 2009, 187–188). Contemporary ideas of competition often draw from scientific authority of economic theory and even evolutionary biology. Both have had an impact on our social and political thinking, and competition often appears as natural and generally beneficial. Competition serves as a general social imaginary upon which actors habitually assess the outside world (Alasuutari and Qadir 2016, 643–645). While explicitly Darwinist applications have not been trendy social thinking for more than half a century, neoliberalism, building on neoclassical economics, has (Cerny 1997; Krugman 1994; Sum 2009). Of course, there has always been resistance against the attempts to make competition an overarching super-ideology to which possibly contradicting values and doctrines are made subordinate. In Europe, the strong social democratic tradition occasionally accompanied with nationalist tendencies was able to delay the strengthening of the ideology of competition until 1980s, at least in policy domains such as public pension schemes (Mahoney and Thelen 2009, 20).

In the late 1980s and first part of the 1990s, competition at the supranational level was discussed in the confines of the creation of the European common markets. This objective was first endorsed by the Single European Act in 1987, a policy which was reinforced by the Maastricht Treaty and the creation of the single currency: various trade barriers were to be removed and harmonization of national regulations affecting competition was to be enacted. The principal task of the Directorate-General for Competition was to create a real competitive environment for European companies. Functioning competition within the European markets was believed to foster efficiency, productivity, economic growth, and general welfare. Indeed, construction of competitive internal markets was the dominating Commission-led policy initiative during the 1990s—the enlargement project trailing behind—with the effect of trumping contradicting policies and objectives (Wallace et al. 2005, 114–115).

Globally, the tendency was much alike: under the General Agreement on Tariffs and Trade (GATT), the Uruguay Round (1986–1994) led to an unprecedented reduction of tariffs and agricultural subsidies and

greatly extended the domain of the negotiations. In 1995, the World Trade Organization (WTO), whose "main function is to ensure that trade flows as smoothly, predictably and freely as possible", was commenced. Everyone was to benefit from the liberalization of global trade. On the other hand, the perspective of competitiveness also emphasizes the role of nation-states, seeing them as key actors in the global trade. Paradoxically, the perceived concern of competitiveness may even lead to expansion of state regulation and intervention (Cerny 1997, 251). This was visible already in the early 1990s, when the head of EU Commission Jacques Delors identified the lack of competitiveness of the EU (vis-à-vis the United States) as a key problem of European economic performance, to which investments in technology and infrastructure were seen as remedies (Krugman 1994, 29). At the same time in the United States, the economic and trade policies formulated by the Clinton administration were strongly guided by the ideas of national competitiveness.

At the turn of the millennium, the ideologies—or realities—of neoliberalism and globalization finally met. Sum (2009) has called *competitiveness* a knowledge brand that emerged in the mainstream vocabulary and political agenda through efforts of various actors on both global and regional levels. The more the markets were opened—regionally and globally—the more the provincial concern for one's own economic achievement proliferated in the Western world (Kettunen 1999; Sum 2009), though this is not self-evident, as Cerny (1997) has pointed out. Moreover, competition was no longer reserved for companies alone: individuals had to start competing for their jobs; nations for investments, workers, and affordable loans; public agencies for skilled employees; educational institutions for funding, top researchers, and talented students. Global competition entails huge risks, and it was acknowledged that not everyone was going to benefit automatically. It became habitual for the governments of the smaller states to assess their national competitiveness.

From 1990s onward rankings of competitiveness have emerged (Chap. 4). The competitiveness rankings have also influenced indicators in other domains, tying them ideationally to the political imaginary of competition. This is notable in good governance (Erkkilä and Piironen 2009) and higher education (Erkkilä and Piironen 2013). The notion of competitiveness brings ideological coherence to the transnational governance of

higher education (cf. Sum and Jessop 2013, 40–41), as universities competitiveness is linked to national and regional competitiveness believed to foster economic goals such as growth, employment, and welfare (see below).

In the assessments of good governance, state institutions are now valued for their positive effects on governance performance. This also concerns the knowledge infrastructure of state: good governance and competitiveness meet in the notion of transparency.

Good Governance and Transparency

In the early 1990s, the concept of "governance" came to complement, and sometimes replace, the hierarchical and statist notion of "government" that had dominated both the discourse and practice of politics and administration, but which lacked the capacity to capture the nature of changed realities of collective decision-making (Peters and Pierre 2006). At the same time, the World Bank, intent to overcome the legal constraints preventing it from interfering in member countries' internal affairs through its lending criteria in the late 1980s, coined the concept of "good governance" (Thomas 2007, 731–736). For an intergovernmental organization, good governance was a practical means of not having to resort to "political" criteria such as democracy. But good governance also had substance of its own. As a management recipe that "marries the new public management to the advocacy of liberal democracy" (Rhodes 1996, 656), it helped to shift the focus from traditional democratic values of governance to instrumental virtues enhancing institutional efficiency and to a specific understanding of economic viability (c.f. Zanotti 2005; Drechsler 2004; Knack and Manning 2000).

Whereas the notion of governance has become somewhat neutral, referring to a standardized set of "steering mechanisms in a certain political unit", "good governance" has not (Drechsler 2004, 388). It is a normative concept that puts emphasis on reducing the reach of the state and on adopting the logic of private enterprise in terms of how governance is conducted. The ethics of the good in "good governance" can be traced to free market economics, which formed the core political ideas of

international financial institutions since the late 1980s (Argyriades 2006, 158–60; Doig et al. 2006, 241; Drechsler 2004; Seppänen 2003, 114; Zanotti 2005, 470). Many of the standards of good governance are identical to the policy prescriptions of NPM initiatives that were launched in the Western World around the same time (Drechsler 2004).[4] This is especially evident in the emphasis put on efficiency and performance as key concerns of governing.

Apart from political science and administrative studies, the question of the most plausible institutional design for a country has been addressed by scholars of economics. The NPM reforms and, as Drechsler argues, initial perceptions of good governance have been centered on the ideas of limited domain of state and public institutions. To an extent, this can be seen in the policies of international financial institutions. From the economics point of view, the picture is more mixed, though. The increased interest in the administrative performance in "ethics", that is, seeing transparency, accountability and low corruption as virtues of governing at present, bears close comparison to the patterns of thought and doctrines of contemporary economic theory. Since the late 1970s, information economics has gained ground among economists, and in the last two decades also, well-performing institutions and the rule of law have been firmly focused on economic agenda, often referred to as "Washington consensus" (cf. Stiglitz 2008).

George A. Akerlof, A. Michael Spence, and Joseph E. Stiglitz have brought up issues concerning imperfect information, corruption, and their transaction costs. As Joseph Stiglitz has put it, this has marked a slight shift in economics paradigm (Stiglitz 2002), highlighting the relevance of information and transparency for market efficiency (Stiglitz 1998, 3). Also the hardcore liberal economic policies are under attack here for failing to see the particular circumstances of countries, which makes the doctrinal adoption of stability and growth pacts difficult (Stiglitz et al. 2006).

Institutional economists have argued for firm institutions as keepers of economic performance for open economies (Rodrik 1998) and also pointed out how differing institutional paths lead to varieties of capitalism (Hall and Soskice 2001). Douglass C. North has also made similar observations from a historical perspective, arguing that the quality of

institutions determines the economic performance of a country (North 2005). North has criticized the libertarian economists and their idea of laissez-faire efficiency based on minimal regulation, such as general conditions of rule of law and effective property rights.[5]

Even if economists disagree on whether institutions can be exported (Przeworski 2004),[6] or on their ideal role and scope, it is obvious that for economics governance public institutions are not simply a matter of democracy but particularly of economic performance. The institutional economic literature merges these two without much hesitation: democracy is somewhat straightforwardly seen to amount to increased (market) transparency and lowered tariffs and transaction costs (Kono 2006; Libich 2006). Previous assessments of the possibly contradictory dichotomization of democracy and efficiency are virtually neglected. In other words, whereas the scholars of political science and administration have previously seen these two to be potentially at odds with each other (Jessop 1998, 42), the newly emerging ideas of political economy of institutions seem to bypass this trade-off.

When looking at the new numerical objectifications of administrative virtues, it seems apparent that the feasible and sought-after qualities favor economic performance over traditional ideas of democracy or administration. The drive for good governance has also had a concrete influence on the knowledge institutions of state. Whereas openness and access to government information was for a long time seen as potentially at odds with efficiency and economic performance, the above-discussed paradigm shift in economics has paved way for the novel understanding of transparency as a central element of market efficiency (Erkkilä 2012; Stiglitz 2002). Consequently, there has been a global drive for transparency (Blomgren and Sahlin 2007), and countries have rushed to adopt freedom of information legislation. Figure 3.3 shows how the number of information access laws has developed globally, coinciding with the global policy prescriptions of good governance and transparency.

Transparency is aligned with the current pursuit to establish institutions that are both democratic and efficient (Erkkilä 2012). The access to government information is often seen to enhance both the performances of government but also allow citizen participation and control of government. While the information access laws are an important element in the

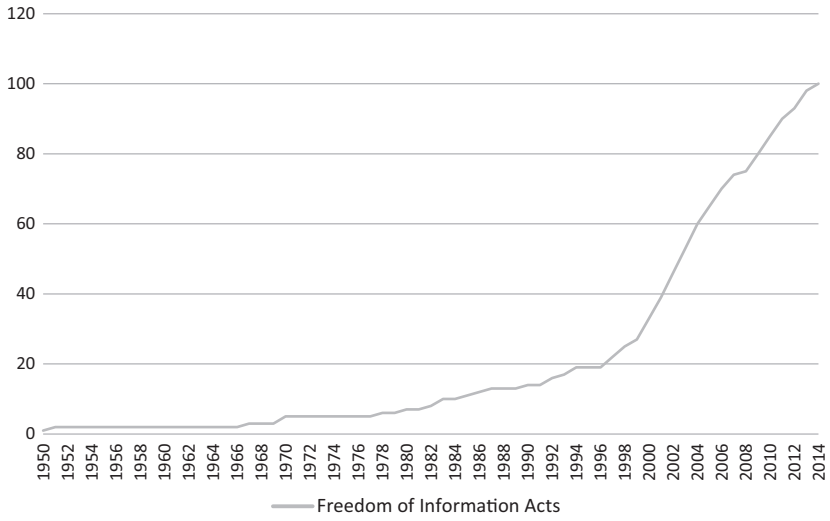

Fig. 3.3 Number of countries with freedom of information acts. Sources: Fringe Special, FreedomInfo.[7]

current assessments of economic competitiveness, it is also important for the knowledge-based economy and innovation. Without such legislation in place, the digital services using public information would be difficult to organize. The information access laws are therefore also at the heart of current developments in information technology and innovation.

Transparency has also become an attribute of global measurements. At present, there are some 15 different indicators of global scope that assess transparency of state institutions in some respect (see Chap. 5). While these measurements were initially part of broader indicator sets of good governance, there is a recent development toward detailed and focused measurements of particular aspects of transparency, such as budget transparency (Erkkilä 2016). While academics have criticized the measurements for their methodology (Michener 2015), there is also keen interest into making such comparative assessments, particularly from the economic perspective (Williams 2015). Alongside democracy, transparency is currently seen as a key element of economic competitiveness and development of nations. Solid national institutions are also seen as an important element of innovation.

Innovation

Innovation is often talked about in terms of the innovation environment, a paradigm discussed already in the early 1990s, stressing innovation as a foundation for countries economic competitiveness (Lundvall 1992). If concern for competitiveness dominated international policy agenda in the first part of 2000s, it was supplemented by the catchword, of innovation, later in the decade. Innovation was a convenient tag as it neatly elaborated the existing paradigm toward a specific solution. An innovation and the capacity to innovate are generally seen in a positive light (Gripenberg et al. 2012). Innovation implies a new idea with proven utility. An innovative firm gets the upper hand in market competition; a society that fosters innovation reaps the benefits of productive public sector and thriving economy. Already at the turn of the 2000s, research on innovation started to consider the dynamics of innovation, where university–industry–government relations (the so-called triple helix) were seen as a decisive factor for innovation. Furthermore, distinguishing this perspective on innovation from previous ones, it was argued that "the university can play an enhanced role in innovation in increasingly knowledge-based societies" (Etzkowitz and Leydesdorff 2000, 109). This also implied a new role for the university in regional and national economic development (Etzkowitz et al. 2000).

The EU has been important in promoting innovation as a European priority. The Commission launched its *First Action Plan for Innovation in Europe* in November 1996. The first common framework for innovation policy in Europe identified not only need for new products and services, but also highlighted innovation as a necessary ability to maintain competitiveness and employment. The action plan identified three areas for action: to foster innovation culture, to establish a framework conducive for innovation, and to better articulate research and innovation. The role of the EU was coordinative; responsibility lay with member states and public and private actors (European Commission 1997). As an Open Method of Coordination measure, the new Innovation Policy Directorate of DG Enterprise and Industry has, from January 2000, produced the *Trend Chart on Innovation in Europe* with concise

information and statistics on innovation policies, performances, and trends in the EU member countries. The flagship product of the Trend Chart is the European Innovation Scoreboard (see Chap. 6.).

In 2004 Wim Kok's high-level group submitted its damning mid-term review *Facing the challenge* on the lack of progress in implementing the 1997 *Lisbon Strategy.* The report pointed out that urgent action was needed to take advantage of the promises of the "knowledge society": to attract talented researchers, to boost R&D, and to promote ICT. The group expressed its concerns for lacking business friendliness and recommended that the administrative burden be reduced, legislation improved, and start-ups facilitated (High-level Group 2004). Retrospectively, all the components are present—concern for competitiveness, productivity, knowledge society, R&D, education, intellectual property rights, and capacity to transform research into marketable products and processes—but the dots are not yet connected by the terminology of innovation.[8]

It was only two years later that the vision became clearer, as the *Innovative Europe* report by the European Commission-mandated Aho Group was published in 2006. The group was, in the spirit of the Kok's report, tasked with providing suggestions on how to reinforce EU's research and, now explicitly, innovation performance. The report identified a lazy, unsustainable, and inflexible Europe that is being challenged by increasing global competition. Arguably, the "report is about putting research and innovation at the centre of the endeavor to recapture the entrepreneurial vigor and value-creation that are needed to sustain and improve the European way of life" (European Commission 2006, 4). As a final word, the group warned Europe and its citizens that their time is running out, but the "path to prosperity through research and innovation is open" if action is taken "before it's too late" (ibid., 30). The European Innovation Scorecard is cited to show how Europeans are lagging behind the United States and Japan (ibid.)

The actions the Aho's group recommended were very similar to earlier suggestions: Europe should be transformed into an innovation-friendly market fostering investment for research and innovation. Research excellence should be fostered and talent attracted; industrial R&D and science-industry nexus should be supported; international mobility of individuals, financial assets, processes, and knowledge

should be encouraged. The group expects that the productivity of the research system would increase especially if governments showed "a willingness to cut sub-standard or low priority research to free up resources to be spent on the best" (ibid., 20).

Innovation was the key theme also in the report *Europe 2020: A strategy for smart, sustainable and inclusive growth* (European Commission 2010) in which the development of knowledge and innovation is presented as necessary drivers of growth. The tone is alarmist. Europe's decline is framed by comparing European levels of R&D spending, levels of education, and academic performance in relation to the United States and Japan. To support the Agenda 2020, the Commission put forward seven flagship initiatives that include "'Innovation union' to improve framework conditions and access to finance for research and innovation so as to ensure that innovative ideas can be turned into products and services that create growth and jobs" (ibid., 5). The initiative, among others, encourage member states to reform national R&D and innovation systems to foster excellence and specialization; to support cooperation between universities and business; to ensure a sufficient supply of science, math, and engineering graduates; and to prioritize knowledge expenditure through tax incentives and other financial instruments (ibid., 12–13).

The goals are carried into higher education policy papers. The *Supporting growth and jobs—an agenda for the modernization of Europe's higher education systems* (European Commission 2011): "education, and in particular higher education and its links with research and innovation, plays a crucial role in individual and societal advancement, and in providing the highly skilled human capital and the articulate citizens that Europe needs to create jobs, economic growth and prosperity" (ibid., 2). Boosts in innovation are tied to the modernization agenda of European higher education. Strengthened innovativeness makes many demands for member states and higher education institutions: curricula that is sensitive to the emerging labor market needs, performance-based funding of research, institutional flexibility and, of course, more assessment and audition. The paper also announced that the Horizon 2020 programme "the Framework Programme for Research and Innovation" would bring the varied existing research and innovation (R & I) funding under a single framework.

The 2014 *Research and innovation as sources of renewed growth* (European Commission 2014) is a testament to the now well-established ideational convergence between the concern for competitiveness and the remedies of innovation and research. It again repeats the consensus about causal ideas stipulating that modernization of European higher education systems and institutions in terms of a set of specific parameters will drive innovation, competitiveness, and prosperity. R&D spending should be increased but only hand in hand with reforms of R & I systems. The report urges for governments to engage in strategic planning and steering of higher education and research. It also encourages prioritizing competitive and entrepreneurial funding mechanisms for research and innovation. These measures, it is believed, will lead to improved quality, efficiency, and impact of R & I spending, and thus help to improve the European competitiveness and prosperity.

All in all, innovation and innovativeness are high on the European policy agenda. It is one building block in the idea sphere that steers and conditions European policymaking in various policy domains, including higher education.

World-Class University

Rankings as technologies for governing should not been separate from the surrounding discourses. In a way rankings are manifestations of the idea of economic *competitiveness* that now covers academic competition and the pursuit of the "world-class university" (Shin and Kehm 2012; Salmi 2009). The key elements of competitiveness, good governance, and innovation have also entered the debate on higher education, with universities increasingly being perceived accountable for their research output in terms of innovation and national economic performance (Erkkilä and Piironen 2013). Ever since their launch a decade ago, global university rankings have been keenly followed by higher education policy experts and scholars (Cheng and Cai Liu 2006; Cheng and Liu 2007; Hazelkorn 2008; Marginson and van der Wende 2007; Salmi 2009).

Much of the research on university rankings has concentrated on the methodology they use (Dehon et al. 2009a, b; Shin et al. 2011). But rankings also have deep impacts on higher education institutions

(Hazelkorn 2011), reshaping the higher education landscape (Erkkilä 2013; Kehm and Stensaker 2009; Münch 2013), and global governance (King 2010; Shin and Kehm 2012).

The rankings have caused a particular policy concern in Europe due to the somewhat poor ranking of European universities and Europe's declining role in the global economy. What is interesting about this development is the role of the European Commission, which has been active in drafting policies for "European higher education", a policy domain that traditionally has not come within the EU's ambit. These initiatives have been closely linked to the EU's economic ambitions. The relatively poor global ranking of European universities also provides a contrasting image to long-standing academic traditions in Europe (for history, see Ridder-Symoens 2003a, b; Rüegg 2004, 2010).

Concern for European and national competitiveness has also turned the focus on the competitiveness of higher education systems, which are now seen as an element of economic competitiveness (see Chap. 4). As we explain more carefully in the next chapter, rankings are used to identify the top-ranking American universities as models for lower-ranked European institutions. The rankings are also used to single out institutional factors to explain the differences, and strengthened market-oriented institutional autonomy is identified as central for improving the performance of European universities. This is evident in university reforms in Europe, where direct public regulation of higher education institutions is replaced by alternative mechanisms of accountability and transparency such as performance management, auditions, accreditations, and rankings.

The rankings increasingly provide an ideational input for higher education policies at the EU level. They also inform university reforms at national and institutional levels. Largely owing to the political imaginary of competitiveness, the current drive for the institutional autonomy of higher education institutions in Europe has been conceptualized in economistic and market-oriented terms at the expense of the traditional attributes of university autonomy in influencing policies and institutional practices. In a similar fashion, the notion of competitiveness has informed the measurements of good governance that are closely linked to economic performance of countries. This also underlines the link between the new

demands for accountability and transparency in higher education. Though the organizations producing the league tables possess no apparent norm-giving authority, they have nevertheless come to steer decision-making. The mechanisms of influence will be explored more fully in Chap. 4.

Global rankings are also part of a discourse on quality, serving as evaluative tools. This is most notably linked to international attempts to define the attributes of *good governance* and measure them. The concept of good governance is also closely related to competitiveness, as they both emphasize institutional performance and its benefits for economic activities. Through the notion of quality, the criteria of good governance have spread to the sphere of higher education; "academic quality" is often linked to notions of "accountability" and "transparency". The higher education institutions are increasingly seen accountable for their performance through research output and innovations, now measured by university rankings that are an instance of transparency. As policy instruments (Salmi and Saroyan 2007), the rankings are part of a "modernization" of public governance (OECD 2005) and higher education (European Commission 2011). Global university rankings are part of the transnational drive for evidence-based decision-making (Djelic and Sahlin-Andersson 2008) and global knowledge production (Mittelman 2004; Schofer and Meyer 2005). As will be discussed in the empirical chapters of this book, the idea of the world-class university is also tangled in the notions of competitiveness and innovation, as well as their measurements.

Conclusions

One should exercise caution over the generally appealing arguments of grand processes such as "new" public management, information society "revolution", "modernization", or "globalization" (Hood 1998, 208–19). There is often no single rationale to the above-mentioned processes, but many. This is also true of the rise of global indicators, which have many ideational sources, discussed above. Global indicators are closely linked to a set of smaller and bigger ideas, ideologies, and policy discourses. In this

chapter, we have identified and examined the concepts of the knowledge-based economy, evidence-based policymaking, competitiveness, good governance, innovation, and world-class higher education. These ideas, we think, are not separate but parts of a system that makes them meaningful, as our empirical examples from the EU and the OECD demonstrate.

But the prescriptions inscribed in these ideas and discourses are only realized in practices, mechanisms, and technologies (Dean 2010). Quantification, as explained in the previous chapter, helps to mediate ideas into policies: "The events and phenomena to which governing is to be applied must be rendered into information—written reports, drawings, pictures, numbers, charts, graphs, statistics" (Miller and Rose 1990, 168). Although we have focused on the ideational background—ideas and discourses traceable in policy papers, for example—we have kept our sights on the techniques that make them relevant for governing. In the following chapters our focus will be directly on numbers, statistics and rankings. We show that numeric techniques are not neutral vehicles for objectification. Not only do they make politicization and depoliticization possible, they have a logic of their own, which essentially supports economic competitiveness, which we see is the encompassing idea currently structuring the system for the steering and dissemination of knowledge in Europe.

Notes

1. Results are displayed as proportions of all entries found in the two databases where microunit stands for one part per million hits
2. [http://www.oecd.org/officialdocuments/], accessed 25.8.2017
3. In recent years, a technological transition has caused the digitalization of administrative data and processes in most of the states (Castells 1996; Lash 2002). But the states still differ significantly with regards to their institutional trajectories (Castells and Himanen 2002). Due to information society theorizing, we have perhaps come to lose the sight of the historical peculiarities of government information, such as registry data. Even though most of the countries have the means for (re)organizing their management of public data in technologically uniform manner, there are great differences in the data infrastructure and cultural traditions in its use (cf. Newman and Bach 2004). Also public records of countries differ in

their scope, coherence, and integration, but most notably also in their accessibility.

4. Several other international organizations also grew interested in administrative ethics. The OECD, which through the late 1980s and early 1990s had been active in promoting NPM in Europe, notes the following in a 1996 document on administrative ethics (see, e.g., OECD 1996, 60). In the EU, the European Commission's White Paper of European Governance defined the good governance that was to be expected from the EU institutions and member states alike (European Commission 2001).
5. Pointing to the early-2000 scandals such as Enron and WorldCom, North argues that market efficiency is more a complex matter than the neoliberal thinking would perceive it to be (North 2005).
6. Marking a division in the ideal role of institutions in a given country, the new emphasis on the institutionalism has also brought their endogenous nature to fore. Institutions matter, but can they be exported or engineered (Przeworski 2004)?
7. FreedomInfo [http://www.freedominfo.org/]; Fringe Special: Overview of all FOI laws, 30 September 2012 [http://www.right2info.org/resources/publications/laws-1/ati-laws_fringe-special_roger-vleugels_2011-oct]
8. The term "innovation" is used in the report only to denote a benefit of increased interaction between universities, scientists, and researchers on the one hand and industry and commerce on the other.

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