

IARIW-ESCoE Conference

“Measuring Intangible Assets and Their Contribution to Growth”

The Globalinto large-scale survey of intangible investments

Aimilia Protogerou, Laboratory of Industrial and Energy Economics, National Technical University of Athens, protoger@chemeng.ntua.gr

Yannis Caloghirou, Laboratory of Industrial and Energy Economics, National Technical University of Athens, y.caloghirou@ntua.gr

Aggelos Tsakanikas, Laboratory of Industrial and Energy Economics, National Technical University of Athens, atsaka@central.ntua.gr

Panagiotis Panagiotopoulos, Laboratory of Industrial and Energy Economics, National Technical University of Athens, panag.panag82@gmail.com

This paper aims to present the methodology and research design of a large-scale survey on intangible investments that is currently being conducted in the context of the Globalinto project funded by the European Union’s Horizon 2020 Programme. Globalinto seeks to develop new measures of intangible assets in order to analyse the role of knowledge production and diffusion for innovation, productivity and growth. In general, the current treatment of Intangible Assets can be characterised as partial and uncoordinated with a particular lack in measurement at a micro (business-firm) level. New methodologies and statistics with micro foundations and harmonization approaches across countries are needed for micro level analysis to better understand individual firm behavior and performance, i.e. innovation and firm productivity. In addition, survey-based approaches on micro level IAs remain rather limited. Literature review shows just three recent survey works attempting to measure intangible assets and relevant investments in different countries: ONS , Imperial College London and NESTA (2009; 2011): Investment in Intangible Assets Survey (UK), the Eurobarometer survey (2013): Investing in Intangibles: Economic Assets and Innovation Drivers for Growth”, and the INAPP and ISTAT (2013) in Italy.

In this respect, the Globalinto large-scale survey aims to add to the existing studies by a) developing a more comprehensive view of business’ spending on intangible assets, b) identifying the factors influencing these investments, c) assessing the relationship of the intangible assets to strategy and their impact on enterprise (economic and innovation) performance, and d) investigating the impact of Covid-19 pandemic on the level of these investments.

The survey has been very recently launched in seven European countries (Germany, France, Italy, Denmark, Finland, Greece and Slovenia) and is expected to be completed in early January 2021. Our aim is to collect 1790 complete questionnaires through telephone interviews (CATI type) with the most knowledgeable respondent (firm owner, CEO and/or top-level managers). Interviews are conducted in local languages to increase the survey’s reliability. Our target population has been drawn from the commercially available Orbis database (and may be complement if needed with

additional samples from national registries or other available databases) based on three basic criteria: country, industry (both manufacturing and knowledge-intensive services sectors are included), and employment targeting at firms with 20 or more employees in the sectors.

The survey instrument includes 5 different sections. Section A provides general information about the firm. Section B concentrates on investigating investment decisions on six intangible assets (i) training, (ii) software/databases, excluding research and development and web design, (iii) research and development (R&D) and acquisition of external knowledge, (iv) design of products and services (excluding research and development), (v) company reputation and branding, and (vi) organisation or business process improvements. Measuring investments in intangibles involves two steps. First, we need to find out how much firms spend on each intangible category. Furthermore, we need to ask firms how much they spend on purchasing intangible assets and what they spend on “in house” or own account investment assets. Specifically, the questionnaire targets at capturing spending in intangible assets during the past year in terms of expenditures as a % of the firm’s turnover, and the firm’s choice to allocate resources to “making” internally rather than “buying” externally those intangibles.

Section C puts emphasis on the determinants of a firm’s investment in intangible assets. In line with the capability view of the firm, it is argued that a firm’s propensity to invest in intangible assets can be understood mainly as a bundle of resources and capabilities that the firm has evolved over time and only marginally as a result of exogenous technological contingencies. The adoption of such a perspective in the study of intangible assets investments calls for a focus on firm-specific factors that in interaction with system-specific (external factors) can explain the firm’s propensity to undertake this type of investments. On this basis we choose to focus on variables such as strategic priorities, organizational complexity, human and technological resources as well as specific organizational capabilities (e.g. dynamic capabilities regarding the sensing and seizing of opportunities, innovation management capabilities, and design and digital capabilities) which we believe are important determinants of a firm’s intangible investments. For example, the quality of human resources employed by the firm, the degree of organizational complexity (e.g. degree of internationalization, FDI) or a firm’s strategic priorities (e.g. price vs differentiation strategy) may have a significant impact on its intangible assets’ investment decisions.

Section D aims at capturing the impact of investments in intangible assets using various performance measures including innovative firm performance. Please note that additional performance measures related to productivity such as sales per employee, profits per employee etc. can be deducted for the sample firms from the financial data available from Orbis. In section E a number of questions related to the impact of public policies on the intangible investments of a firm are included. Last but not least, section F, which includes questions on the COVID-19 crisis, was added to the questionnaire in order to capture the impact of the pandemic on the investment on IAs and the firms’ digital capabilities/strategies

As already mentioned, the survey is expected to be concluded in the next two months and survey results will be available. The survey aims at providing evidence-based implications for coherent policies as well as business strategies by informing: a) policy formulation at an EU and national level regarding the support of IAs development and effective use as well as other complementary measures for increasing European firms’ and economies’ innovation, competitiveness and growth,

and b) strategic decisions regarding the appropriate mix of investments in IAs and other issues such as the development of specific organisational capabilities so as to improve innovation and economic performance in the long-term.