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# BIBLIOMETRIC REVIEW OF CORPORATE GOVERNANCE THEORIES AND METHODS

The aim of the paper is to carry out a bibliometric review of corporate governance theories and methods. The bibliometric review covers 2322 titles and 11598 keywords for the period 1999-2016. The data were extracted from the SSRN's electronic library.

The paper identifies Top 10 corporate governance theories and methods. The results of bibliometric review define the Agency theory and evidence as a most common theory and method respectively. The Top 10 theories in corporate governance are taken from close scientific fields and the methods used are universal for all sciences. JEL: C89; G34

## Introduction

Corporate governance emerges as a preferred form of capital accumulation and is broadly implemented thanks to its ability for easy control of management. Corporate governance is entering in the public agenda after a series of scandals based on unfair practices by leading audit firms. It can be argued that corporate governance is included in the science agenda when it goes beyond the company boundaries and has a negative impact on the society. We shall analyze which internal processes in the corporation have become known to the external environment, i.e. by analogy with *camera obscura* in parallel we shall perform a look into the corporation and go beyond its boundaries.

In dynamics of market economy the volume of researches on corporate governance is growing and at the same time corporate governance principles remain insufficiently well-known (Ahrens, Filatotchev & Thomsen, 2011). The basis for such an assertion stems from the different characteristics of individual companies and attempts to analyze common characteristics of these companies. The interdisciplinary feature of corporate governance contributes to the application of theories and methods of several sciences, which further complicates the conduct of reviews and the definition of most common theories and

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methods.<sup>2</sup> For example, implementation of the legal "Principal-agent" model in economics draws attention unilaterally to the "bundle" of contracts only, and stakeholders remain in the background.

The new economic reality is related to an increased interest in corporate governance. Good practices are widely implemented thanks to their reflection in research publications (Tsvetanova, 2014). Our analysis is focused on a bibliometric review of publications in the fields of corporate governance and we, therefore, hope to contribute for reflection and implementation of good practices. In accordance with the modern economic reality we formulate the following research hypotheses:

H1: Publications of corporate governance follow the trend of general economic dynamics;

H2: Corporate governance is a part of the economics science and therefore uses economics theories and methods.

Our review has a three-part structure. In the first part, we describe the review methodology, including a bibliometric analysis and a web database of research publications. The second part contains the main results for most common theories and methods of corporate governance. The third part presents conclusions and recommendations from the review and paves the way for further researches in the fields of corporate governance.

## Methodology

Relatively at the same time when corporate governance becomes a subject of scientific reviews, a new science is born – the bibliometrics. In 1969 A. Pritchard introduces the bibliometrics as a quantitative analysis based on mathematical and statistical methods (Pritchard, 1969). With the dynamics of computer storage of data and their sharing, as well as a change in publishers' policy, it is now possible for corporate governance experts to carry out their own bibliometric review at a professional level.

Due to a lack of consent for the most common theory in corporate governance, we will review a multiplicity of existing theories. Given the interdisciplinary nature of corporate governance, it is advisable to use a bibliometric review (Engwall, Blockmans & Weaire, 2014). It is a deductive approach for quantitative review (Blockmans, Engwall & Weaire, 2014). In some sciences, the bibliometrics is a well-established practice and recognized as a tool for solving the access to scarce resources at the institutional level (Nedelcheva, 2017). By applying a bibliometric review to corporate governance publications, we will reduce the impact of our own perceptions on the review, and the data will be objective. The key advantage of bibliometric review is the high degree of objectivity as the review is carried out after the publication of the data and without direct contact with the author (Durisin & Puzone, 2009).

<sup>3</sup> There is an approach based on subjectivism – carrying out a review of keywords selected by experts through a "brainstorming" (Furrer, Thomas & Goussevskaia, 2008).

<sup>&</sup>lt;sup>2</sup> There are 14 dimensions of corporate governance after carrying out a review of 39 structural measures in 2106 companies (Larcker, Richardson & Tuna, 2007).

We will try to explain the theories of corporate governance by using a bibliometric review. In this way, we will define and analyze the theories instead of generating a new theory as is in the case with the use of inductive approaches.

As a source of information, we will use the Web-based Social Science Research Network (SSRN). The database is established in 1994 for free access to published papers, including to forthcoming papers. Some authors recommend the SSRN as a data source due to its wide range of topics and its significant history (International Association of Scientific, Technical and Medical Publishers, 2015). At the time of carrying out the bibliometric review, the SSRN's eLibrary provides more than 650,000 research papers from more than 360,000 researchers across 30 disciplines.

Our bibliometric review starts from 1999 – a core year given the formulation of OECD principles on corporate governance and their implementation at a local level through national codes of good practice.<sup>4</sup> We will accept 2016 as a final year for the bibliometric review, which is inconsistent with the established practice of databases with impact factor for a time lag of two years between the year of publication in a journal and the year of adding in a database.

## Results

Our bibliometric review includes all publications from SSRN that contain in their titles the word combination "corporate governance". For the period 1999-2016, total 2322 publications correspond to this criterion. The analyzed publications have 11598 keywords, 14140 citations, 4249 authors, and 81790 pages.

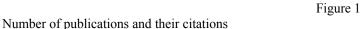
Our data outline two stages of corporate governance publications (see Figure 1). In first stage, 1999-2010, the number of publications is increasing.<sup>5</sup> We identify two local maximums – unfair audit practices in the USA (2003) and the start of the global financial crisis (2008).<sup>6</sup> The number of publications in the second stage (2011-2016) reflects measures to reduce the effects of global financial crisis by introducing of new roles for corporate governance (for example, a target shift to stakeholders instead of to shareholders).

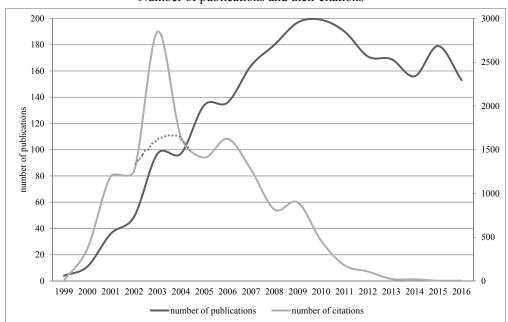
<sup>&</sup>lt;sup>4</sup> The OECD principles are globally recognized as an international benchmark for good corporate governance practices after their publication in 1999 (Jain & Rezaee, 2006).

After 1980s, the number of scientific journals and articles increased by an average of 3% each respectively. The reason for growth is explained by the increase in number of researchers internationally (International Association of Scientific, Technical and Medical Publishers, 2015).

<sup>&</sup>lt;sup>6</sup> As stated in the introduction, when reviewing publications from scientific journals, the time lag between the year of the event and the year of event reflection should be taken into account. In most cases, this lag can be explained with the time it takes to find a case and its analysis by the author, as well as the technological time of the publishing houses for reviewing and publishing the paper. Last but not least, the time lag includes the time to add the paper to a database, e.g. for Scopus the time lag is two years since the paper was published in a journal and the paper was added in the database.

The number of citations follows the dynamics of publications until 2004. Since the same year, the trend for publications has been rising, while citations are fall. It is recommended to analyze this finding by a meta-analysis of citations' quality as the quantitative approach used has limited capabilities.



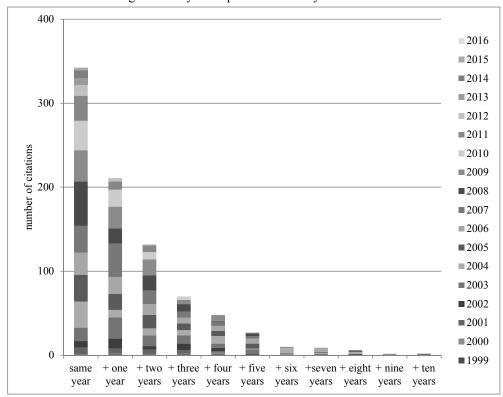


In the beginning of the reviewed period, the publications are mostly conceptual in their content and were cited throughout the whole reviewed period. Since 2005, a time lag has started – the publications have been cited for first time two years and more after their publication. The peak of a number of citations in 2007 and subsequent years is due to the citation in the first three years following the year of publication. There is a peak in the first years after publishing and a further decline – this dependence is on quantitative publications (see Figure 2).

<sup>&</sup>lt;sup>7</sup> The peak of citations in 2003 is due to one publication entitled "Corporate Governance and Equity" by P. Gompers, J. Ishii & A. Metrick, which has 1281 citations. The results will be different if we ignore the number of citations for this publication. The new situation is presented on the graph with dashed line.

<sup>&</sup>lt;sup>8</sup> Authors from the start-up period of corporate governance have a great impact on good practices, and modern researches are not able to assess their contribution (Durisin & Puzone, 2009).

Figure 2 Time lag between year of publication and year of first citation

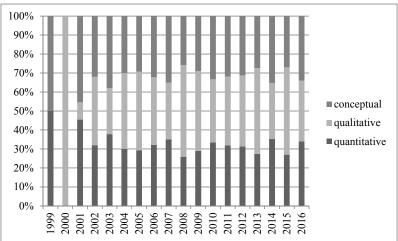


The development of corporate governance is accompanied by dynamism in its theories. The authors use a wide range of scientific theories, which we can divide into three groups: conceptual (based on deductive methods and without empirical indicators) (Saggese & Sarto, 2016), quantitative and qualitative theories (based on inductive methods). In our review, the conceptual theories are characterized by a highest volume of pages (on average over 40 pages), the quantitative theories have a larger number of authors (average of 2.2 authors), and the qualitative theories – the highest number of citations without a time lag (the year of citation is the year of publication). Unlike quantitative theories, the qualitative theories refer to a particular economic sector or state. The largest number of citations has quantitative publications, followed by the conceptual and qualitative publications (the latter with the largest number of downloads from the database). A dynamics of conceptual theories from quantitative to qualitative theories was found during the period under review (see Figure 3).

<sup>&</sup>lt;sup>9</sup> Another bibliometric review identified publications which are a combination of quantitative and qualitative methods (Lazzarotti, Dalfovo & Hoffmann, 2011).

Figure 3





In view of the publishing policy of journals and the requirements of database for adding publications, the bibliometric review will use both the titles of publications (for corporate governance methods) and the keywords (for corporate governance theories).

Keywords can be used as the main tool for correctly targeting and adopting the publication. In most cases, the keywords are not subject to review and give to the author a greater freedom in presenting his ideas. In our bibliometric review every publication has not more than 15 keywords. The most common keywords other than "corporate governance" in descending order are "board of directors", "ownership structure" and "firm performance".

# **Theories of Corporate Governance**

The interdisciplinary nature of corporate governance is reflected in its definitions. <sup>12</sup> Typical of corporate governance is the availability of a broad palette of definitions covered by an "umbrella" (Cochran & Wartick, 1988). Similarly, the theories and methods of corporate governance are numerous and will be considered as a set in the form of an "umbrella".

<sup>&</sup>lt;sup>10</sup> The large number of keywords has been explained as a lack of continuity in researches and inconsistency in research focuses (Chuang, Huang & Ho, 2007).

<sup>&</sup>lt;sup>11</sup> Other authors point to as most common keywords "ownership structure", "board of directors" and "manager remuneration". The difference with our results can be explained by the database used (Huang & Ho, 2011).

<sup>&</sup>lt;sup>12</sup> Notwithstanding the large volume of publications, the level of knowledge of corporate governance remains low due to the approaches used to reviewing the company's own characteristics and the inability to summarize the characteristics of corporate governance (Ahrens, Filatotchev & Thomsen, 2011).

Our data outlines the Agency theory as a basis of the "umbrella" of corporate governance theories.<sup>13</sup> Most other analyzes confirm our conclusion on the leading role of the Agency theory in corporate governance (Durisin, Puzone, 2009). The Agency theory is inspired by the legal model "principal-agent". The first major application of the model is in the field of auditing for a protection of shareholders from managers' actions. Traditionally, the Agency theory presents corporate governance in the fields of accounting and auditing. Increasing interest in accounting and auditing increases the rating of Agency theory, but not of corporate governance.

The next application of Agency theory is in two directions: external and internal mechanisms for control that led to the division of Anglo-Saxon and Continental model of corporate governance. 14 Our results do not give a clear distinction between theories for Anglo-Saxon and Continental model, which may mean there is a course of convergence process.

The data from our review outlines the Agency theory as the most commonly referred: it encounters 10 times in titles and 123 times in keywords (see Figure 4). 15 Its dynamics follows the overall dynamics of publications over the reviewed period (see Figure 1). During reviewed period, the Agency theory is presented each year in keywords with a peak in 2009-2010, which can be defined as the beginning of the global financial crisis, given the time lag of two years between the year of publication and the year of addition of publication to the database.

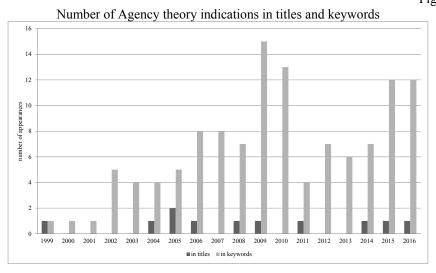


Figure 4

<sup>13</sup> The development of theories begins with the Agency theory and later on with Resource dependence theory, Institutional theory, and Managerial hegemony (Cohen, Krishnamoorthy & Wright, 2008).

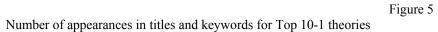
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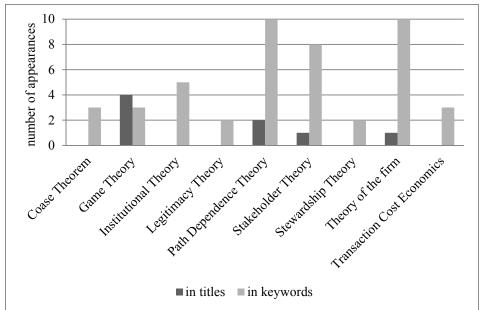
<sup>&</sup>lt;sup>14</sup> The Agency theory reflects the institutional context of the USA and is unable to explain the forms

of government in other countries (Lubatkin, 2005).

The results of another bibliometric review shows as a most common theory the Transaction costs theory followed by the Institutional theory (Ferreira, Pinto & Serra, 2014).

Some authors define the rest theories of corporate governance as evolved from the Agency theory, which are mostly empirical and are related to the prevention of the principal-agent problem (Mannar, 2016). Unlike other reviews in which only the Agency theory is mentioned, in our bibliometric review, we will present other theories. The most commonly referred other theories are different nuances of corporate governance: information asymmetry reducing, legal and institutional environment, protecting the interests of internal and external persons. Besides the Agency theory, the Top 10-1 theories are: Path Dependence Theory, Theory of the firm, Stakeholder Theory, Game Theory, Institutional Theory, Coase Theorem, Transaction Cost Economics, Legitimacy Theory and Stewardship Theory (see Figure 5).





Typical of these nine theories is that, according to our data, they concern the practice of a particular state, unlike the tenth theory, the Agency theory, which does not refer to a geographical scope. Countries appear primarily in the titles, while geographic regions are indicated in the keywords. The most commonly referred theories cover both the Anglo-Saxon system and the Continental system. Most of the referred countries are not members of the OECD, benchmarking data on these countries are not published by the OECD and we can assume that some countries are targeted to "explain" rather than to "comply". In

dynamics the countries stop appearing in titles and in keywords and we can assume there is a convergence process of good corporate governance practices. <sup>16</sup>

The reviewed publications containing the ten most commonly referred theories (see Figure 6) follow the general dynamics shown in Figure 1. The similar dynamics between a publication and a citation marks a turning point in 2011, in which year the subject of publications focuses on corporate governance mistakes and costs incurred by the shareholders, not by the stakeholders.

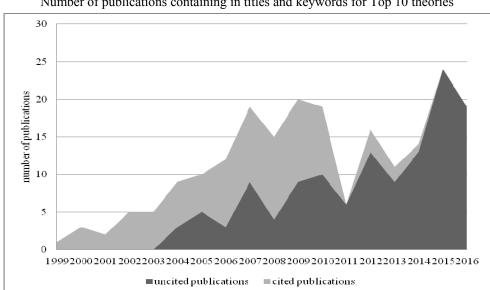


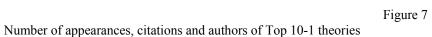
Figure 6 Number of publications containing in titles and keywords for Top 10 theories

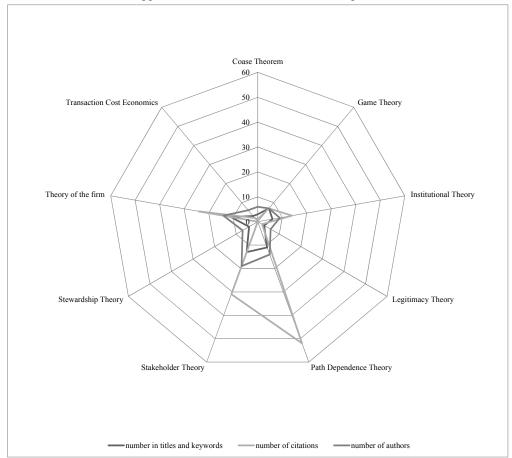
Agency theory has the highest number of citations (a total of 2490 citations), followed by Path dependence theory<sup>17</sup>. The smallest time lag between the year of publication and the year of first citation is for the Agency theory (the first citation is in the same year or one year after the year of publication), and the largest lag – for the Stakeholder theory (1-4 years) (for the Top 10-1 theories, i.e. for the Top 10 theories with the exception of the leading theory, the Agency theory, see Figure 7). Our data coincide with the trend towards an increase in the number of authors (increasing publications by more than one author from 8% in 1988 to 23% in 2009) (International Association of Scientific, Technical and Medical Publishers, 2015). To improve the citation of corporate governance publications, we should follow the recommendations of our previous bibliometric review (Nedelchev, 2017).

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<sup>&</sup>lt;sup>16</sup> The Agency theory is defined as the most appropriate of all theories for conducting convergent processes (Merendino, 2013).

<sup>&</sup>lt;sup>17</sup> Results of other reviews reveal the most frequently cited theories: Agency theory, Stewardship theory, Stakeholder theory, and Contingency theory (Durisin & Puzone, 2009).





The largest combination of theories in a single publication is with a relatively short title – "Theoretical Perspectives of Corporate Governance" (Abid, Khan, Rafiq & Ahmad, 2014). The keywords to this publication indicate five of Top 10 theories: Agency theory, Stewardship theory, Stakeholder theory, Resource Dependency theory, and Transaction cost economics. The publication in question has a large number of authors (four authors), a small volume of pages (10) and no citations.

Our data defines corporate governance as interdisciplinary and polyvalent – for example in "Valuing Professional Japanese Baseball Players and the Role of Statistics, Economics, Culture and Corporate Governance" by M. Nichol the corporate governance is used as a tool with three other scientifically fields. In addition to previous reviews, the idea of eclecticism in corporate governance is confirmed (Mannar, 2016). We find that the corporate governance is a point of contact among more than two areas of science – in

addition to economics and management, the corporate governance includes aspects from law, sociology, politics, history, psychology, statistics, culture and ethics<sup>18</sup>. The most comprehensive application of corporate governance is found in accounting and auditing<sup>19</sup>.

The Agency theory is present in each year for reviewed period 1999-2016 (see Figure 8). The greatest accumulation of theories has the period that can be related to the beginning of global financial crisis (2010) and the beginning of changes in national corporate governance codes (2014). Since 2007, the Agency theory has been presented together with Stewardship theory. Less, but a significant presence, has the Path dependence theory and Stakeholders theory till 2009, and after 2009 – the Information asymmetry, Institutional theory and Theory of the firm.

Figure 8 Time distribution for Top 10 theories

											Theory of the firm				Transaction Cost Economics		
								Stakeholder Theory			Stakeholder Theory				Theory of the firm		
					Theory of the firm		Theory of the firm	Path Dependence Theory			Reputation Games				Stakeholder Theory	Theory of the firm	Theory of the firm
					Stakeholder Theory	Stakeholder Theory	Stakeholder Theory	Organization theory	Stakeholder Theory	Path Dependence Theory	Institutional Theory		Transaction Cost Economics	Theory of the firm	Path Dependence Theory	Legal origin theory, path- dependence	Institutional Theory
	Path Dependence Theory		Information Asymmetry	Transaction Cost Economics	Path Dependence Theory	Reputation Games	Path Dependence Theory	Information Asymmetry	Information Asymmetry	Institutional Theory	Information Asymmetry		Institutional Theory	Information Asymmetry	Information Asymmetry	Information Asymmetry	Information Asymmetry
Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory	Agency Theory
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016

For a better presentation of our results we will use a visualization approach named "tag cloud". The number of representations of a given theory (tag) is shown with different font size, i.e. the more frequently the theory is presented in titles and keywords the larger font size it will be reflected. The Agency theory is reflected with the largest font size, i.e. that it is the most commonly presented theory in titles and keywords (see Figure 9). Smaller fonts, i.e. fewer presentations, reflect the rest theories.

We will present the results for the Top 10-1 theories through a visualization technique called "Chernoff faces". Multidimensional data are first presented in an appropriate manner in 1973 by Herman Chernoff. The technique includes the representation of similar objects through human faces, each feature of which corresponds to predetermined data (see legend). The Path dependence theory has the best overall results followed by the Theory of the firm and the Stakeholder theory (see Figure 10). We can identify as friendly faces those theories that have a large number of citations and publications (the mouths and faces), and as unfriendly faces the theories with a large time lag between publication and citation (the brows).

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<sup>&</sup>lt;sup>18</sup> Since World War II, the number of academic disciplines has been increasing significantly (Claveau & Gingras, 2016).

<sup>19</sup> According to other reviews the second of the continuous statement of th

<sup>&</sup>lt;sup>19</sup> According to other reviews, the corporate governance has been greatly reflected in auditing and accounting literature following the scandals of unfair audit practices in the USA in the 2000s (Carcello, Hermanson & Zhongxia, 2011).

Figure 9

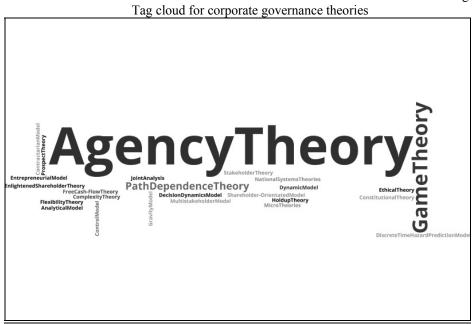
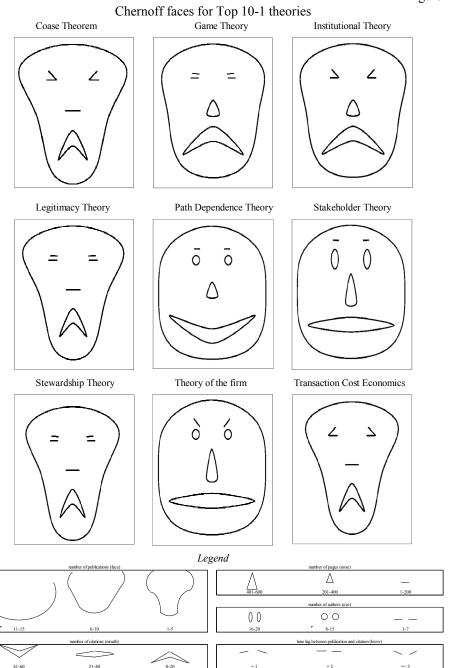


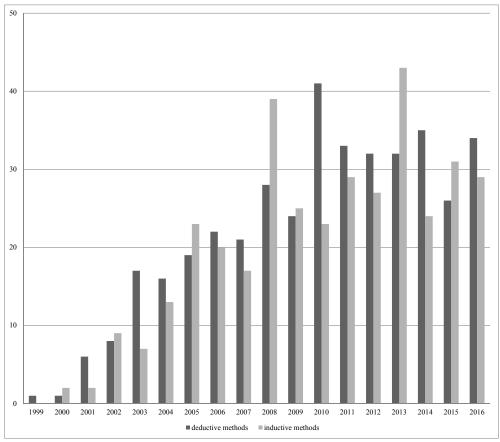
Figure 10



# **Methods of Corporate Governance**

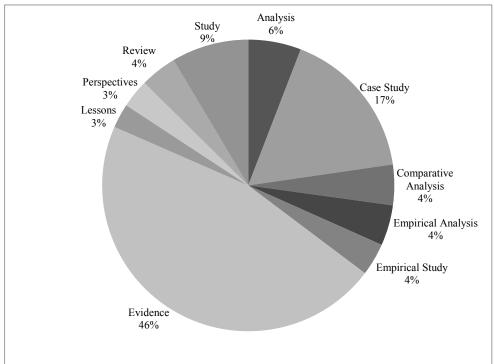
The method is defined as a set of scientifically-based principles and norms for review of corporate governance. The proper method selection contributes to proper understanding and presentation of corporate governance. In most publications, the methods are presented in the title, while the theories – in keywords. It can be argued that after the onset of the global financial crisis, deductive methods prevail (see Figure 11).

Figure 11 Number of deductive and inductive methods



The interdisciplinary feature of corporate governance is reflected in an "umbrella" both from theories and methods. The Top 10 methods are headed by evidence and case study (see Figure 12). In rare cases, the authors use more than one method, for example, "A Contemporary Literature Review of Corporate Governance: An Overview" by Linjian Pan.

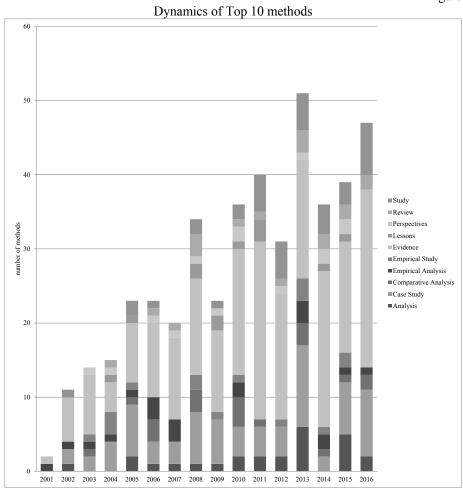




The dynamics shows usage of a large number of methods in 2013 – a total of 51 methods and increase the number of Case study (see Figure 13). There is an increasing number of methods used while retaining the leading share by Evidence. In most cases of using Evidence is for a combination of corporate governance aspect with an economic indicator for a specific country.

Trends in science over the past 10 years have limited the scope of bibliometrics to the analysis of citations. The number of citations is three times greater than the number of publications. In the case of five methods (Case Study, Comparative Analysis, Empirical Analysis, Empirical Study, and Evidence) the number of citations is greater than the number of publications (see Figure 14).

Figure 13



While other studies find a "citation inflation", i.e. the number of citations increases faster than the number of publications, we observe a specific case – some methods have a large number of presentation and at the same time small number of citation. In the classical case of "citation inflation" the number of publications is increased by 33%, while citations increased by 55% for 1999/2003 and 2004/2008, (International Association of Scientific, Technical and Medical Publishers, 2015). In our case some corporate governance methods have proactive citations, i.e. the number of citations is larger than the number of publications (Case study, Comparative analysis, Empirical analysis, Empirical study, Evidence). For the rest methods (predominately qualitative methods) the number of publications is larger than the number of citations. And in the case of Lessons, as a conceptual method, there is equality between the number of publications and citations (12).

Figure 14

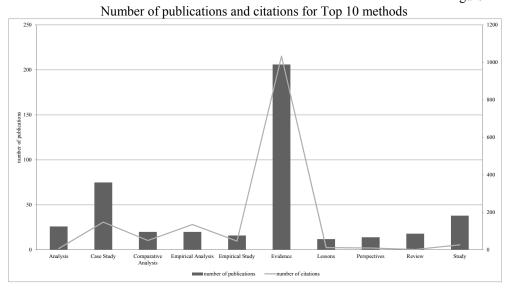
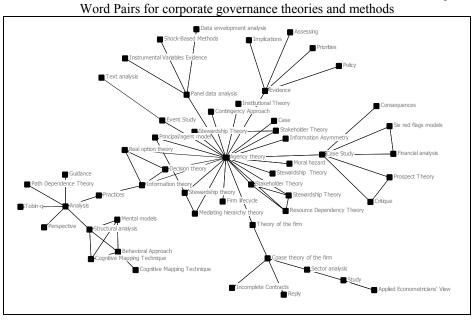


Figure 15



To illustrate the combination of theories and methods of corporate governance we will use "word pairs" approach. The approach was introduced in the 1990s to visualize relationships

between individual variables after an empirical study was completed. Thanks to modern software we differentiate not only individual theories and methods, but also their interrelations. The Agency theory is the main center and its periphery includes both methods and other theories (Figure 14). An interesting case is the interrelation between the two top theories, the Agency theory and the Path dependence theory, as two methods are between them – Analysis and Practices (at the bottom on the left in Figure 15). There is an impressive case – the Institutional theory has not any relations to other theories and methods. In another case which is not less interesting is separation of a cluster in the shape of a triangle among Agency theory, Stakeholder theory and Stewardship theory.

### Conclusions and recommendations

Given the results, we can summarize that the "umbrella" of definitions for corporate governance is reflected in an "umbrella" of theories and methods. Irrespective of a large number of corporate governance publications, their theories are shared from a range of other sciences or rather the theories are taken from close scientific fields. Overall the theories are very specific for corporate governance while the methods are universal and applicable to all sciences.

Throughout the reviewed period all corporate governance theories are related to control over management of ownership and not to a separation of control and ownership. The top position is reserved for the Agency theory and it cannot be claimed that both the importance of this theory is exhausted and that there is a need for a new theory.

The increased interest to good corporate governance practices is due to the new economic reality. The contribution of scientific researches is a multiplication of good practices and creation of a specific form of capital based on the knowledge.

Our results partially support the First hypothesis (HI). The number of publications directly reflects all the peaks and downturns of economic development, which supports the hypothesis (Nedeltchev, 2004). Additional indicators of publications, such as a number of pages and authors, are included to the support of HI. Other indicators of publications, such as the number of citations, have registered a fall after a historical moment of economic development, linked to significant scandals such as unfair auditing practices in 2003. We can argue that after this moment the corporate governance becomes subject to other sciences beyond the economics, while retain a limited number of theories and increasing the number of methods used.

The results reveal a large number of theories and methods used in corporate governance publications. An additional critical attitude towards the Second hypothesis (H2) is the application of theories and methods of a large number of sciences close to the economics. While the economic development has its own peaks and falls, the corporate governance has steadily increased the number of publications due to the new roles assigned to corporate governance. As a confirmation of our conclusion is the discrepancy in the trend between the number of publications and their citations – while the number of publications follows the

dynamics of the economy, the number of citations reflects the real dynamics of corporate governance and more specifically – the dynamics of good practices.

The beginning of the measures against effects of global financial crisis revealed an increase in diversity of theories and methods of corporate governance. At the same time there is a transition to protection the interests of stakeholders rather than to shareholder wealth maximization and a shift of theories from Shareholder primacy to Stakeholder theory. Increasing number of theories from the external environment and targeting on "hard" legislation most clearly give an idea of the new direction of economic development and, accordingly, of the practices and researches of corporate governance.

With an increase in the number of researches reduces the significance of results and contribution of the author due to the need to process a large volume of data. Our results outline a balancing process – with an increase in the volume of publications, there is a return to a narrow set of theories introduced since the very beginning of good corporate governance practices. We can sum up the results to the need for a functioning theory, not the need to increase the number of theories and to introduce new theories according to the tempo of increase number of publications and authors. A further confirmation of reaching a saturation point is the number of citations, which from 2004 marks an opposite tendency to the trend for increase the number of publications and authors. The modern publications of corporate governance have found equilibrium around a particular number of theories and methods by balancing with the good practices.

Special features of corporate governance are both its long history and its relatively recent reflection in the scientific literature. In the present review we attempted to describe 100 years good practices of corporate governance through 20 years of scientific publications. In addition to the large number of corporate governance reviews, we add yet another based on bibliometrics, i.e. new results with a low level of subjectivism. Thereby we suppose that our results will raise new questions for further corporate governance reviews.

For further development of good corporate governance practices through scientific publications we recommend to authors to use the following combinations of theories and methods in keywords and titles respectively:

- Agency theory + evidence;
- Coase theorem + analysis;
- Game theory + lessons;
- Institutional theory + case study;
- Legitimacy theory + evidence;
- Path dependence theory + analysis;
- Stakeholder theory + assessment;
- Stewardship theory + case study;
- Theory of the firm + study;
- Transaction cost economics + test.

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