

EUROPEAN POLICY BRIEF



POLICIES FOR PUBLIC SECTOR INTANGIBLES

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INTRODUCTION

GLOBALINTO ("Into" means enthusiasm in Finnish) aims to develop and refine measures of intangibles at the micro level and amongst others as part of global value chains at the macro level and to use these measures to analyse the causes of the productivity slowdown and how productivity growth can be improved. In addition, the project looks at the specific policy challenges related to intangibles, which are based on two observations. First, we do not observe any coherent and co-ordinated policy vis-à-vis intangibles. Second, there is a lack of understanding as to the meaning of intangibles in the public sector.

This policy brief outlines our findings as to the nature and conceptualisation of public sector intangibles and highlights the tensions and challenges related to policies for public sector intangibles. It suggests a number of policy recommendations to improve the value of and benefit from public sector intangibles. We illustrate our findings with the example of the UK and look at the explicit strategies for public sector intangibles. This policy brief builds on a previous [Globalinto policy brief on private sector intangibles](#).

EVIDENCE AND ANALYSIS

Concepts and Analysis

Investments in intangible assets in the USA and European Union region (EU) are growing at a faster rate as compared to investments in tangible assets. Policy makers across countries have introduced policies for specific categories of intangibles, such as computerized data(bases) and software. With the notable exception of Ireland, there is no comprehensive policy or institutional framework for the canonical development of intangibles as a whole, although there are strategies about individual components of intangibles. For instance, France established the Appui au patrimoine immatériel de l'État (APIE) in 2007 to develop strategies and optimize the management of public intangible assets, but the organisation primarily focuses on structural and relational capital components of public sector intangibles. Policy decisions on intangibles do also rarely consider explicitly the growth of *intangibles commons*, which is the pool of knowledge, skills and competencies regarding a technology or sector and the associated production processes, freely available to all firms in an industry. Moreover, academic scholarship and policymakers alike have devoted greater effort in conceptualisation and measurement of intangibles for the private sector, and this reflects in the policies as well. Although the public sector constitutes 40-50% of the GDP in the EU countries, and hence, contributes a significant proportion of the intangible assets in the economy, policies and academic literature for intangibles in the public sector are scarce.

Our analysis of the literature and the system of national accounts even suggests that there is no agreement on what constitutes public sector intangibles. The literature on public sector innovations focuses predominantly on the development of organizational capital and information and scientific assets, although the terminology used is different. There are few studies or reports on public sector intangibles and in each of these studies, the definition of

public sector intangibles, and the categorisation of its components, differ. The lack of a shared understanding of public sector intangibles impedes their measurement. Globalinto adopts the definition of public sector intangibles derived from SPINTAN, a project commissioned by the EU aiming at discovering the theoretical and empirical underpinning of public intangible policies, as "the non-market investments by the general government and the non-profit institutions serving households". In this project, we refine the measurement of public sector intangibles, especially organizational capital, using occupational data on public sector.

The lacunae in conceptualisation and measurement of public sector intangibles – especially in terms of productivity and spillover effects – and our limited knowledge of the mechanisms underlying the generation and development of public intangibles for innovation misinforms policies and is leading to a far greater emphasis on incentives for development of intangibles by the private sector. This, however, ignores the wealth of knowledge and other intangible assets residing with the public sector. The poor data and analysis of the public sector intangibles also ignores the role of the public sector in supporting the private sector and in the development of the "intangibles commons" benefiting the economy and society as a whole.

Research from Globalinto shows that investments per employee in R&D is higher in the public sector as compared to the manufacturing sector, but this trend is reversed for other components of intangible assets. These results reveal the absence of systematic investments in public sector intangibles across EU. Research from Globalinto also suggests that strong complementarities between public sector and private sector intangibles, such as public and private R&D, private and public sector software development as well as organisation

capital in the private and public sector, leads to productivity growth. Moreover, we identify the importance of good governance – which we can itself define as a public sector intangible – for the development of other intangible assets in the public sector. To invest in government effectiveness, regulatory quality, rule of law, control of corruption, political stability and absence of violence, and voice and accountability accelerates the growth of other public sector intangible assets. Simultaneously, growth in public sector intangible assets improves the institutional framework in a country. These results suggest that while policies for individual components of public sector intangibles, such as computerized data(bases) and software or organizational capital are important, a further holistic approach is needed to analyse the synergistic relationships between various components of public sector intangible assets, as well as the synergies between the public sector and private sector intangible assets.

Analysis of policies towards public sector intangibles, conducted for the UK public sector, suggests that strategies for various components of public sector intangibles vary in their maturity, very much depending on the attention bestowed by the political leadership. For instance, the current political leadership in the UK and in some of the EU countries such as Germany and France, are taking a keen interest in the growth of Artificial Intelligence and machine learning related technologies (super software), and hence, there is a strong emphasis on policies for computerized data(bases) captured by the government statistical agencies.

Further, there is a strong bias towards the identification of knowledge that can be protected by formal legal systems and can be commercially exploited. Often, this is done in partnership with the private sector rather than seeking the growth of the intangibles commons. The establishment of Cobalt Light Systems, and Celsius Health in the UK are but two examples of the government labs spinning

off new technology and know-how into start-ups for commercial reasons.

Looking at the UK example also reveals the tensions inherent in the policies for public sector intangibles. For example, the current policy and strategy documents do not address how ministerial departments and public/government agencies will achieve the balance between in-house investments (own-account organizational capital) and outsourcing of development of public sector intangibles (purchased organizational capital). Questions related to ownership of computerized data used by the private sector for commercial purposes, responsibilities for data security, and routes for commercialisation of technology developed by the public sector have largely remained unanswered. The growth of the intangibles commons is crucial in ensuring that knowledge is not concentrated in the hands of the few. The public sector has a crucial role to play in the development of the intangibles commons, especially through funding and the activities of the government labs. Thus, while commercialisation of innovations from the public sector is important to generate revenues for further investments in knowledge, it also has the potential to limit the flow of knowledge through privatisation of the new knowledge, thereby hampering the growth of the intangibles commons. In sum, current policies do not address the balance between commercial exploitation of new knowledge on the one hand and the growth of the intangibles commons on the other hand.

These outstanding issues reflect the lack of a holistic approach while developing policies for intangibles. Such an approach to developing policies for public sector intangibles would not only improve the effectiveness of the public sector, but also increase the innovative capacity of the economy and support the growth of the private sector. This is at the core of the justification of a multifaceted policy approach towards growth and development of public sector intangibles.

POLICY IMPLICATIONS AND RECOMMENDATIONS

We ask for a fresh perspective on policies for public sector intangibles based on the growth of intangibles commons and the complementarities between the public sector and private sector intangibles and the intangibles commons. Our analysis points to the following suggestions for policy development:

Firstly, we need to develop a broader and shared understanding of public sector intangibles as well as common guidelines for measurement to allow for a systematic stock taking of public sector intangibles in Europe.

Second, the systematic development and growth of the intangibles commons should be an important consideration of the policies for public sector intangibles. We need systematic policies to better exploit the potential of public sector intangibles to create more public value as well as support private intangibles. As the UK example shows, currently, policies are made “ad hoc” at the level of individual ministries and individual public/government agencies, which results in duplication of effort and differences in interpretation of the concept and constituents of public sector intangibles. While strategies for the growth of various components of public sector intangibles are vital for the overall growth of the economy, we advocate for a more holistic approach recognising the observed complementarities between the various components of public intangibles as well as the synergies between the public and the private sector.

Further, we should evaluate public value from investments in public sector intangibles over the long term rather than short-term financial returns. Public sector intangibles can support innovativeness by mitigating the adverse effects of high fixed costs that are typical for intangible investments. The value derived from the growth of the intangibles commons as well as the development of nascent industries should be considered explicitly while evaluating investments in public sector intangibles.

Finally, while advocating a dedicated effort to build up and strengthen public sector intangibles for better public service and for private sector growth, we must take public concerns over privacy and equity more seriously.

RESEARCH PARAMETERS

This policy brief reports results from an extensive literature review of the current policies on public sector intangibles. We examined academic articles as well as project reports on public sector intangibles. We searched for academic articles on public sector intangibles as a distinct category, as well as the components of these intangibles, such as computer software, computerized data(bases), cultural assets, and organisational competencies. We also evaluated the current policy and strategy documents of the UK government to gain insights into the adoption of the concept of public sector intangibles by policy makers.

Globalinto has devoted large effort to better measurement of broad intangibles. In practice, national statistical institutes approximate software investments from ICT related labour costs. Globalinto uses similar methodology for measurement of organizational and R&D capital, and extends the methods to public sector. The refined methodology is the bedrock for the empirical studies of intangibles – both public and private – in the Globalinto project.

PROJECT IDENTITY

PROJECT NAME GLOBALINTO (Capturing the value of intangible assets in micro data to promote the EU's Growth and Competitiveness).

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EU Horizon 2020 Framework Programme (2019-2022), TRANSFORMATIONS-14-2018: Supply and demand-oriented economic policies to boost robust growth in Europe – Addressing the social and economic challenges in Europe, a continuation to FP7 INNODRIVE project (www.innodrive.org) that developed the Innodrive-methodology in measuring intangible assets at the firm level. In 2013, Horizon2020 NET4SOCIETY chose Innodrive among the seven SSH projects in FP6 and FP7 that had a considerable impact – not only on research but also on policy, society or economy.

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FURTHER READING Bloch, C., Piekkola, H., Rybalka, M., Eklund, C., (2021) Measuring intangible assets at the firm level – development of an occupation based approach (D3.4)
Bounfour, A., & Nonnis, A., (2021), [Impact of public sector intangibles and their components on firms' productivity](#) (D7.3)
Lampel, J., Edler, J., & Gadepalli, S. D., (2020) [Public policy and intangibles: A conceptualisation and critical appraisal](#) (D2.6)

[Piekkola, H.](#), (2020), Intangibles and innovation-labor-biased technical change, *Journal of Intellectual Capital*, Vol. 21 No. 5, pp. 649-669. <https://doi.org/10.1108/JIC-10-2019-0241>

Piekkola, H., Redek, T., & Farčnik, D., (2020), [Intangible assets in the public sector: An extended definition and methodological guide](#) (D7.1)

Redek, T., & Kostevc, C. (2021), [Public sector intangibles and governance quality in the European Union](#) (D7.2)

Redek, T., Koman, M., Kostevc, C., Prašnikar, J., & Žabkar, V., (2021) [Role of policy for development and the use of intangible assets](#) (D7.5)

Redek, T., Kostevc, C. & Farčnik, D., (2021) Report on the empirical analysis on the role of intangible assets in the public sector (D 7.6)

Roth, F., (2021), The rule of law and intangible capital by businesses (D7.4).

[Tsakanikas, A., Roth, F., Caliò, S., Caloghirou, Y., Dimas, P. \(2020\). The contribution of intangible inputs and participation in global value chains to productivity performance: Evidence from the EU28, 2000-2014 \(Hamburg Discussion Papers in International Economics, No.5\), University of Hamburg.](#)