

Public Sector Reform from the Post-New Public Management Perspective: Review and Bibliometric Analysis¹

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Received: 26. 8. 2019

Accepted: 15. 10. 2019

ABSTRACT

The aim of this article is to evaluate the impact of public sector reform on academic literature from the post-NPM perspective. There have been several investigations into post-NPM public governance models and their impact on public sector reform. Yet, the research problem faced when analysing post-NPM literature is the lack of studies examining the multitude of possible public governance models (PGM) with sufficient comprehensiveness, especially in Central and Eastern European (CEE) states. In order to effectively address the research problem, a bibliometric analysis was performed, following three objectives: (i) an investigation into the evolution of PGM literature, (ii) identification of the core publications and authors based on publication frequency, and (iii) a citation network analysis (a historiograph), indicating the relations among the most-cited publications. It involved the identification of 16,374 publications in the Web of Science database, narrowed down to the 100 most cited between 1994 and 2017, and the application of the HistCite bibliometric analysis software, covering descriptive statistics, bibliometric indicators, and historiographic citation analysis. The research results reveal a growing research interest in the topic, as supported by bibliometric indicators. In addition, important differences as regards coverage and diffusion of individual post-NPM models are indicated. Namely, most publications focus on the 'governance' paradigm and subsequent critical rethinking, as indicated by several post-NPM modernisation proposals. Furthermore, we have shown that such evaluation of governance and related doctrines may be biased in favour of subjective, pluralistic Western ideas about governance, presumably limiting their impact within the CEE and several other regions. Hence, the regions' particularities in terms of governance (post-socialism, *Rechtsstaat* culture, EU membership, small states, etc.) must be further taken into account in the post-NPM literature.

¹ This article is a revised version of the paper entitled *Consolidating the state of the art of post-NPM literature: a bibliometric approach* presented at the 27th NISPACEe Annual Conference 2019, Prague, Czech Republic, 24–26 May 2019.

Keywords: public administration, public governance models, bibliometrics, historiography, Web of Science, Central and Eastern Europe

JEL: D73, H83

1 Introduction

In order to tackle today's dynamic societal environment, the public administration constantly needs to look for opportunities to improve its productivity, process efficiency, increase collaboration and focus on innovation (Drechsler, 2014; Hammerschmid et al., 2016; Pollitt and Bouckaert, 2011). Socio-economic changes have induced new highly important challenges for public administration, which require a more efficient response. The emergence of the global financial crisis, digitalization, migration issues, the rise of extremist right-wing parties, populism, ecological issues and several others reveal the insufficiency of current public governance models (PGM) to efficiently and effectively support the needs of modern society (Ropret et al., 2018; Segarra-Blasco et al., 2008). In countries on the path from a developing to a developed economy, the situation proves even more acute due to several additional post-transition issues (Aristovnik et al., 2016; Koprić, 2012; Bouckaert, Nakrošis and Nemeč, 2011; Ropret et al., 2018). Consequently, public administration reforms are determined as a highly important priority within the UN's 2030 Agenda for Sustainable Development, the post EU 2020 strategy, and EU member states' national strategies (European Commission, 2010; Hammerschmid et al., Millard, 2017; 2016; Aristovnik et al., 2016; Tomažević et al., 2017; Ropret et al., 2018). The ability to significantly improve authoritative decision-making and public services for individuals, businesses and non-governmental organizations is consequently of strategic importance for the public administration at the European and member state (MS) levels (Hintea et al., 2015; Millard, 2017; OECD, 2016; Ropret et al., 2018). On this foundation, we identify the requirement to thoroughly evaluate the impact of public sector reform from the post-NPM perspective on academic literature. In the continuation, we present the theoretical background (Section 2), providing an overview of public governance models (Subsection 2.1). Then, a detailed presentation of the main research problem (Subsection 2.2) of the study follows. We continue with the research aim and the research questions (Subsection 2.3). The next section is dedicated to a presentation of the research methodology (Section 3). A presentation of the study's main results follows (Section 4). In continuation, the main results are discussed (Section 5) and a conclusion provided (Section 6). Finally, acknowledgements, and references are shown.

2 Theoretical background

2.1 An overview of public governance models

In today's ever more complex and fast-changing environment, public officials increasingly face situations where they are not in possession of all the informa-

tion needed to make a decision in the public interest; nor do they always possess the time or the know-how to evaluate the information they already have (Ropret et al., 2018). As the political scientist and Nobel laureate Elinor Ostrom (2007) warns, one should beware of constructing governance frameworks that are overly specified and burdened with long lists of elements and exacting conditions. We approached this dilemma by focusing on the main dimensions of governance, as covered by the umbrella term 'public governance models'. The latter represent the basic elements for specific research with regard to the institutional capacity of public organizations to provide public services demanded by a country's citizens or the representatives thereof in an effective manner (Emerson and Nabatchi, 2015; Katsamunska, 2016; Ostrom, 2005). A presentation of the main elements of different models follows in the continuation.

Many elements of the classic model of the public administration's operation based on Weber's theoretical starting points (the Weberian model) are becoming obsolete given the challenges facing modern society (Dunleavy and Margetts, 2015; Hammerschmid et al., 2016; Ropret et al., 2018). While some elements, such as hierarchy, professionalism and political neutrality of the public administration that operates through legislation, remain indispensable today in many public administrations (Hood and Dixon; 2016; Pollitt and Bouckaert, 2011), one must take into account that the model's focus is on the routine division of labour, depersonalization of employees and formalized communication (Pollitt and Bouckaert, 2011). A particular limitation is isolated governance, in which taking account of the needs of the citizens and business as a counterpart of the PA seems to be secondarily important. On the contrary, the contemporary 'governance' concept draws strength from its claim to represent a wider, more holistic concept than 'government' alone, encompassing a move away from traditional hierarchical forms of organisation towards network forms (Hammerschmid, et al. 2016; Malito and Umbach, 2015; Ropret et al., 2018). In the early 2000s, hardly any organisation or territorial entity did not subscribe to the virtues of greater civic engagement, at least verbally. In Western democracies, citizen participation is already recognised as a potential cure against the acute "crisis" of democratic representation (Torcal and Montero, 2006).

Consequently, alternative governance models have been proposed in recent decades aiming to enable better utilisation of public administration employees' potential and a better response to the challenges of modern society (Bach and Bordogna, 2011; Mathis, 2014). Great Britain and New Zealand were pioneers of this movement called New Public Management (NPM), which later spread to many other countries. It is a new form of public sector governance that implements managerial methods from the private sector and market mechanisms (Bach and Bordogna, 2011; Bovaird and Löffler, 2003; Pollitt and Bouckaert, 2011), which is an outcome of the requirements to cut public expenditure as a share of gross domestic product and to better integrate the voice of those addressed by the PA (recipients of public services) and civil servants. New Public Management was used in reforms of various public administrations, most effectively in New Zealand, Great Britain and the United

States of America. In other countries, reservations about NPM started appearing after a decade of trial implementation. They were chiefly based on the lack of integration of citizens and business as a PA counterpart, who were considered to have the role of 'final customers', and the fear that economic-financial interests (as an element from the private sector) would prevail over the public interest (Bovaird and Löffler, 2003). Thus, countries in continental Europe (e.g. the Netherlands, France, Belgium, Italy and Germany) decided on incremental changes to the Weberian model that included new (neo) elements for more contemporary governance, especially on moving from a focus on respecting the internal bureaucratic rules to a focus on rules for externally meeting the needs and desires of citizens through a culture of professionalism. The Neo-Weberian model of governance also complements the role of representative democracy with a series of mechanisms for the executive and legislative authority to consult directly with citizens (Drechsler, 2014; Pollitt and Bouckaert, 2011).

The other alternative for comprehensive contemporary governance is so-called New Public Governance (NPG). It is a modern governance model based on the theoretical assumptions of modern politics and society, especially the democratic sharing of the public administration's formal power with all relevant stakeholders (Osborne, 2010). It originates from Network Theory and presumes a plurality of co-dependent stakeholders who contribute to the quality formation of public services as well as a plurality of administrative processes that contribute information to the system of public policies. Starting from the interpretation that the frequently specialised and fragmentary reforms of PAs have unintentionally produced difficulties for policymakers, who were then no longer able to control all the autonomous 'bits' as they wished, the 'Digital-Era Governance' model has emerged (Pollitt and Bouckaert, 2011). This model stresses the significance of changes in relationships within government, and between governments and their citizens, which are facilitated by contemporary ICTs and is termed "Digital-Era Governance" by its originators Dunleavy et al. (2006). Two of the key themes of this new model are said to be 'reintegration' (putting back together what NPM had pulled apart) and 'needs-based holism' (simplifying the entire relationship between the citizen and the state so that the former only has to go to one website or place to get all their requirements dealt with) (Dunleavy et al., 2006). It is noted that the above models should mainly be understood as theoretical frameworks, which can only have a significant effect in practice if properly adapted to the socio-economic preconditions of a given environment (Pollitt and Bouckaert, 2011). Unsurprisingly, an increasing body of literature is focussing on the analysis of methodological incongruences (Bovaird and Löffler, 2003; Kaufmann, Kraay, and Mastruzzi, 2011; Malito and Umbach, 2015; Singh et al., 2009). At the same time, quantitative evidence concerning the measurement of digital governance (models) is still inadequate (Ropret et al., 2018). Moreover, even the use of quantitative approaches for complex societal problems is inadequate for holistically addressing this complexity. The interdisciplinary nature of public administration also requires that individuals with diverse methodological interests and approaches be included (Ropret et

al., 2018). Finally, there is more insight to be gained from combining qualitative and quantitative research than from either form individually. In researching complex societal phenomena, more than one method should be used in the validation process to ensure the variance reflected is that of the trait and not of the method (Creswell, 2009).

2.2 The research problem

While it is clear that closed, hierarchical governance models will become increasingly untenable (Alford, 2009; Edelmann et al., 2012; Bryson et al., 2014; Malito and Umbach, 2015; Ropret et al., 2018), the research problem faced when analysing the post-NPM literature is the lack of studies examining the multitude of possible public governance models (PGM) with sufficient comprehensiveness, especially in Central and Eastern European (CEE) states. This leads to limitations on the application of concrete governance models in managing/governing the public administration system. Although different works often mention the system of public administration there is in fact no such system: there are only many systems present (Hammerschmid, et al. 2016; Bevir, 2011; Ongaro, 2010; Osborne, 2010; Painter & Peters, 2010; Peters, 2009; Ropret et al., 2018). The public governance models we know of today remain overly idealistic and too general or partial, or do not give details concerning why, how and when any of them will be effective/successful (Kovač and Bileišis, 2017; Pollitt and Bouckaert, 2011). For example, one-size-fits-all solutions neither take account of regional administrative traditions and cultures nor specific national circumstances (De Vries and Nemec, 2013; Drechsler, 2014; Hupe and van der Krogt, 2013). Regarding the legal determination of public administration in Central Europe, and at the same time to resolve interdisciplinary problems, reforms must be managed not only by regulation or management but holistically (Kovač and Jukić, 2016; Ropret et al., 2018). Accordingly, a deficiency of every governance model, such as (Neo) Weberian theory, (post) NPM, good or digital governance, is that the individual model is only useful for particular challenges or areas encountered by politicians and officials (Kovač and Bileišis, 2017). Based on this literature review, the need for a critical evaluation of public governance model (PGM) literature proves as vital in providing the scientific foundations for overcoming complex contemporary public governance issues, related to multi-level governance, delegation of powers and decentralization, business globalization, digitalization, the 4th industrial revolution, migrations, nationalism and interstate conflicts, environmental change and several others. With the regulatory approaches of the 19th and 20th century, we are simply unable to respond any faster to the complexities of the 21st century.

2.3 The aim of the research

The aim of this paper is to perform a bibliometric analysis in order to evaluate the impact of public sector reform from the post-NPM perspective on academic literature. Bibliometrics encompasses statistical analysis of written publications (De Bellis, 2009; OECD, 2013). The method has great value, es-

pecially when using citation analysis to quantitatively assess the core journal titles and watershed publications in particular disciplines; interrelationships between authors from different institutions and schools of thought; and related data about the sociology of academia. This may be achieved through three main groups of bibliometric methods (Archambault and Gagne, 2004; Olczyk, 2016). The first method involves counting numbers of publications in journals during a specific time frame. This may be used for the evaluation and comparison of the research performance of individual researchers, and research institutions (Garfield et al., 1978; Adam 2002; Bornmann et al., 2008). Second, citation analysis is a search for the value or impact of a paper, a journal or a research group (Garfield, 2007; Koskinen et al., 2008). Third, co-citation analysis, co-word analysis and bibliographic coupling are used to study the development of fields in a scientific discipline and to determine linkages among them (Teixeira and Sequeira. 2009).

Consequently, it will be possible for the study to systematically tackle the research problem, related to identification of most influential studies and the lack of studies examining the multitude of possible public governance models (PGM) with sufficient comprehensiveness, especially in Central and Eastern European (CEE) states. Moreover, a critical evaluation of post-NPM literature proves vital in order to provide the scientific foundations for overcoming complex policy issues, related to multi-level governance, delegation of powers and decentralization, business globalization, digitalization, the 4th industrial revolution, migrations, nationalism and interstate conflicts, environmental change and several others. We recognize that modernization of PA is a challenging process due to the several interrelated aspects (Kovač and Jukić, 2016; Ropret et al., 2018). Not surprisingly, this leads to very diverse (partly also conflicting) definitions and methodologies used by scholars (Vitezić et al., 2016). Governance measures have been as diverse as the processes (governance as a tool); structures (governance as a form); inputs (governance as both structure and process, bureaucratic and administrative capacity); and as outputs/outcomes (governance as policies, consequences and results; for more, see Bevir et al., 2011; Polliitt and Bouckaert, 2011; Hammerschmid et al., 2016 etc.). As a consequence of these diverse approaches, the reality of measuring governance remains difficult and is still contested (Vitezić et al., 2016). In addition, the monitoring of efficiency and effectiveness in CEE remains complex also because the objectives and interests of stakeholders are multifaceted. Consequently, when dealing with measures of governance, effectiveness, efficiency, and democracy, policymakers, practitioners and researchers alike are confronted with the need to assess highly different aspects and parts of over-conceptualised and incoherently defined phenomena (Malito and Umbach, 2015). Consequently, practitioners and researchers alike are confronted with assessing quite different interests and challenges (Malito and Umbach, 2015) and, even more importantly, a vast amount of resources is needed to effectively address these challenging phenomena.

In order to address the aforementioned research challenges, three research questions are going to guide our study and, finally, lead to the realization of

the research aim. First (RQ1), the question how the PGM field evolved over time in relation to the number of publications identified is to be addressed. This mainly encompasses the investigation of the growth patterns within PGM literature and gives us insight into the indicated relative importance of the studied field. Going more into detail (RQ2), the study tackles the question who are the core journals and authors as indicated by number of citations. Finally (RQ3), the question of the relations between the most frequently cited documents is going to be addressed. Consequently, we are going to present the main academic trajectory, highlighting the structural backbone (Nooy et al., 2005; Lucio-Arias and Leydesdorff, 2008; Olczyk, 2016) in the development of the PGM field. Moreover, based on addressing these questions, it will be possible to provide specific guidelines for further PGM research, taking into consideration the national legacies of respective countries.

3 Methods

The research methodology followed a systematic approach, encompassing multiple phases. The first phase consisted of identifying all relevant papers within Web of Science database, representing globally one of the most respected sources of research literature. Based on 32 keywords, all possibly relevant scientific papers in relation to public governance models within the fields of public administration, political science and law were downloaded from the WoS database. This resulted in 16,374 publications within a time-span from 1994 to 2017 being identified. In the second phase, these papers were thoroughly evaluated with a view to narrowing the broad set of papers down to 100 most relevant ones. This was done by means of two complementary indicators: based on the total citation count (global citation score – GCS) and the citations per year (GCS/year), 100 highest overall ranking WoS papers with a focus on public governance models could easily be identified, downloaded and separated from less relevant ones.

The third phase encompassed application of bibliometric analysis. This was aided by HistCite 12.03.17, a software package used for bibliometric analysis and information visualization, developed by Eugene Garfield, also the inventor of the Science Citation Index (Apriliyanti and Alon, 2017). Specifically, two bibliometric methods were applied:

1. First, a descriptive analysis of the basic bibliometric indicators (number of publications and citations) to indicate how the PGM field evolved over time in relation to the number of publications (RQ1) and to identify the most-cited publications and authors (RQ2).
2. Second, we apply a bibliometric method called citation network analysis, based on cited references, to discover the relations between the most-cited publications (Small, 1973). Based on the recommendation of Griffith et al. (1974), we selected the 100 most-cited publications and aimed towards the visual presentation of the relations among these publications associated with the development of the PGM field. This was achieved with a historiograph (Figure 3), where the vertical axis represents time, the hori-

zontal axis shows citation network nodes and arrows show the relationship between the cited publications (Olczyk, 2016).

This allowed for a comprehensive numerical and graphical presentation of the evolution of the PGM literature, as reflected by the identified main authors, journals, publications, and relations among the latter. Moreover, based on the identified bibliometric patterns within the literature, it was be possible to provide guidelines for further (post-NPM) governance model research.

4 Results

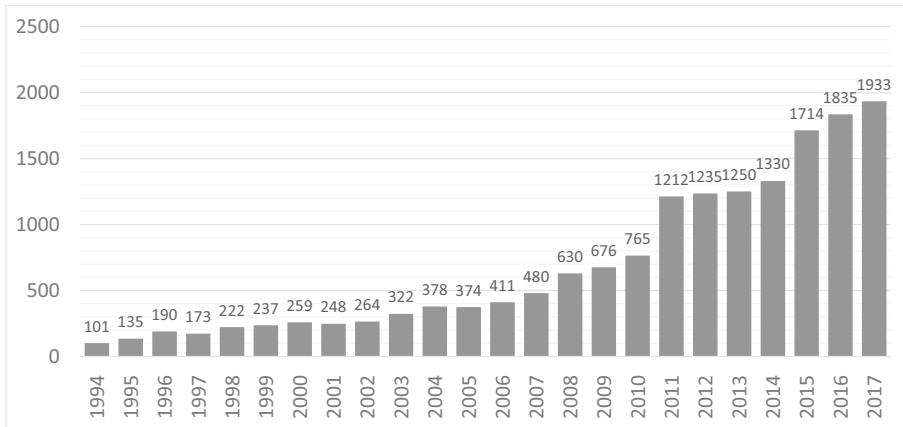
The research results of the bibliometric analysis reveal several interesting insights into public governance model research. Following elements of analysis are presented: (i) an investigation of the evolution of the PGM literature (RQ1) based on publication frequency, (ii) an identification of the core publications and authors (RQ2), (iii) the citation network analysis (a historiograph), indicating the relations among most-cited publications (RQ3).

4.1 Publication frequency

The research results reveal growing research interest in the topic of public governance models (Figure 1): in 1994, slightly over 100 WoS publications a year were relevant, with the number rising to 322 units in 2003 and to even higher values in 2008 and later on. That indicates the growing attention in the quest of finding optimum public governance models after the emergence of the global social & financial crisis in 2008 and subsequent challenges, related to migration issues, the rise of extremist right-wing parties, populism, ecological issues and several others calling for an efficient and effective response of the public administration. Among the most covered sources in terms of publication frequency were highly respected journals in the PA field, underlining the relevance and quality of our methodological approach: International Review of Administrative Sciences, International Journal of Public Sector Management, Public administration, Public Management Review, International Journal of Public Administration, and Public Administration Review.

Moreover, it can be observed within Figure 2 that most of the authors belong to the Anglo-American-Australasian group of countries, followed by Continental European and Nordic countries. Therefore, we must recognize the indication that lacking research within other regions may inhibit more reliable scientific guidelines about PGM implementation and development. This holds true particularly for regions with a comparably low level of administrative and economic development (e.g. several countries in Eastern Europe/CEE, Asia and Africa). The need for further PGM research in these regions is additionally underlined by the fact that, compared to the good foreign practices of reforming public administration and developing new governance models, comprehensive interdisciplinary approaches are often lacking in these countries (Kovač and Jukić, 2016). More insights into the content of the studies will be provided in the next subsection, namely by identifying the individual most influential PGM publications, their authors and corresponding titles.

**Figure 1: WoS publications concerning PGM (1994-2017):
number of papers per year.**



Source: Authors' own calculation based on the database created ($N = 16,374$).

4.2 Core publications and authors

This analysis begins with identification of the most important publications based on the achieved values of global citations (Table 1). Due to space limitations, the table presents a short summary of the 100 globally most highly-cited publications in the WoS database (10 highest ranked papers, per each of three time periods, based on global citation score (GCS)).

The globally most cited publication in the period 1994-2002 (and also our whole database of research on post-NPM governance) is the paper *The new governance: Governing without government* by Rhodes (1996) which is focused on the 'governance' paradigm, defining governance as 'self-organizing, interorganizational networks'. Moreover, it argues these networks represent a highly important feature of public service delivery in Britain. This dominant focus on the 'governance' paradigm is also reflected throughout the influential papers within the whole period 1994-2002.

Moving on to the next time interval (2003-2011), the globally most cited publication is *Collaborative governance in theory and practice* by Ansell and Gash (2008), which is focused on the Collaborative governance paradigm. This mode brings public and private stakeholders together in collective forums with public agencies to engage in consensus-oriented decision making. The paper identifies critical variables that will influence whether or not this mode of governance will produce successful collaboration. Also, it identifies numerous factors that are crucial within the collaborative process itself. These factors include face-to-face dialogue, trust building, and the development of commitment. Different modes of governance and concretization of the concept itself in various forms seems to be the focus of several other papers in this period as well (e.g. *Network governance*, *Digital-era governance*, *E-government*...).

Table 1: Summary of the 100 globally most highly-cited publications in the WoS database (30 highest ranked papers in selected time period presented, based on global citation score (GCS)).

ID	AUTHOR(S)	TITLE	YEAR	SOURCE	TITLE	GCS	GCS/ YEAR	PERIOD
2	Rhodes, RAW	The new governance: Governing without government	1996	POLITICAL STUDIES		1319	54.96	
8	Moon, MJ	The evolution of e-government among municipalities: Rhetoric or reality?	2002	PUBLIC ADMINISTRATION REVIEW		684	38.00	
6	Denhardt, RB; Denhardt, JV	The New Public Service: Serving rather than steering	2000	PUBLIC ADMINISTRATION REVIEW		461	23.05	
10	Ho, ATK	Reinventing local governments and the e-government initiative	2002	PUBLIC ADMINISTRATION REVIEW		433	24.06	
1	Dunleavy, P; Hood, C	FROM OLD PUBLIC-ADMINISTRATION TO NEW PUBLIC MANAGEMENT	1994	PUBLIC MONEY & MANAGEMENT		384	14.77	
9	Sanderson, I	Evaluation, policy learning and evidence-based policy making	2002	PUBLIC ADMINISTRATION		353	19.61	
4	Lowndes, V; Skelcher, C	The dynamics of multi-organizational partnerships: An analysis of changing modes of governance	1998	PUBLIC ADMINISTRATION		343	15.59	
7	Freeman, J	The private role in public governance	2000	NEW YORK UNIVERSITY LAW REVIEW		304	15.20	
5	Williamson, OE	Public and private bureaucracies: A transaction cost economics perspective	1999	JOURNAL OF LAW ECONOMICS & ORGANIZATION		295	14.05	
11	Vigoda, E	From responsiveness to collaboration: Governance, citizens, and the next generation of public administration	2002	PUBLIC ADMINISTRATION REVIEW		274	15.22	

1994–2002

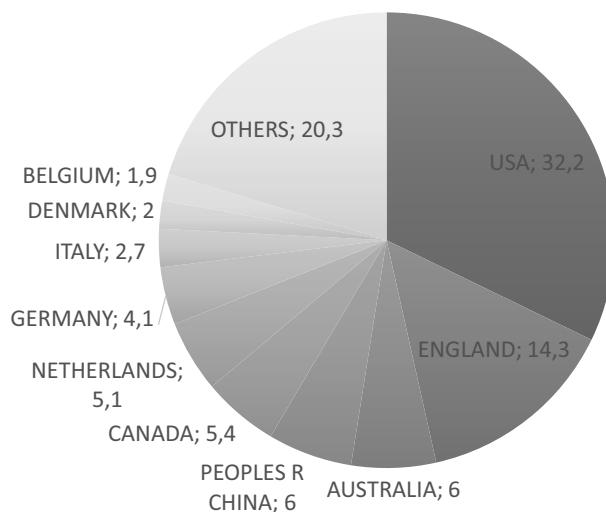
2003-2011

ID	AUTHOR(S)	TITLE	YEAR	SOURCE TITLE	GCS	GCS / YEAR	PERIOD
54	Ansell, C; Gash, A	Collaborative governance in theory and practice	2008	JOURNAL OF PUBLIC ADMINISTRATION RESEARCH AND THEORY	1088	90.67	
55	Provan, KG; Kenis, P	Modes of network governance: Structure, management, and effectiveness	2008	JOURNAL OF PUBLIC ADMINISTRATION RESEARCH AND THEORY	941	78.42	
35	Dunleavy, P; Margetts, H; Bastow, S; Tinkler, J	New public management is dead - long live digital-era governance	2006	JOURNAL OF PUBLIC ADMINISTRATION RESEARCH AND THEORY	565	40.36	
14	Irvin, RA; Stansbury, J	Citizen participation in decision making: Is it worth the effort?	2004	PUBLIC ADMINISTRATION REVIEW	550	34.38	
15	West, DM	E-government and the transformation of service delivery and citizen attitudes	2004	PUBLIC ADMINISTRATION REVIEW	529	33.06	
47	Bovaird, T	Beyond engagement and participation: User and community coproduction of public services	2007	PUBLIC ADMINISTRATION REVIEW	498	38.31	
36	Fung, A	Varieties of participation in complex governance	2006	PUBLIC ADMINISTRATION REVIEW	493	35.21	
37	Bevan, G; Hood, C	What's measured is what matters: Targets and gaming in the English public health care system	2006	PUBLIC ADMINISTRATION	487	34.79	
27	Levi-Faur, D	The global diffusion of regulatory capitalism	2005	ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE	432	28.80	
67	Loorbach, D	Transition Management for Sustainable Development: A Prescriptive, Complexity-Based Governance Framework	2010	GOVERNANCE	431	43.10	

ID	AUTHOR(S)	TITLE	YEAR	SOURCE TITLE	GCS	GCS / YEAR	PERIOD
76	Emerson, K; Nabatchi, T; Balogh, S	An Integrative Framework for Collaborative Governance	2012	JOURNAL OF PUBLIC ADMINISTRATION RESEARCH AND THEORY	424	53.00	
77	Bonson, E; Torres, L; Royo, S; Flores, F	Local e-government 2.0: Social media and corporate transparency in municipalities	2012	GOVERNMENT INFORMATION QUARTERLY	286	35.75	
78	Seyfang, G; Haxeltine, A	Growing grassroots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions	2012	ENVIRONMENT AND PLANNING C-GOVERNMENT AND POLICY	275	34.38	
84	Schmidt, VA	Democracy and Legitimacy in the European Union Revisited: Input, Output and 'Throughput'	2013	POLITICAL STUDIES	204	29.14	
79	Bennett, WL	The Personalization of Politics: Political Identity, Social Media, and Changing Patterns of Participation	2012	ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE	203	25.38	
85	Fukuyama, F	What Is Governance?	2013	GOVERNANCE	192	27.43	
86	Osborne, SP; Radnor, Z; Nasi, G	A New Theory for Public Service Management? Toward a (Public) Service-Dominant Approach	2013	AMERICAN REVIEW OF PUBLIC ADMINISTRATION	188	26.86	
93	Voorberg, WH; Bekkers, VJGM; Tummers, LG	A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey	2015	PUBLIC MANAGEMENT REVIEW	174	34.80	
94	Head, BW; Alford, J	Wicked Problems: Implications for Public Policy and Management	2015	ADMINISTRATION & SOCIETY	170	34.00	
91	Bryson, JM; Crosby, BC; Bloomberg, L	Public Value Governance: Moving beyond Traditional Public Administration and the New Public Management	2014	PUBLIC ADMINISTRATION REVIEW	152	25.33	
2012-2017							

Source: Authors' own calculation based on the database created (N = 100).

Figure 2: WoS publications concerning PGM (1994-2017):
geographical coverage in % (based on author affiliation)



Source: Authors' own calculation based on the database created (N = 16,374).

In the period 2012-2017, we can identify the paper of Emerson, Nabatchi and Balogh (2012) An Integrative Framework for Collaborative Governance as most highly cited in terms of the global citation score. The paper synthesizes a suite of conceptual frameworks, and presents an integrative framework for Collaborative governance.

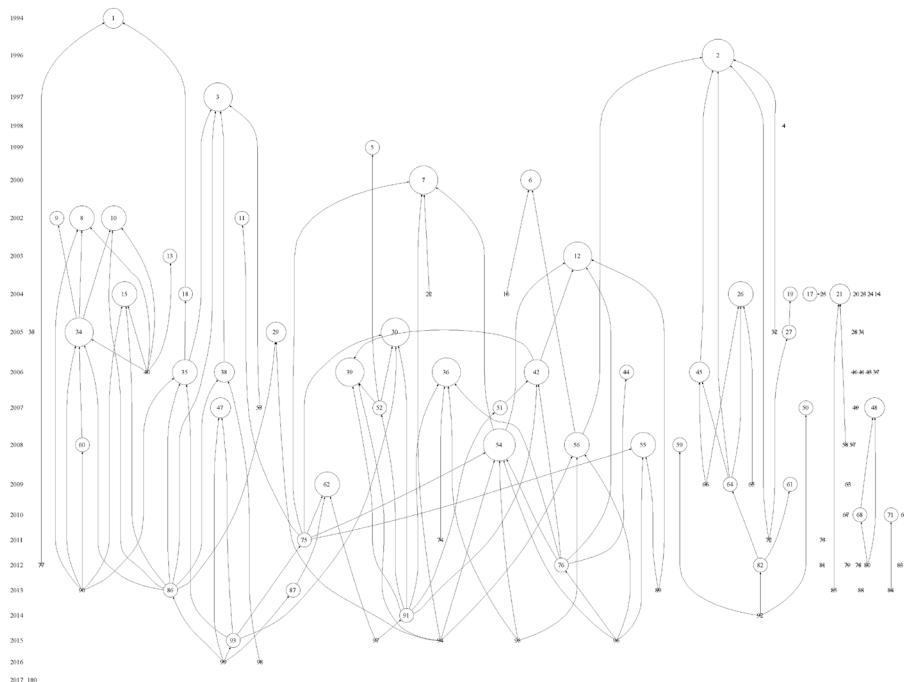
The framework specifies a set of dimensions that encompass a systemic context, a Collaborative governance regime, and its internal collaborative dynamics that can generate impacts across the systems. Related to the performance of the various governance paradigms in practice, papers in this time period are particularly aimed at a critical rethinking of the governance paradigm and related (sub)models, the critical analysis and at presenting highly integrated frameworks for PGM analysis and implementation, aimed at solving 'wicked' administrative problems (e.g. Head and Alford, 2015; Bryson et al., 2014; Voorberg et al., 2015). Also of great interest is the finding that the majority of the most-cited publications (56%) focus entirely on either good governance, Collaborative governance and Network governance. This indicates a possible lack of focus on other possible governance models (NPM, (Neo)-Weberian, Digital-era and others) and, even more importantly, a lack of scientific guidelines for effective and efficient implementation of the latter in appropriate administrative settings.

4.3 Citation network analysis

Next, the relations among most-cited publications are going to be investigated through citation network analysis. The best tool for visualization of such

relationships is a historiograph (Olczyk, 2016). It involves drawing a citation network among highly cited papers, depicting the development of the PGM subject over the selected timeframe of three decades. In HistCite, it is recommended to narrow down the huge population of papers and citations that constitute the sample to the most cited ones, in order to make the citation links manageable and accordingly transparent. Therefore, the 100 most influential publications in the database were selected for the historiograph development (Figure 3). The vertical axis represents time and the horizontal axis shows citation network nodes. Each node (a circle in the diagram) refers to a single publication with a unique identifier (ID; identical to Table 1) in the database. Arrows show the relationship between the cited publications, while the size of the node reflects the number of local citations (LCS) in the sample (bigger size reflects higher number of local citations in the database of 100 units).

Figure 3: Historiograph of the locally most highly-cited publications in the WoS database (N = 100).



Source: Authors' own calculation based on the database created (N = 100) and the local citation score (LCS).

Chronologically, the first amongst the most-cited publications in the database relates to the paper of Dunleavy and Hood (NODE 1) From old public-administration to New public management (1994, LCS = 2), which underlines the importance of the 'New Public Management' paradigm, arguing that NPM has proved a fairly durable agenda. Also, future challenges for NPM are discussed: such as the risk of inappropriate copying; and issues about the core compe-

tencies of public sector agencies. One should take note; however, that this paper was later cited by one of these authors, namely within Hood's (NODE 17) *The middle aging of new public management: Into the age of paradox?* (2004, LCS = 1), which emphasizes paradoxical effects of NPM reforms and in this light argues that it is particularly the analysis of such paradoxes that can help advance public sector reform. As such, a more critical stance towards NPM is presented and its limitations recognized.

Continuing throughout chronological appearance, one can immediately notice a set of influential papers, related to a different post-NPM paradigm, namely 'governance' (NODES 2, 3, and 7). Starting with (NODE 2) *The new governance: Governing without government* by Rhodes (1996, LCS = 5), the notion of governance as 'self-organizing, interorganizational networks' is emphasized as most important feature of administrative service delivery in Britain. Moreover, the network elements of trust and mutual adjustment are particularly underlined. Kickert's (NODE 3) *Public governance in the Netherlands: An alternative to Anglo-American 'managerialism'* (1997, LCS = 4) criticizes the one-sidedness of 'managerialism' in NPM and suggests 'public governance' as it not only possesses theoretical and analytical cogency but also reflects the practice of complex administrative developments. Also, Freeman's (NODE 7) *The private role in public governance* (2000, LCS = 4) proposes a conception of governance as a set of relationships between public and private actors, based on negotiations over policy making, implementation, and enforcement, consequently decentralizing the decision-making process.

The majority of the aforementioned (mainly theoretical) notions of 'governance' seem to have influenced a range of papers, appearing at the start of the 21st century. One stream of such papers is examining the development trajectories of the e-government paradigm. Moon's (NODE 8) *The evolution of e-government among municipalities: Rhetoric or reality?* (2002, LCS = 3) examines the current state of municipal e-government implementation, concluding that e-government has been adopted by many governments, but has not delivered many of the expected outcomes (cost savings, downsizing, etc.), as promised. From a similar perspective, Ho's (NODE 10) *Reinventing local governments and the e-government initiative* (2002, LCS = 3) analyzes the socioeconomic and organizational factors that are related to cities' e-government progressiveness. Based, on a content analysis of best practices, customer-oriented principles, collaboration and networking in the development process rather than technocracy are outlined as highly important success factors. Aside from this, also the challenges in reinventing government through Internet technology are emphasized. The past decade has witnessed a growing interest among scholars of international relations, and global environmental governance in particular, in the role of transnational networks within the international arena. While the existence and potential significance of such networks has been documented, many questions concerning the nature of governance conducted by such networks and their impact remain. We contribute to these debates by examining how such networks are created and maintained and the extent to which they can foster policy learning

and change. We focus on the Cities for Climate Protection (CCP) program, a network of some 550 local governments concerned with promoting local initiatives for the mitigation of climate change. It is frequently asserted that the importance of such networks lies in their ability to exchange knowledge and information, and to forge norms about the nature and terms of particular issues. However, we find that those local governments most effectively engaged with the network are mobilized more by the financial and political resources it offers, and the legitimacy conferred to particular norms about climate protection, than by access to information. Moreover, processes of policy learning within the CCP program take place in discursive struggles as different actors seek legitimacy for their interpretations of what local climate protection policies should mean. In conclusion, we reflect upon the implications of these findings for understanding the role of transnational networks in global environmental governance. Building on the aforementioned papers' propositions, Advancing e-government at the grassroots: Tortoise or hare? (NODE 34) by Norris and Moon (2005, LCS= 4) finds in an empirical study that e-government adoption is progressing rapidly only if measured by web site development. However, holistic approaches towards an integrated and transactional e-government are still lacking. Also, related to advancing e-government towards a more integrated and collaborative "whole of government" solution is the work (NODE 35) New public management is dead - long live digital-era governance by Dunleavy, Margetts, Bastow and Tinkler (2006, LCS = 3). It stresses an emerging post-NPM agenda, which has 'digital era governance' changes at its core, focusing on the reintegration of services, holistic and 'joined-up' approaches to policy-making, and the extensive digitalization of administrative and public service design. Another stream of papers is underlining the need and possibilities of enhancing the collaborative aspect of governance. For example, McGuire's (NODE 42) Collaborative public management: Assessing what we know and how we know it (2006, LCS = 3) addresses the components of emerging collaborative structures, and the types of skills that are required for Collaborative governance. Bovaird's (NODE 47) Beyond engagement and participation: User and community coproduction of public services (2007, LCS = 2) even goes beyond collaboration as it presents a conceptual framework of user and community coproduction and presents several case studies that illustrate the usefulness of the concept itself.

Particularly in the period from 2008 on (presumably due to implications of the socio-economic crisis and related emerging issues), one can notice a more frequent appearance of papers, critically analysing the current 'governance' paradigms' effectiveness in light of new PA challenges and wicked problems. For example, the paper Wicked problems, knowledge challenges, and collaborative capacity builders in network settings (NODE 56) by Weber and Khamidian (2008, LCS = 3) underlines the many positive attributes of (network) governance such as the capacity to solve problems, govern shared resources, and address shared goals. Yet, the authors emphasize that in governing complex public, or "wicked," problems, issues, related to the transfer, receipt and integration of knowledge must be addressed. Also, Making governance networks effective and democratic through metagovernance (NODE 59) by

Sorensen and Torfing (2009, LCS = 3), recognizes that governance through networks of public and private actors might help solve wicked problems and enhance democratic participation, while it may also create conflicts and deadlocks and make public governance less transparent and (consequently) accountable. Therefore, careful metagovernance by politicians, public managers and other relevant actors is necessary. Similarly, building on the collaborative governance paradigm, Collaborative governance in theory and practice (NODE 54) by Ansell and Gash (2008, LCS = 5), identifies critical variables for successful collaboration across a range of policy sectors, including the prior history of conflict or cooperation, the incentives for stakeholders to participate, power and resources imbalances, leadership, and institutional design. In Provan's and Kenis's (NODE 55) Modes of network governance: Structure, management, and effectiveness (2008, LCS = 3), the tensions inherent in different forms of governance are discussed, along with conditions for the effectiveness of each form and the role that management may play in addressing these tensions. Also, for example, A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey (NODE 93) by Voorberg, Bekkers and Tummers (2015, LCS = 1) shows that most studies focus on the identification of influential factors, while hardly any attention is paid to the outcomes, implying that future studies should focus on outcomes of co-creation and co-production.

While limited, some recent development in addressing limitations of current collaborative public governance approaches and seemingly introducing new paths for PGM progress, seems to be already underway. Namely, Wicked Problems: Implications for Public Policy and Management (NODE 94) by Head and Alford (2015, LCS = 0), builds on the literatures on systems thinking, collaboration and coordination, and the adaptive leadership roles in order to provide at least some provisional solutions in addressing administrative problem complexity and stakeholder divergence. Also, for example, Meijer's and Bolivar's (NODE 98) Governing the smart city: a review of the literature on smart urban governance (2016, LCS = 0) highlights the importance of new forms of human collaboration through the use of ICTs to obtain better outcomes and more open governance processes, benefiting from previous studies about the limitations of e-government and collaborative governance paradigms. Yet, in terms of excellent scientific literature, providing reliable guidance on governance paradigms, addressing contemporary governance challenges, evidence still seems to be in short supply.

5 Discussion

The aim of our paper was to consolidate the state of the art of academic research on modern post-NPM public governance models (PGM). By means of bibliometric analysis we tried to address three main research objectives (and related research questions): (i) an investigation of the evolution of the PGM literature (RQ1) based on publication frequency, (ii) an identification of the core publications and authors (RQ2), and (iii) the citation network analysis (a historiograph), indicating the relations among most-cited publications (RQ3).

As regards the first research question (RQ1), the results of our study indicate growing research interest in the topic of public governance models. This has to be welcomed, as at a time of highly complex public problems and limited resources, scientific guidelines for efficient and effective public governance models are a key part of effectively and efficiently coping with tomorrow's societal challenges (Edelmann et al., 2012; Hilgers and Ihl, 2010; Malito and Umbach, 2015; Welzel and Alexander, 2008; Aristovnik, 2012). The finding is also in line with previous research (e.g. Alford, 2009; Edelmann et al., 2012; Malito and Umbach, 2015), claiming that closed, hierarchically governed models will be increasingly untenable. Yet, while our paper reveals growing research interest in the topic of public governance models, there are several research gaps, which we think should be overcome in order to build an adequately holistic basis for effective and efficient governance.

Namely a further analysis, concerned with the question (RQ2) of most influential publications and authors, revealed a vibrant development of publications, focusing particularly on the public governance doctrine and the ongoing quest for improvements with regard to administrative challenges. Also, these influential publications, are focusing primarily on the Anglo-American-Australasian and Continental European region (as regards the authorship and consequently also the content), leaving out the CEE region and its particularities (post-socialism, Rechtsstaat culture, EU membership, small states etc.). The unfavorable situation is intensified by the fact that institutional capacity for effective administrative reforms in the CEE regions is limited and consequently, most administrative reforms represents relatively ineffective "trial and error" approaches (Bouckaert et al., 2008; Bouckaert et al., 2011; de Vries and Nemec, 2013). Also, there are other important challenges in the CEE countries, as in the early 1990s many of these had just established a PA framework based on the rule of law, while shortly after this experiencing the challenge of introducing managerial systems and techniques in the PA (Kickert, 2008; Ropret et al., 2018). This duality frequently led to the relatively conservative modifications of the traditional Weberian bureaucratic governance model (the Neo-Weberian model), while modern paradigms of public sector governance are more characteristic of Great Britain and the USA (New Public Management or NPM, New Public Governance, hybrid models), environments characterized by a stronger orientation towards the user and the transfer of competitive elements from the private sector to the public one (Hammerschmid et al., 2016; Pollitt and Bouckaert, 2011).

Next, we visually presented a historiograph, which showed the relations (i.e. citation links) among mostly influential publications (RQ3), where a process of ongoing PGM development was indicated. In particular, a group of influential papers was identified, introducing the 'governance' paradigm in broadest (theoretical) sense (e.g. Rhodes, 1996; Kickert, 1997; Freeman, 2000), entailing a move away from traditional hierarchical forms of organization, the adoption of network forms and a revision of the relationship between the state and civil society in a more participatory direction. These ideas served as a starting point for concretization and advancement into various public

governance (sub)models, particularly the e-government and Digital-era paradigms (e.g. Dunleavy et al., 2006; Ho, 2002, Moon, 2002). Also, especially in the period after the socio-economic crisis (i.e. from 2008 on), we noticed a vibrant development of papers, critically analysing the state of current 'governance' paradigms' in light of new PA challenges and wicked problems. This led to several additional PGM concretization proposals, such as Collaborative governance, Network governance and Smart governance (e.g. Provan and Kenis, 2008; Sorensen and Torfing, 2009; Voorberg, Bekkers and Tummers, 2015). Consequently, some support for the existence of an administrative layering process rather than paradigm substitution is supported, encompassing building blocks of earlier paradigms (where supported by administrative theory and practice), while also proposing additional ones (Iacovino, Barsanti, and Cinquini, 2015). Moreover, few of the highly influential papers were inspired by NPM research and the possibilities of advancing the NPM agenda. Similar applies to the (Neo)-Weberian model. Consequently, the presented paradigms may be relatively well suited for subjective, pluralistic, or Western (post-NPM) governance. Yet, these publications are not directly tackling CEE regions' particularities (post-socialism, Rechtsstaat culture, EU membership, small states etc.), making the proposed PGM implementation within this region questionable.

6 Conclusion

The process of modernizing PA is complex due to several barriers such as contradictory incentives, vertical structures, employee job security rules, citizen-centric services and privacy issues, as to which no easy solutions exist (Fountain, 2004; Janssen and van der Voort, 2016; Hammerschmid, et al. 2016; Ruud, 2017). Moreover, numerous substantive areas, such as the modernization of organizational structures and administrative procedural law, the rationalization and modernization of the civil service system and the improvement of the pay system, the development of e-government and innovation in governance must be taken into account. In Europe, there have been high expectations of significant cost savings through PA modernization (Ruud, 2017). The purpose is to improve performance and provide benefits for the citizens. Yet, according to our research, not enough effort has been made to analyse the impact of modernization in the public sector, especially in Central and Eastern European countries. Namely, while several governance model proposals can be identified, such as Digital-era governance, Collaborative governance, Network governance and Smart governance, the main issue about how to build a consensus around the enduring socio-political values and traditions remains. Also, this leaves open multiple possibilities of how, and towards what ends, power might be exercised (Gisselquist, 2012; Ikeanyibe, Eze Ori and Okoye, 2017). Especially in Central and Eastern European countries, where scientific foundations concerning PA modernization are still fragmentary (Kovač and Jukić, 2016). By their very nature, the study of complex systems, such as the public administration system, requires the observer to incorporate adequate holism (Keating, 2014; Mulej et al., 2008; Whitney

et al., 2015). Consequently, limiting the study to parts rather than the whole system induces a lack of knowledge about the functioning of the system as a whole and, even more importantly from this paper's standpoint, leads to limitations and incorrect decisions in modernizing the PA.

A thorough modernization of the PA requires an integrated approach to technology, processes and people to manage the availability and sustainability of processes (Janssen and van der Voort, 2016; Nograšek and Vintar, 2015; Savoldelli et al., 2014; Yıldız, 2016). In the organizational structure and culture, all elements are interdependent (a change in one element cause changes in another element) both within and between organizational levels (Janssen and van der Voort, 2016; Nograšek and Vintar, 2015; Savoldelli et al., 2014; Yıldız, 2016). Reforms must be managed not only by regulation or management but holistically (Kovač and Jukić, 2016; Ropret et al., 2018), founded on principles of good governance, such as accountability, effectiveness and efficiency, rule of law, transparency, participation, equity and inclusiveness, consensus orientation and responsiveness. While there are frequently trade-offs of one principle being prioritized at the expense of another, legalism and neo-liberalism are often among the core causes of PA reforms (Ropret et al., 2018; Kovač and Jukić, 2016). Further, the multi-level governance from the perspective of Central and Eastern European countries is characterized by a largely hierarchical structure, and there is a mismatch of the old hierarchical structures and new institutions that emerged during and after the period of transition, often causing vertical coordination problems (Kluváková-Oravská and Chobotová, 2010). Similarly, the evaluation from the perspective of small European states also unearths some interesting facts. In small EU countries hardly any involvement of subnational actors in policy-making processes or in networking can be observed and also those countries subnational actors are weak relative to those at the national level (Kull and Tatar, 2015). PGMs, involving a multi-level systemic approach and collaboration between state and civil society policy actors are fundamental for creating an innovative policy environment. Above all, new models of governance can improve the role of a postmodern public administration in the policy process. Moreover, such tailored and at the same time holistic approaches towards PA modernization could in many cases serve as an antagonistic tool and a response to uneven development.

Finally, we recognize the limitations of our study. One vital shortcoming stems from the fact that, due to limited available time and the faced financial constraints, it was not possible to include scientific papers from all relevant databases. Therefore, the foundations for our analysis were built on 16,374 publications from the Web of Science database, representing a globally recognized source of world-class research literature, linked to a rigorously selected core of journals. Moreover, one of the shortcomings stems from the low number of papers available, especially in the CEE states. Related to this limitation, is another one, namely that the availability of more country-specific studies might have given even more insights about the state of PGM development and impacts. We recognize that one-size-fits-all solutions neither

take into account regional administrative traditions and cultures nor specific national circumstances (Bouckaert et al., 2008; de Vries and Nemec, 2013; Hupe and van der Krogt, 2013; Drechsler, 2014; Nemec, 2014; Ropret et al., 2018). Hence, a more thorough PGM and regional specifics representation from the governance perspective must be further taken into account within the post-NPM research. Along with this, the socio-administrative particularities of entities at different governance levels have to be encompassed in literature as well, allowing for an effective diffusion of the public governance models within the literature, and furthermore, in the CEE and other states' administrative practice.

Acknowledgements

The authors gratefully acknowledge the project The Development of a Holistic Governance Model for an Efficient and Effective Slovenian Public Administration (No. J5-8238) was financially supported by the Slovenian Research Agency.

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