Editorial

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Research and the driving role of public institutions. Policies, arrangements, and instruments for innovation

The editorial opens with a positive news. ANVUR, Agenzia Nazionale di Valutazione del Sistema Universitario e della Ricerca (Italian National Agency for the Evaluation of Universities and Research Institutes) classified and included RIPM, Rivista Italiana di Public Management, as a scientific journal in the following Areas: Legal Sciences, Economics and Statistics, Political and Social Sciences.

The Editors and the entire Editorial Team hope that this new qualification, strengthening the mutual link between the mission and vision of the Journal and its multidisciplinary approach, will increasingly encourage Public Management to contribute to the journal, also on an international level. Such contributions will define lines of thought and case studies to gather energies towards public institutions and among all stakeholders that can

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help the subject matter to grow over time.

In addition, we would like to bring to your attention the theme addressed in RIPM Special Focus - Vol.3 - n.2 | 2020 "Emergency management, between exceptionality and continuity: models and tools for risk management".

The theme addressed in the last issue of the journal resulted from the emergence of the Covid-19 pandemic event. It is even more topical today, compared to the launch of the Special Focus. It led a significant number of scholars to keep questioning and debating the economic, social, organizational and managerial implications of a state of crisis in public institutions. We invite scholars to contribute to the permanent section of RIPM -Dialogues -, to feed the debate on areas that will undoubtedly stimulate our reflections for a long time to come.

In analyzing the reasons that led to a reflection and, hopefully, a virtuous debate, on the Special Focus of this issue entitled "Research and the Driving Role of Public Institutions - Policies, Structures and Tools for Innovation", the underlying idea was to investigate, from various points of view and enhancing theoretical, technical and operational approaches - the role of research in the twenty-first century. There is no doubt that the subject at the center of our analysis is once again inspired by the current state of art. Debating the role of research today has a direct impact on public policy choices that many countries made in the last two years. There exists a direct correlation between the pandemic and the role of research, with the profound belief that a large part of the progress and well-being of future generations will derive from the public policies and actions taken in this field.

We are certainly facing an exceptional and comprehensive, cross-cutting debate where some arguments are often "against" science, research, knowledge and acquired skills. For many years, issues related to investments in scientific and technological research have received little space in the public debate. Today, on the contrary, we are witnessing a turnaround and a revival of the relationship between research and economic and social growth, research and competitiveness of countries and, more generally, a true revival of the analysis of the role of science in human progress.

From this point of view, the Covid-19 pandemic has been an exceptional opportunity to put research back at the center of human development.

The pandemic acted as an accelerator of change. It necessarily required an original and, at the same time, rigorous approach to address unprecedented challenges, in which the traditional models of public decision-making are being revisited.

We live in an era of great changes where megatrends, also meaning a multiplicity of social, technological, demographic and environmental variables, contribute to change the way in which the behaviors of different players are interpreted and redefined, thus modifying the economic, financial and geopolitical landscape.

A debate on the ability to interpret a lead-

ing role of science and research contributes to improve the processes through which we face decisions and determine public choices. These latter are fundamental for the well-being of society as a whole and feed the innate hunger for new knowledge. The future of every country, and relationships between countries, rest on the ability to generate knowledge.

A national or supranational strategy is needed to encourage scientific and technological research by channeling economic resources and human capital towards shared goals and values in all sectors. In this respect, NextGenerationEU¹ can be an extraordinary driving force to create the investment conditions that have long been hoped for and for a long time never applied.

At the same time, the governance of institutional infrastructures governing research and development functions should be outlined. The compelling needs that the pandemic has redefined should be seen as an opportunity. The role of public institutions requires a strategic repositioning and is the key to define, or redefine, their consequent driving function. Giving impetus to the research function in an innovative way by public institutions in order to "put back at the center" first and foremost precisely the administrations is a critical element of evaluation at a global level. A greater commitment, joining forces to create a shared model to fund scientific research combining excellence and equity across geographic, economic, social and political boundaries is an inescapable imperative for the survival of humanity.

The changes caused by the pandemic have certainly created an upsurge of reflections on scientific research. But today these reflections, which are often characterized by controversial positions, should be conveyed and challenged. All over the world, a remarkable interest in science has arisen among both insiders and outsiders. This interest risks misleading the focus of attention with respect to the reasons that intrinsically require placing science and research in the foreground.

There is little doubt that, either directly or indirectly, public policy decisions over the past two years have been influenced by science, by those who interpret science, and by institutional players who design measures based on their interpretations of science in a context that can be described as an emergency.

However, it is also indisputable that the "overexposure" of science and the scientific method witnessed in recent times did not turn into a dissemination of knowledge of the standards, considered fundamental in the twentieth century, of the scientific method of communitarianism, universalism, selflessness and skepticism although such elements keep being topical. These principles, in short, have not entered any mainstream debate. On the contrary, the state of art that existed even before the breakout of Covid-19 has persisted. Before the pandemic, the free exchange of data and research findings was

particularly limited, undermining the sharing on which the scientific method is based (Ioannidis, 2021).

Science was unanimously considered the realm of an isolated, self-referential elite. Even the principle of systematic skepticism went into crisis because of Covid 19. It is worth recalling what happened in 2020 and 2021: on occasion, peer-reviewed journals presented their results, although biased by the pressure dictated by the need to "publish" certain outcomes first.

There is a hunger for a reform of the academy. This latter can be strengthened by reshaping the approach to evidence-based research, absence of conflicts of interest, transparency and sharing of outcomes. Unfortunately, the beginning of the pandemic has caused a resurgence of the pathologies of non-virtuous research processes; only after two years, virtuous conditions in line with Mertonian principles are being recreated, also thanks to the high global visibility of research-related issues in both social and non-social media.

In this regard, it is interesting to underline the risk, if not the practice, of infodemics and the role of the media in conveying scientific and research results with an overexposure of investigators in the last two years. The relationship between science, research outcomes and communication has been, very often, weak, instrumental, fallacious. A first conclusion is therefore the need to innovate in terms of research communication, especially by public institutions. It is necessary to find, or rediscover, the balance underlying dissemination, that is not an end in itself: to be able to interact with any audience, including non-technical users, making data and information available, being ethically rigorous, being aware of the continuous evolution of scientific thought and the importance of the evolution of scientific thought for innovation in the actions of public institutions.

Another interesting topic evoked by the Special Focus is the relationship between innovation and progress.

Researching certainly means nurturing progress, which is much more than innovating - making something new. Progress comes from the Latin progressus, meaning an advancement toward higher degrees or stages "with the implicit concept of improvement, evolution, a gradual and continuous transformation from good to better, both in a narrow and in a broader and comprehensive sense (...) development towards higher and more complex forms of life, pursued through the advancement of culture, scientific and technological knowledge, social organization, the achievement of political freedoms and economic well-being, in order to provide humanity with a general improvement in the standard of living, and a greater degree of liberation from hardship"2.

Ultimately, scientific research rises to a role that radiates well-being for humanity: this is the fundamental point to consider, especially at this historical time, so painful in many ways and so in need of optimism and confidence.

Progress, in line with what was stated about the communication of scientific research, develops when assumptions are not based on mere opinions but rather on facts, on robust scientific evidence. This is the only way to increase the overall well-being of humanity. Progress should be interpreted as a driver of innovation in public institutions creating a close relationship between decision-making, implementing processes and evaluation of decisions over time.

The Special Focus introduces a further, significant element triggering original reflections: the role of public institutions in creating conditions suitable to scientific progress. Also, with respect to science and research, we can state that in the last two years the definition, analysis and evaluation of the decision-making processes of public institutions, both policies and management decisions, have been observed, refuted, hindered or denied as never before.

It is believed that the authoritativeness, legitimacy to act, reputation and, certainly, the ability to create value for public institutions - progress and well-being as the ultimate effects - derive from how "decision making" mechanisms are defined, especially, but not only, during a crisis.

In this respect, too, public administrations, starting with those at the central level - those that deal with policies more than others - have gradually slipped into rearguard positions, losing their authoritativeness, legitimacy and reputation over time. In our opinion, one of the causes of this retreat derives from several variables which, together, have contributed to the present situation.

First, reformist tendencies of institutional structures and governance models inspired by the private sector - Outsourcing, Downsizing, New Public Management etc. - have slowly created serious weaknesses in the internal, autonomous and independent development of decisions, also because of an emerging dependence on external institutions, including private-sector ones. What's more, it often happens that institutions engaged in research and exploitation of data and information to support decisions do not talk to each other, do not "make" any restitution to the institutions from which they ask data and information (Andrews, 2019). In short, they do not help enhancing the authority of public decision-making.

Second, factors like the structural shortage of staff, which has increased over the years, partly due to formal constraints on the acquisition of human capital, and the mismatch between the skills required and those available, have led to difficulties in managing time of decisions and defining the optimal mechanisms to make appropriate decisions. The lack of attention to the development of human resources policies, the scarcity of resources for recruitment and professional development, the inability to engage in predictive action has "emptied of meaning" one of the fundamental pillars of good governance

(Rhodes, 2000): the central role of civil servants as conscious institutional players capable of building and stabilizing the "infrastructure" needed to redefine decision-making processes, in terms of a harmonious relationship between politics and administration.

Third, there exists a structural misalignment between the timing of politics and administration (Bach & Wegrich, 2020). In our opinion, this is one of the weakest elements in achieving "good governance" objectives. Side effects include, among others, the lack of a lasting political line on investment in research; the failure to continue investing in innovative institutional and organizational structures; the lack of direction and integration in sharing a common position on the role of research in decision-making.

A similar mechanism of distrust has arisen in the relationship between political decision-makers and civil servants, and in the way civil society considers this relationship. Quite often, it is interpreted as being "not loyal" or subordinate to the logic of fast and opportunistic sliding doors (Sasso & Morelli, 2021).

This sequence of considerations allows us to affirm that time is ripe for a strong revival of science and research and of progress as a "gradual transformation from good to better" in public institutions.

Such reputational relaunch cannot disregard an internalization of the investment and subsequent capitalization in the propulsive role of research. Institutional reforms of public agencies for research, evaluation and dissemination of research, the role of or technical offices - also internal think tank - or development department to support policy decisions, recruitment and selection of human capital with specific higher education degrees, the regulation or rather re-regulation of the non-negotiable principles underlying the publication and dissemination of scientific research findings - are essential elements to ensure that the actions of public institutions are reputable, authoritative and valuable (Osborne, 2018).

This desired framework is rooted in the inescapable emergence of paradigms of public management - open government innovation and multilevel governance - increasingly able to anticipate, interpret, and accompany the managerial evolution of institutions to an approach capable to engage internal and external stakeholder.

This issue is another example of the journal's specific aptitude for listening, with its the Special Focus section dedicated to the thematic study of research and the "driving" role of public institutions. As already happened in the debut issue, also through an interview, attention was paid to how the authors, despite their different disciplinary approach, based on their roles and within their respective institutions, see the public and private research system.

The first contribution is entitled "The management of public resources allocated to research and the axiological dimension of supply chain performance". It focuses

on the use of public resources granted to research. It highlights the "potential performance of the supply chain, as a tool able to subsume the incremental value chain in the progressive combination of the activities of organizations competing with the mission deployed directly by the PA, and also of social reporting as well as of its related participatory evaluation". As already debated in a previous issue, this confirms that "innovation invests, or should invest, in public institutions, institutional structures, organizational and managerial models, in the roles of political and managerial players, skills, redefinition of output and outcome".

An authoritative panel, composed of the Minister of University and Research, the President of Enea, the Director of the Interuniversity Center for Bioethics Research (CIRB), the Presidents of the Italian Academy of Business Economics (AIDEA) and of the Italian Society of Management (SIMA), and the Directors of two Observatories of the Bruno Leoni Institute, agreed to answer the Special Focus questions, reported below.

The following is a list of questions. Respondents were invited to express their personal opinions also referring to concrete cases.

- What contribution can management research make to the development of public administrations?
- What are the most innovative institutional arrangements in public institutions to promote, accelerate and enhance scientific and technological research activities?

- What are the management tools for managing and organizing research analysis and evaluation processes?
- What are the models, players and mechanisms promoting a virtuous circularity of research funding paths?
- How can we enhance the human capital of researchers and their role in institutions?
- Are there robust models of Technology Transfer (TT) today? Is it possible to develop TT-type models to nurture virtuous forms of collaboration between the academy, the market and non-profit institutions?
- What are the current research evaluation mechanisms that are most consistent with sustainable models?
- What are the innovative models employed by public and private institutions to support and develop scientific and technological research?
- Is it possible to build tools for the development of funding mechanisms for scientific research that consider all stakeholders while ensuring the best possible outcome for society as a whole?

Each contribution expresses "the point of view on research and interrelation with public institutions". According to RIPM style, information, ideas, models and methodologies are shared. They can be used to depict possible scenarios related to the R&D chain, from evaluation to financing and technology transfer, also in view of the complex program of reforms and investments for the 2021-2026 period defined

by the NRRP. They show that "research and advanced training can foster the construction of innovative and simplifying responses, profiled on the specificities of an administration, while shaping specific and horizontal professional skills" (Messa). Managerial research can contribute to the "definition of systems for measuring, evaluating and managing performance that take due account of the peculiarities of public institutions and help sustaining a continuous improvement in the quality of the services they provide" (Pizzo). In this regard, it is interesting the reference made, among others, to the mobilization created around the space race of the '60s of the last century as an example of how "scientific and technological research, combined with challenging objectives", can provide today, starting from the great challenges of green and digital transitions, a "major contribution to the creation and development of innovative public sectors, while stimulating very productive spinoffs at the industrial level" (Dialuce). They consider the "research process (...) as a (...) process of value creation", which must be "managed and evaluated", "managing the various steps (...) and keeping its main outputs under control". Incentive mechanisms also depend on such measurements "so as to always trigger a virtuous circle" (Castaldo). They underline "the need for public and private financing of research by a GDP percentage at least close to the competing countries of the OECD area (...) in a country like Italy marked by an unacceptable territorial gap" (Patroni Griffi). They also point out the need to "improve the dialogue between companies and research institutions in order to break down those barriers that do not allow to enhance

the skills and capabilities of researchers" (Amenta & Stagnaro).

The thematic section entitled "R&D and PA: Open issues and outlooks" features a series of "in field" experiences. Again, they highlight research as one of the engines of growth (social, economic and cultural) and sustainable development for our country.

Two articles are devoted to the National School of Administration (SNA). Its mission includes (applied) research, to support organizational change processes, with "two priority objectives: the realization of research projects that can have a real-life impact on public administrations; and the promotion of a virtuous circle between research and training activities". As a result of the decree on PA recruitment (d.l. 80/2021), one should add the "identification of specific types of training for the staff of public administrations in charge of the development and implementation of the NRRP activities and measures". The first contribution illustrates the methodological approach adopted and the research strategies for the period 2019-2021, some of which are still being implemented. It highlights the "cross fertilization role that SNA can play between universities and PA, in terms of knowledge and "liaison" between the two worlds. This should avoid the risk of an abstract academic research and a feeling of subalternity on the part of the administrations, at times even skepticism about the ability of university research to really understand and support the PA needs". The second article explores the importance, confirmed by some interviews, of "research in the managerial field (...), strongly linked to experience (...) in the field". A case in point is related to the author's professional path and its two lines of activity. It emphasizes that "an articulated and complex field of study, such as that of the Italian public administration, requires analytical tools, interpretation theories, intervention models that can explain the context, given that the nature of the Italian PA is substantially different from the other large families of organizations addressed by management scholars".

The Special Focus ends with an article about "Creating social, economic and cultural impact of public research: it seems easy, but...". It offers significant considerations for both the present and the future, such as strengthening Technology Transfer Offices, the role of Humanities and Social Sciences, evaluation and attention to "meteors", i.e., actions that turn out to be unsustainable over time once the initial funding has been used up. It also outlines a new contribution to the Knowledge Exchange processes by businesses, especially SMEs.

The journal's Dialogues section features an essay: "The governance of innovation in Venice: past, present and future" retracing the link between the Venice of the Serenissima and innovation, offering hints for the future of this city, paradigmatic for others, which can be summarized with some key words also mentioned in the Special Focus, like "attraction", "facilitation", "network governance" and "internationalization".

The same section presents an article on "Organization and effectiveness of agile work during Covid-19. A survey on the

perception and opinions of workers in a public health institution". It follows up a debate that began in the previous issue, in which the value chain of agile work was presented, and new conceptual and application models were proposed. After providing an interpretative framework, the authors illustrate, also through an internal survey, the telework experience of the Istituto Zooprofilattico Sperimentale delle Venezie, in relation to the implementation of agile working.

The contributions in this volume, featuring different points of view and a wide range of insights that blend theoretical and technical approaches, do confirm, as warned by the President of the Republic during the ceremony celebrating "I Giorni della Ricerca" on October 26, 2020, that "research is paramount, a common good that calls for common responsibilities".



Bibliographical references

- Andrews, L. (2019). Public administration, public leadership and the construction of public value in the age of the algorithm and "big data". *Public Administration*. Wiley Online Library.
- Bach, T., & Wegrich, K. (2020). Politicians and bureaucrats in executive government. The Oxford Handbook of political executives.
- Ioannidis, J. P.A. (2021). How the Pandemic is changing the norms of science imperatives like skepticism and disinterestedness are being junked to fuel political warfare that has nothing in common with scientific methodology. Consultabile in https://www.tabletmag.com/sections/science/articles/pandemic-science
- Osborne, S. P. (2018). From public service-dominant logic to public service logic: are public service organizations capable of co-production and value co-creation? *Public Management Review*.
- Rhodes, R.A.W. (2000). Governance and public administration, in J. Pierre, Ed., Debating Governance, Authority, Steering and Democracy. Oxford: Oxford University Press.
- Sasso, G., & Morelli, M. (2021). Bureaucrats under populism. Journal of Public Economics Elsevier.