ABSTRACT

New Public Management (NPM) has been the most inspiring principle of public sector reforms in Europe. However, in Napoleonic-oriented countries, one of the main obstacle to the effective implementation of NPM reforms has been the “implementation gap”. Among the different fields in which the implementation of NPM reform have been controversial is the Higher Education sector. This study addressed the implementation of an Italian NPM Reform in the case of universities to investigate if the implementation gap highlighted in previous studies have been fulfilled in which are the elements that have favored such improvement. As main result, the study shows a «dramatic situation» for the implementation and use of performance management system in Italian universities and there are areas of improvement in this analysis but the implementation gap is still is strongly present. However, from 2012 until now, the National Agency for the Evaluation of Universities (ANVUR) have devoted several efforts to improve the use of performance management in universities. So, it has been considered the role of the Italian National Agency for the evaluation of universities (ANVUR) in order to favor the use of this tools as the basis to improve the overall organizational performance.

Keywords: performance measurement, Higher Education, implementation gap, New Public Management, Italy
1. INTRODUCTION

Starting from its first appearing in the public management debates in the early ‘90s (Hood, 1995, 1991), the New Public Management (NPM) has been the most inspiring principle of public sector reforms in Europe (Lapsley, 2008; Hood and Peters, 2004; Pollit and Bouckaert, 2004). Among the different core principles of the NPM, performance measurement and performance management have been discussed since they have sometimes lead to controversial results (Van Thiel and Leeuw, 2002). Particularly, the implementation of performance management and measurement practices have been more challenging in the administrative and bureaucratic countries (i.e. Italy, France, Spain, Germany), characterized by a Napoleonic culture (Ongaro, 2006; Capano, 2003). In these contexts, the main obstacle to the effective implementation of NPM reforms has been the “implementation gap”, i.e. the distance between law’s prescription and actual existence of managerial tools and the distance between the formal presence of such tools and their utilization (Ongaro and Valotti, 2008).

In Italy, although the failures of previous NPM reforms have been proved in different public sector fields (see, for example, Macinati, 2010; Kuhlmann, 2010; Capano, 2003) they continue to be implemented. Among the different field in which NPM reform have been implemented, the Higher Education sector seems to be one of the most controversial for NPM reforms to become effective. The HE sector has some peculiarities that clash with the whole design of the Italian NPM reform (i.e. the Brunetta Reform) to date. First, the HE sector has its own independent tradition of performance evaluation that makes it relatively different from other public sector domains (Ferlie et al., 2008; Frølich, 2011; Mintzberg, 1980). Second, performance measurement and management in universities is particularly challenging, because of the multi-dimensional performance of its activities (Rabovsky, 2014; Rebora and Turri, 2011). By way of example, the performance of universities could be measured and evaluated with respect to at least four dimensions: teaching, research, third mission and administrative services. These claims are supported by a recently research carried out by Agasisti and colleagues (2017) who, by studying the results of the Brunetta Reform implementation - according to which each public administration have to implement a performance cycle that evolves around two documents, the “Performance Plan and the Performance Relation” to plan and evaluate the performance of the administrative services- in 2012 performance management system in Italy, pinpointed a situation in which Italian universities are far from an effective performance management system and they can be considered in a situation of “NPM prehistory” (Agasisti et al., 2017).
Furthermore, in order to support Italian universities in implementing a virtuous performance cycle, a national evaluation agency, i.e. the National Agency for the Evaluation of Universities and Research Institutes (ANVUR)\(^1\) was created. Starting from 2013, ANVUR has devoted efforts to improve the performance management system of universities in order to favor the use of this tools as the basis to improve the overall organizational performance. The role of ANVUR is the typical “steering at the distance”, providing support and suggestions to universities by using an open dialogue with universities’ General Directors, administrative staffs and internal evaluation units (named “Nuclei di Valutazione”, NdV).

Starting from the previous research of Agasisti et al. (2017), and considering the role and activity of ANVUR, this papers wants to investigate the trajectory of performance management system implementation in Italian universities. Specifically, our research objectives is stated as follows:

- has the 2012 implementation gap decreased in Italian universities?
- Which are the elements of the performance management system that have changed favoring the modification of the implementation gap of the 2012?
- What is the role of ANVUR in explaining such changes?

Specifically, three years later, this research wants to understand if had decreased their implementation gap in the actual use of performance measurement system. From a methodological point of view, we apply the same methodology and the protocol of analysis proposed by Agasisti et al. (2017) on the 2015 performance documents mandated by the Brunetta Reform (i.e. the Performance Plan and the Performance Relation). In addition, to investigate the elements that have changed from 2012 to 2015, we select 4 case studies of the universities that improved their performance management systems that have move from “PMS prehistory” to “PMS best practices” (Agasisti et al., 2017).

Two different implications can be drawn from the current studies. First, by analyzing the trajectories of changes and the elements that have been improved, we can provide suggestions for managers on how to improve the performance management system in universities. Moreover, from a policy perspective, the analysis of the role of ANVUR could highlight implications on the effectiveness of a “steering at the distance” approach to improve the implementation of performance management system in universities, providing in turn advices for other countries.

The outline of the paper is the following. The first section reviews the literature on performance management in the HE sector; the second one present the performance measurement system

\(^1\) Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca
mandated by law for the Italian universities. The third section presents the methodology, while results are presented in the fourth section and described in the fifth one.

2. NATIONAL PERFORMANCE FRAMEWORK

Reduced budgets across the public sector and public services is accompanied growing interest by researchers in the performance measurement by organizations inside the government, among them, public universities.

In Italy, in the second half of the nineties, a number of changes that have triggered a process of reform, which is still underway, has concerned the education sector. This process mainly concerns the transition from the logic of bureaucratic and self-referential to an innovative management model. In our country, the business and management process of the public administration system is inspired by "New Public Management trend" that has characterized many common law countries. Indeed, the main agenda is to regain consciousness to the economy through higher levels of productivity, public sector efficiency.

The national government issued numerous regulatory interventions in the Italian university system aimed to improve the performance measurement system. Specifically, the law 537/1993 has introduced the principle of distribution of national financial resources based on merit and established the evaluation units; the law 370/99 has invested evaluation units “of the assessment of the administrative management, teaching and research activities”. Moreover, the rules of the decree 286/99 has introduced in public entities the implementation of four types of control: strategic control, management control, administrative and accounting regularity control, the evaluation of managers.

Then years later, a new reform was implemented to all the Italian public sector: the Brunetta Reform (d. lgs 150/09). This decree has allowed the consolidation of rules and practice of previous laws. The performance management cycle in Italian universities has the following purposes: to improve the connection with the economic and financial planning; to promote measures in the field of anti-corruption; to promote transparency and external communication; to enable an effective assessment of the effectiveness, efficiency and economy of public administration.

This Reform is clearly NPM-oriented since it is grounded on the core principles of the NPM, as improving accountability and transparency of public administration, promoting and efficient use of resources by the use of private sector-like instruments (e.g. performance measurement, pay-for-performance, value for money). The focus of the reform was on the introduction of a performance management cycle, in terms of: evaluation of organizations and individuals, responsibility for top
managers, transparency of public administration and public service efficiency (Arnaboldi et al. 2016).

Among the different issues stated by the law, a particular attention is paid to performance measurement and performance management. The Article. 3 of the Decree. 150/2009, indeed, obliges public authorities to measure and evaluate their performance, with reference to the complex administrations, to the organizational units, the areas of responsibility and individual employees. According with the provisions of the article number 4 of the Brunetta law, the performance cycle is divided into the following phases: definition and assignment of objectives, related with expected values and performance indicators. The article number 5 describes the main features of the objectives, which are defined and programmed over three years, before the start of the respective year and are defined in line with the budget set out in policy documents; specifically the objectives are:

- relevant and pertinent to the needs of the community, the institutional mission, the political priorities, and management strategies;
- specific, measurable and clear;
- able to produce a significant improvement of the quality of services;
- referable to a fixed period, usually corresponding to one year;
- referred to the national and international standards as well as' by comparisons with homologous administrations;
- comparable with the trends of the administration's productivity by reference, if possible, at least the three years prior;
- related to the quantity and quality of available resources.

The Article number 8 is about the organizational performance. It concerned, the implementation of active policies on the final satisfaction of the needs of the community the implementation of plans and programs, namely the measurement of the current degree of implementation of the objective; the improvement of the quality of the organization and the professional skills and the ability to implement plans and programs; the efficient use of resources, as well as' optimization of the times of administrative procedures; the quality and amount of benefits and services provided.

On the other hand, according to the article number 9, the measurement and the evaluation of individual performance is related to the achievement of specific individual targets; the contribution to the achievement of the target’s group.
To this end, the authorities shall draw up a document, called Performance Plan by 31st of January. This document also links goals to resources. Then, in order to measure and assess the organizational and individual performance, the authorities draw up a Performance measurement system, which is based on a bonus system according to measurement criteria of merit. In order to report results, the authorities shall draw up the Final report of performance by 30th of June. Finally, to ensure the transparency. These documents are published on the web site of each entity and on the governmental performance web site (portaleperformance.gov).

Moreover, there are others subsequent rules: the decree 91/2011 about the harmonization of accounting practice with the introduction of accrual accounting in public government; the law 190/2012 about the corruption in public government; the law 240/2010 which reforms the university system in terms of organization and recruitment of academic staff. The 240/2011 also recalls the NPM principles, particularly, not only it introduces a system of Quality Assurance (QA) for teaching course and research, but it also stresses the need to harmonize the quality management system with the performance cycle.

Nowadays in Italy the Government and Parliament have begun a new process of reform of the Public Administration with the decree 74/2017; is reasonable to say that will also influence the modus operandi of the Italian academy and research; as a consequence the role of the Agency will change as well.

3. CHALLENGES OF MEASURING PERFORMANCE IN HE

NPM had been the “leitmotif” of almost all of the public sector reforms starting from the ‘90s (Hood and Peters, 2004; Hood, 1995, 1991; Dunleavy and Hood, 1994;). Although some “variations of theme” (Hood, 1995) had been recognized, performance measurement and performance management is widely recognized as one of the core NPM pillars (Diefenbach, 2009). Such reforms are mainly focused on enhancing the accountability and the transparency of the whole public sector (Frølich, 2011; Pollitt and Bouckaert, 2004; Alexandre, 2000; Hood, 1991) and, on the other end, on creating more efficient public organizations (Arnaboldi and Azzone, 2010; Arena et al., 2009; Johnsen, 2005).

However, when applied to the public sector, the idea of performance measurement (and management) should be treat carefully. First, it is accepted that the public sector has a widely set of stakeholders to which public organizations have to be accountable, leading to the need of measuring different aspects of the public sector performances (Modell, 2001; Brignall and Modell, 2000). Secondly, there is a widely agreement that performance measurement in the public sector often
leads to “several unintended consequences that may not only invalidate conclusions on public sector performance but can also negatively influence that performance” (Van Thiel and Leeuw, 2002, p. 267). Some of these unintended consequences range from the proliferation of regulators and auditors linked to a general costs increases, the strong focus on measurement can lead to the “ossification” of organizations and, finally, the implementation of performance measurement system only for compliance and external accountability (Van Thiel and Leeuw, 2002). To date, current literature widely agree that, often, performance measurement and management in the public sector lead to the so-called “performance paradox” (Van Thiel and Leeuw, 2002), i.e. the weak correlation between performance indicators and performance itself (Meyer & Gupta, 1994; Meyer & O'Shaughnessy, 1993).

When these NPM reforms are implemented in the HE sector, the risk of performance paradox is much more pressing, given the peculiarities of this sector. As pointed out by different authors (see, for example, Turri, 2014; Rebora and Turri, 2011) the HE sector is a particular field of public action since universities “are not organizations as the other” (Musselin, 2006, p. 63). Specifically, at least three peculiarities had been highlighted. First, the HE sector is characterized by the autonomy of academics and researchers that constitute a community sharing the same values (Agasisti et al., 2017; Musselin, 2006), leading some authors speaking about “professional bureaucracies” (Mintzberg, 1979) or “organized anarchies” (Cohen et al., 1972). Musselin (2006), highlights other two peculiarities of the HE sector: academics tasks are functionally loosely coupled and teaching and research are “unclear technologies”. The first characteristic identified by Musselin refers to the low level of cooperation and coordination required by teaching and research activities, where teamwork is not unavoidable to carried out these activities. The second feature, i.e. the fact that teaching and research are “unclear technologies”, relies in the fact that i) these activities are complex processes difficult to grasp and ii)ambiguous causal relationship exist between tasks and results (Musselin, 2006).

Furthermore, with respect to other public sector domains, the performance of HEIs is highly multidimensional and activities on which performance should be evaluated, managed and measured are highly different, changeable and non-standardize (Agasisti et al., 2017). At the end, HEIs have an ancient history of autonomy and they are historically far from the strict steering of the central government: as stated by Alexander (2002), “controversies over institutional autonomy and government control are as ancient as universities themselves” (Alexander, 200, p. 414) or, again, citing Ferlie et al., (2008), the HE sector is “a stand alone sector” (Ferlie et al., 2008).
These peculiarities are recognized as critical factors for performance management and evaluation in public universities, leading some authors to speak about “decoupling evaluation system” from day-to-day activities (Rebora and Turri, 2011).

4. THE ROLE OF ANVUR IN THE EVALUATION OF PERFORMANCE CYCLE

The Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR) has been instituted by Law in 2006, (Law n. 286 24th November 2006) but it becomes effectively operative only in 2010 (law 240/10). Its main task is to carry out its external evaluation of the quality of public and private universities and public and private research institutes, with respect to three areas: quality of teaching, research and third mission.

In 2013, the Agency acquired new skills in the evaluation of the performance planning and reporting activities with respect to the administrative support services of universities and research institutes supervised by the Ministry. Combining this new activity with its traditional evaluation functions of teaching and research, the Agency is now in a position to play its role in a systemic perspective. Specifically, with reference to performance management, the Agency has three main tasks i) directing the National System for the Evaluation of Administrative Activities of Public Universities; ii) is the key actor in a continuous dialogue with the actors of the HE Sector and iii) guaranteeing «horizontal analyzes» on the performance management systems of the public universities.

Specifically, about the last activity, the agency undertook an analysis of the performance management systems, establishing a close dialogue with the universities and research institute.

So, in terms of activities carried out by the Agency:

- held a series of meetings with the representatives of CODIGER (Coordination of General Managers of Public Research Institutions supervised by the Ministry);
- has created a Working Group composed by 3 General Managers of Italian universities of different sizes and an expert in performance management in the university sector;
- has sent feedback to universities and research centers related to the performance plans and organized 11 on-site visits to discuss the feedback;
- has participated in the annual conference of the CODAU (Coordination of University General Managers);
- has dedicated a session to Performance Evaluation within the International Workshop “Teaching and Research Evaluation in Europe”;
– has published the Guidelines for the integrated management of the Performance Cycle, both for the Universities and for the Research institute.
– finally, as foreseen in the European agreements on higher education and research, the Agency collaborates with European and international agencies sharing information and experiences, which allow it to develop its institutional strategies.

5. METHODOLOGY

By applying the research design proposed by Agasisti et al. (2017), this paper wants to analyze the state of the art of the use and implementation of performance measurement system in Italian universities four years later. The primary sources of data are represented by the Performance Plan and the Performance Relation, that according to the requirements of the Brunetta Reform have to be published respectively at the end of January (year t) and at the end of June (year t+1). Specifically, we consider the 2015 performance cycle and we therefore analyzed the Performance Plans 2015-2017 and the Performance Relations published in 2016, but referred to the 2015.

Research design is composed by three steps: 1) Collection of Performance Plans and Performance Relations; 2) Qualitative analysis of the documents trough the protocol of Agasisti et al (2017); 3) fulfillment of the matrix provided by the above-mentioned authors. The research design is illustrated in figure 1.

Figure 1. The research design

<table>
<thead>
<tr>
<th>Data collection</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 2015 Performance Plan</td>
<td>• Data analysis through the protocol applied by Agasisti et al., (2017)</td>
</tr>
<tr>
<td>• 2016 Performance Relation</td>
<td>• The protocol is based on verifying is the law requirements are satisfied by the analyzed documents</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Matrix definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Positioning of the universities inside the matrix of Agasisti et al. (2017)</td>
</tr>
<tr>
<td>• Selection of case studies to be investigated</td>
</tr>
</tbody>
</table>
Data collection. As stated before, universities are mandated to publish their Performance Plan and the related Performance Relation on a dedicated on-line page in their institutional website (called “Transparent Administration”). Hence, the universities’ institutional websites were the primary source of data and if the documents were not published, we also searched for them in the website administrated by the Central Government, called “Performance Portal” (https://performance.gov.it/).

Description of the protocol of analysis. As to the second step, the protocol of analysis proposed by Agasisti et al. (2017) is based on the legal requirements, that is on the presence of strategic objectives, operational objectives, indicators, targets and results description. We first analyzed the Performance Plans and took note of the following information for each Institution: strategic areas (they usually correspond with missions, i.e. teaching, research and third mission), presence of strategic objectives and operational objectives (definition), number of strategic objectives and operational objectives per strategic area, their coherence with mission (i.e. teaching, research and third mission), their connection with budget and financial resources. We also analyzed the presence of indicators and targets, their typology (i.e. the percentage of quantitative and of qualitative indicators) and targets. Finally, we analyzed the Performance Relations and registered the following information: the presence of a description of organizational results and of individual results, the analysis of gaps and their causes, the percentage of reached and not-reached objectives. To ensure the analysis comparability, each of the author tested the analysis of two different universities; we then discuss these “test results” together to identify a shared procedure of coding.

The Matrix. The synthetic matrix proposed by Agasisti et al., (2017) is based on two axis: “Quality of the PMS” and “Expected use of the PMS”. The first, based on the data contained in the Performance Plans, focuses on the type and on the coherence of objectives (both strategic and operative) and on the definition of coherent indicators and targets. Following these information, it is possible to distinguish between two ideal-type of situations: “Unstructured and dispersed” (Few strategic objectives; few attention to the core mission of university; the process of cascading from strategy to operational objectives is not always present and coherent; few indicators and targets) and “Structured and comprehensive”, that refers to all that cases in which Strategic objectives reflect the mission of university and they are articulated into few, achievable and measurable operational objectives, measured with indicators and targets. The second axis, focused on the expected use of the PMS, is fulfilled through the analysis of the Performance Relations. Here the authors distinguished between two situations: “compliance” and “strategic”. The former is characterized by scant connection between defined objectives and relative assessment, few indication action and
results and few directions on the stage of fulfillment; the latter has three core features: assessment of those objectives defined in the Performance Plan, description of actions undertaken and results achieved and fulfillment measured through targets contained in the Performance Plan.

Case studies. Starting from the comparison between the positioning of universities in 2012 and in 2015, universities that have moved from “NPM prehistory” to “NPM best practices” have been analyzed in order to understand which elements of the Performance Plan and of Performance Relation have been improved in the two years.

6. RESULTS

In this section results are presented. We start by showing data retrieved from the analysis of the Performance Plans (i.e. strategic overview, type of strategic objective and coherence with the university’s mission to move then to the process of operationalization of such strategic objectives into operational one); the second part presents the analysis of data contained in the Performance Relations (and specifically how results are presented and if they are coherent with that of Performance Plan). We finally present the percentage of universities positioned in each of the squares proposed in the matrix of Agasisti et al. (2017).

6.1. The Performance Plan: strategic and operative objectives

The main findings related to the analysis of the Performance Plans are reported in table 1, where we consider the strategic overview of the universities, the presence of strategic objective, their connection with operational objectives and the definition of indicators and targets.

<table>
<thead>
<tr>
<th>Area of investigation</th>
<th>Specification</th>
<th>Percentage (of the total universities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic areas</td>
<td>Teaching, Research, Third Mission and administrative services</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>Teaching, Research and administrative services</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td>Not available</td>
<td>11%</td>
</tr>
<tr>
<td>Presence of strategic objectives</td>
<td>Yes</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>14%</td>
</tr>
<tr>
<td>Coherence of strategic objectives</td>
<td>Yes</td>
<td>75%</td>
</tr>
<tr>
<td>with the university’s missions</td>
<td>No</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Not available</td>
<td>10%</td>
</tr>
<tr>
<td>Average n. of strategic objectives per</td>
<td>Teaching</td>
<td>21%</td>
</tr>
<tr>
<td>missions</td>
<td>Research</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Third Mission</td>
<td>7%</td>
</tr>
<tr>
<td>Average n. of operational objectives per</td>
<td>Teaching</td>
<td>12%</td>
</tr>
<tr>
<td>missions</td>
<td>Research</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Third Mission</td>
<td>4%</td>
</tr>
<tr>
<td>Presence of objectives related to the</td>
<td>Yes</td>
<td>45%</td>
</tr>
<tr>
<td>traditional administrative services</td>
<td>No</td>
<td>55%</td>
</tr>
</tbody>
</table>
As far as the strategic areas is concerned, almost all of the Italian universities identify teaching and research as the primary missions and to these dimensions also that of administrative support services is almost considered in all the Italian universities. With respect to the strategic level, the 80% of Performance Plans report strategic objectives that are generally (75%) coherent with the traditional university’s missions. The analysis of the number of strategic objectives for each strategic areas highlights a feeble prevalence of strategic objectives for the teaching mission (21%), followed by research mission (14%) and by the third mission (12%). A similar trend is also verified with operational objectives that, on average, are focused more on teaching (12%), then on research (7%) and finally on third mission (4%). The remaining percentage refers to objectives related to administrative support services that are usually implemented to “horizontally” support all the above mentioned missions. Among the objectives related to administrative support services, only the 45% of Performance Plans report objectives related to the ordinary activities of the administration. At a very general level, data related to the linkage with financial resources highlight that almost all the Italian universities (88%) did not define devoted financial resources to ensure the achievement of the stated objectives.

We then focused on how the achievement of operational objectives have to be assessed. To start with indicators more than the half of Italian universities (74%) have defined specific indicators and, it seems that universities favour quantitative indicators than qualitative ones (53% versus 47%). Similarly, the use of targets seems to be common among Italian universities: the 61% of universities provide, their Plans, the definition of specific targets to assess objectives’ achievement.

**6.2. Performance Relation: accounting for results**

Performance Relation, provided the year after the definition of the Performance Plan, has the objective of accounting for results achieved during the year. Information retrieved in this documents are presented in table 2.

<table>
<thead>
<tr>
<th>Definition of financial resources devoted to the achievement of operational objectives</th>
<th>Yes</th>
<th>8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>88%</td>
</tr>
<tr>
<td>Presence of indicators</td>
<td>Yes</td>
<td>74%</td>
</tr>
<tr>
<td>No</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Not available</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Type of indicators (on average)</td>
<td>Qualitative</td>
<td>47%</td>
</tr>
<tr>
<td>Quantitative</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>Presence of targets</td>
<td>Yes</td>
<td>61%</td>
</tr>
<tr>
<td>No</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Not available</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Data provided by the Performance Relation
The analysis of results achieved is generally distinguished into two levels: organizational and individual results. The practice of describing organizational results seems to be more popular compared to that related to individual results. In both cases, however, our analysis shows that universities generally opt for a qualitative description of results (90.2% for organizational performance and 73.5% for individual results), while only in few cases (21.5% for organizational performance and 6.1% for individual performance) the qualitative description is also supported by quantitative analysis (e.g. the differential analysis between the defined target and the actual value achieved). It is possible to affirm, in general, that the culture of accounting for results has grown from the analysis carried out in 2012 and, since the analysis based on 2015 show that only in the 9.8% (for organizational performance) and the 26.5% (for individual performance) of case any results description is provided.

6.3. Matrix fulfillment: how many universities in each square?

The matrix used by Agasisti et al. (2017) identifies four different situations or clusters related to PMS implementation. Hence, intersecting the axis “quality of PMSs” and the axis “expected use of PMS” we locate the universities in the following four clusters: a) the cluster named Prehistory of PMSs includes all universities whose Performance Plan resulted to be unstructured and dispersed and have developed PMSs only for external compliance with the Brunetta Reform axis; b) in the cluster named PMS incoherence we find all universities that, although developed an articulated Performance Plan, have not assessed the achievement of goals in their Performance Relation; c) the cluster PMS incomplete consist of universities have developed unstructured and dispersed strategic planning but have used performance information for internal managerial goals and not only to be external accountable; d) finally, in the cluster named PMSs best practices we find all universities that have structured PMSs with coherent strategic objectives and measurable indicators used to assess the results in the Performance Relations.
As shown in figure n.1, 48% of Italian universities are located in the so-called PMS prehistory square, while only a relatively small percentage of Italian universities are located in the squares PMS incomplete (4%) and PMS incoherence (14%). The remaining 34% of universities are part of the PMS best practices. Not surprisingly, figure 1 presents a polarized picture of the implementation and expected use of PMS in their administration, in line with the previously cited study of Agasisti et al., (2017).

7. DISCUSSION

This paper was inspired from the work of Agasisti et al. (2017) based on the analysis of 2012 Performance Plans and Performance Relations. We discuss the above presented results by adopting a comparative approach with respect to result the authors found in 2012.
We start by comparing the different contents of the Performance Plans and of the Performance Relations, with a specific attention to the coherence with the university’s missions, the presence of strategic objectives, the presences of operational one, indicators, targets and, finally, how universities account for organizational and individual results achieved. These results are summarized in table 3.

Table 3. The content of Performance Plans and Performance Relations, four years later

<table>
<thead>
<tr>
<th>Documents</th>
<th>Results</th>
<th>2012</th>
<th>2015</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Plan</td>
<td>Performance Plans and Performance Relations available</td>
<td>27%</td>
<td>82%</td>
<td>Improvement</td>
</tr>
<tr>
<td></td>
<td>Presence of strategic objectives</td>
<td>27%</td>
<td>80%</td>
<td>Improvement</td>
</tr>
<tr>
<td></td>
<td>Coherence of strategic objectives with the strategic missions</td>
<td>24%</td>
<td>75%</td>
<td>Improvement</td>
</tr>
<tr>
<td></td>
<td>Linkage with financial resources</td>
<td>Scant</td>
<td>Scant (only the 8%)</td>
<td>Stability</td>
</tr>
<tr>
<td></td>
<td>Focus of operational objectives</td>
<td>Administrative support services</td>
<td>Administrative support services</td>
<td>Stability</td>
</tr>
<tr>
<td></td>
<td>Presence of indicators related to operational objectives</td>
<td>15%</td>
<td>74%</td>
<td>Improvement</td>
</tr>
<tr>
<td></td>
<td>Type of indicators</td>
<td>quantitative</td>
<td>quantitative</td>
<td>Stability</td>
</tr>
<tr>
<td></td>
<td>Presence of targets</td>
<td>15%</td>
<td>61%</td>
<td>Improvement</td>
</tr>
<tr>
<td>Performance Relation</td>
<td>Description of organizational results</td>
<td>39%</td>
<td>90,2%</td>
<td>Improvement</td>
</tr>
<tr>
<td></td>
<td>Description of individual results</td>
<td>23%</td>
<td>59%</td>
<td>Improvement</td>
</tr>
</tbody>
</table>

As table 3 shows, we found different areas of improvement after four years. First, although universities also in 2012 were mandated to publish both documents, only the 27% has published such documents. This percentage strongly improves in 2015: almost all of the Italian universities (82%) actually respond to this transparency requirements of the Brunetta Reforms, publishing both the Performance Plan and the Performance Relation.

A second area of improvement is related to strategic objectives. If in the study of 2012 only 27% of universities actually present strategic objectives (and of this percentage only 24% presented strategic objectives coherent with the missions of universities), in 2015 the 80% of universities
actually define strategic objectives that are in general (75%) coherent with universities’ missions, i.e. teaching, research, third mission and administrative support services.

As far as operational objectives the discussion is concerned, we found a stable situation between 2012 and 2015. First, the majority of operational objectives focus on administrative support services, a finding that is in line with the aim of the Brunetta Reforms (and the NPM principles more in general): are properly administrative support services whose performance has to be motored and improved in order to support the achievement of strategic objectives, more focused on the university’s core missions. Other two areas of improvement, related to the sphere of operational objectives can be identified: the presence of indicators and targets. With respect to indicators, in 2012, only the 15% of universities present performance indicators, leading the previous authors to think on a performance measurement system that was actually unable to support managerial process and organizational learning. In 2015, the 2012 percentage has increased: the 74% of universities present indicators in their Performance Plans and they mainly have a quantitative nature, as the Brunetta Reforms asked for. Similarly, the presence of targets improved too, moving from 15% in 2012 to 61% in 2015.

What has not been addressed, in 2012 as in 2015, is the linkage with financial resources: although the identification of financial resources to achieve objective is a requirement of the law, only few universities actually address this aspect. Therefore, the integration with the financial perspective, and therefore the harmonization of the performance cycle with the financial planning system, is scant also in 2015.

The analysis of Performance Relations, i.e. how and to what extent universities account for organizational and individual results, we found some improvements, although they are mainly focused on organizational results. In 2012, only 39% of universities reported on organizational results, while this percentage move to 90,2% in 2015 to date. The description of individual results, although it has improved (23% to 59%) remains, also in 2015, less addressed than the organizational performance.

To sum up, although it seems that, to some specific extent, universities have improved their performance cycle, this is not enough to affirm that the implementation gap, 3 years later, have decreased.

*The Matrix: does the “implementation gap” decrease?*
The matrix provided by Agasisti et al. (2017) was discussed through the lens of the “implementation gap” (Ongaro and Valotti, 2008), that typically affects NPM reforms implemented in countries with a legalistic and administrative culture, as Italy is.

Specifically, the authors verified, through their matrix, two dimensions of the implementation gap: i) the distance between the law prescription and the content of the document and ii) the distance between the formal presence of these tools and their expected use. Specifically, the first dimension was highly verified by the great absence of performance documents for a vast majority of Italian universities; the second dimension was assessed by considering the number of the universities positioned in the squares named “PMS prehistory” and “PMS incoherence”.

Before proceeding by discussing the “implementation gap state of the art”, we provide synthetic information of the distribution of universities within the four squares in 2015 (table 4).

<table>
<thead>
<tr>
<th>Matrix’s square label</th>
<th>2012</th>
<th>2015</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMS INCOMPLETE</td>
<td>11%</td>
<td>4%</td>
<td>Decrease (positive)</td>
</tr>
<tr>
<td>PMS PREHISTORY</td>
<td>39%</td>
<td>48%</td>
<td>Improvement (negative)</td>
</tr>
<tr>
<td>PMS INCOHERENCE</td>
<td>11%</td>
<td>14%</td>
<td>Improvement (mixed)</td>
</tr>
<tr>
<td>PMS BEST PRACTICE</td>
<td>39%</td>
<td>34%</td>
<td>Decrease (negative)</td>
</tr>
</tbody>
</table>

**Figure 2. Comparison between 2012-2015**
The first point of discussion highlight an improvement on the “implementation gap” state of the art. Indeed, in 2012, most of the universities were not considered for the matrix fulfillment, i.e. the first dimension of the implementation gap addressed. In 2015, the situation radically changes, since almost all of the universities were included in the matrix. This first finding, although it is not sufficient to affirm that the implementation gap have decreased, highlight that universities are more aware of the utility of the documents mandated by law.

However, by looking at the date contained in table 4, the previous positive conclusion does not find a positive return on how the universities are positioned in the four squares. On the contrary, the second dimension of the implementation gap has increased its power: the number of universities coded as PMS prehistory and PMS incoherence increases compared to 2012. In these cases, the adoption of performance measurement system seems to following only a compliance logic, without an expected managerial use to improve organizational performances of universities. Information contained in the documents of these universities, indeed, recalls a logic of simply external accountability and compliance, not supported by an internal use following based on internal accountability.

On the other hand, these results are not un-expectected. In fact, implementation gap is a chronic problem of NPM reforms implementation in Italy that probably could not be completely “solved”, properly for the clash between NPM reforms and the traditional administrative culture of Italy. We can therefore assume that the transition from “NPM prehistory” to “NPM best practice” requires a “mandated step” through other non-optimal condition, as “NPM incoherence” and “NPM incomplete”.

To sum up, if this research has shown relevant improvement in the general adoption of performance measurement system in Italian universities, however it is not possible to affirm that, at a national level, the implementation gap decreased its power to influence the implementation of NPM reforms.

**Case studies: which elements have been improved?**

By comparing the matrix fulfilled by Agasisti et al. (2017) and the present analysis we select 4 case studies that have improved their performance management system, passing from square “PMS prehistory” in 2012 to “PMS best practices” in 2015. For each case studies, we have analyzed which elements have been improved in order to identify their path of change.

**University A and University O.** In 2012, the main criticalities of both University A and University O refer to *i)* the lack of articulation of strategic objectives into operational ones and on *ii)* the completely absence of reporting system in the Performance Relation. These two aspect, in fact,
were completely abandoned in the process of assessing performance of administrative support services. In 2015, on the contrary, University A and University O improved their performance cycle in three ways. First of all, strategic dimensions addressed covered all of the university’s mission, including also Third Mission (University A) and Research (University O), absent in 2012. At that time, for each strategic areas, only one or two objective were defined, while, in 2015 each areas is articulated into more strategic objectives, representing the real efforts that should be in place to accomplish the strategic vision. Second, also the articulation of strategic objectives greatly improved: if in 2012 there were few operational objectives that looked like as activity descriptor, in 2015 several operational objectives are 59 for University A and 23 for University O, and, for the most part of them, appropriate indicators and targets have been also defined. Third, the achievement of the objectives presented in the Performance Plan, have been clearly described in the Performance Relation in which, for each objective, the university reported the degree of achievement. In particular, University O also provide explanations with respect to the causes that have impeded the achievement of the objectives.

**University C and University D.** In 2012, University C and University D seem to have not implemented the performance cycle: no strategic objectives, no operational objectives, no indicators and targets were described in the Performance Plan. Despite the absence of objectives and related metric of measurement, both Performance Relations surprisingly presented the description of “organizational results” achieved. On the contrary, in 2015, both universities provided a structured performance planning identifying, in the Performance Plan, strategic areas, related strategic objectives declined in turn into operational one, measured with indicators (typically qualitative in the case of strategic objectives and qualitative for assessing the achievement of the operational ones). Therefore, the serious gap highlighted in 2012, seems to be filled in 2015. With respect to the Performance Relation we found that, as in 2012, the document provides indication on the objectives achieved. However, if in 2012, it was not clear the relation between performance planning and performance monitoring, in 2015, for each objective described in the Performance Plan, the reporting document clearly highlight which of them have been achieved. In particular, in the Performance Relation of university D, the achievement of each objective is clearly and deeply describing, sometimes reporting about the causes that have impeded the full objective’s achievement.

8. **CONCLUSION**

New Public Management (NPM) has been the most inspiring principle of public sector reforms and, among the different fields of public action, the Higher Education sector seems to be one of the most
controversial for NPM reforms to become effective. Furthermore, the Italian context is notably one in which NPM reforms have led to controversial results, particularly for its legalistic and administrative culture that often lead to “implementation gap” problems.

Recognizing these implementation problems, this paper focuses on the use of performance measurement and management system in Italian universities. Starting the matrix provided by Agasisti et al. (2017), focused on the diffusion and use of performance management and measurement system in 2012, that pinpointed a dramatic situation, this research wants to assess, at one hand, if some improvements in the use of such system in Italian universities occurred and, on the other hand, if the implementation gaps has decreased after three years.

The analysis of Performance Plans and Performance Relations, i.e. the mandated “performance documents” according to the Brunetta Reform, on which this research is based, provide controversial results. Specifically, the research has shown some relevant improvements in the general adoption of performance measurement system in Italian universities, typically in relation to the definition of strategic objectives and their declination into operational one, in turn measured with indicators and target. However, considering the number of universities that have moved from “NPM prehistory” to “NPM bets practices”, it is not possible to affirm that, at a national level, the implementation gap decreased.

In conclusion, we can affirm that, compared to 2012, the use of performance measurement system seems to be more diffused among Italian universities, probably indicating an increased awareness of the usefulness of such managerial tool. However, the transition to an effective use to this tool seems to be still far from the actual Italian reality. We are persuaded that is properly for this reasons that the work carried out by ANVUR, could be fundamental in steering universities toward a better use and implementation of the performance measurement system in a logic of continuous improvement.
REFERENCES


