

Introduction

The growing importance of services in practically all the countries of the world is reflected in the greater contribution of this sector in production, employment, and foreign direct investment (FDI). For example, in developing economies, services accounted for 55% of output in 2015 and 44% of jobs in 2016 (Mashayekhi *et al.*, 2017). Services trade is also growing with, between 2005 and 2016, the share of services in total exports increasing from 24% to 28% in developed economies and from 14% to 17% in developing economies. Although developed economies have been the main providers of services, developing economies have been more dynamic in their sales (Mashayekhi *et al.*, 2017). The main service export categories were travel, with 24.0%; other services; with 22.3% and transportation, with 17.6% (United Nations, 2020). The «other services» category includes knowledge-intensive business services (KIBS). These are characterized by high shares of expert labour in their workforces (many graduates, many professional workers – performing high-skill and often high-wage jobs), making intensive use of information and communication technologies, and mainly providing high-value services to other companies and the public sector. Therefore, in the last two decades, KIBS have been one of the most dynamic segments within the service sector, not only in developed economies, but also in developing economies (Crespi *et al.*, 2018; Rubalcaba *et al.*, 2018; Seclen-Luna and Moya-Fernández, 2020).

KIBS firms, then, are companies that provide knowledge-intensive inputs to the business processes of other organizations (Miles, 2005). In the regional and national economy, KIBS have played a central role in innovation, as carriers, producers and mediators of knowledge in innovation systems (Hsieh *et al.*, 2015; Cooke and Leydesdorff, 2006; Den Hertog, 2000). However, KIBS also play a very important role in the internationalization process of their clients (Braga *et al.*, 2017; Doloreux and Laperriere, 2014; Di María *et al.*, 2012); access to knowledge from KIBS can have a critical impact on the internationalization of companies (Kamp and Ruiz de Apodaca, 2017; Shearmur *et al.*, 2015).

World exports of digital services – many of them KIBS – have grown faster than total services exports – from 45% to 52% of the total in the period from 2005 to 2019 (UNCTAD, 2022). New sources of information and knowledge are often required for companies to compete and grow in markets of which they have little or no prior knowledge. Companies need to develop a strong knowledge base to successfully compete across borders, where they may face difficulties in foreign markets (Fletcher *et*

al., 2013). The internationalization of clients can be a driver for KIBS firms to expand their operations too, providing appropriate inputs to the clients and leveraging their new knowledge to expand into the new markets themselves (Roberts, 2000). This special issue focuses on the important role played by KIBS in the internationalization of companies, as well as in their innovation processes, with the aim of expanding knowledge in this emerging field of research. It features both quantitative and qualitative research, and draws on empirical material from the Basque Country and other Spanish regions, as well as from Latin America.

In the first article **Arantza Zubiaurre**, **Kristina Zabala** and **Eduardo Sisti** set out to explore whether the demand for KIBS is growing in the manufacturing sector, and, whether growing internationalization of KIBS firms is a result of the internationalization of the manufacturing sector. Differences in these relationships may also be apparent across various categories of KIBS. The authors focus the analysis on two regions of Spain that are highly industrial and with the presence of KIBS: the Basque Country and Catalonia. Using Input-Output methodology with data from the two official statistical institutes, these authors examine the evolution of demand for KIBS, and their opening to international markets. The authors suggest that there can be a virtuous «innovation-internationalization» circle, and that the different policies implemented in each of these regions play an important role in creating these trends.

The second article, by **Ciara O’Higgins**, **Inmaculada Freije**, **Alberto de la Calle** and **Antonio Martínez**, describes the difficulties that C-KIBS (creative-KIBS) go through in order to internationalize. The authors consider that the existing theoretical framework prevailing in the field of international marketing is inadequate when applied to C-KIBS with their orientations towards cultural and creative knowledge. Their analysis of a project carried out during 2019 and 2020 in the Basque Country indicates that many of the C-KIBS do not take the traditional approach of targeting one or several geographic markets; instead, they focus on «niche customers» regardless of their geographical location. The C-KIBS faced such barriers to internationalization as limited access to information to assist their search for new market opportunities, and a lack of organizational and marketing capacities. This suggests that policy makers should support the C-KIBS in building their relational capital, in both local and international markets.

The third article, by **Alfredo Eusebio Payá**, focuses on the cultural and creative KIS (Knowledge Intensive System) zone where cultural and creative industries (CCI) and creative knowledge-intensive business services (C-KIBS) intersect. The author examines five different European C-KIBS firms, identifying the various services they produce and the common problems they face. Overall, Europe displays a trend towards geographical concentration and polarization of costs and benefits – both in the cultural and creative economy, and in the digital economy. Policy and strategy will need to take into account regional differences and the specificities of knowledge bases (including their training, their guiding ideas, and their trajectories) when financing projects of this type.

Miren Estensoro, Mikel Albizu, Asier Murciego and Carla Peletier focus their study on the factors determining KIBS' location in the Basque Country. Drawing on official information from the Directory of Economic Activities, Municipal Education Statistics, and the Census for the years 2009 and 2019, the authors carry out a quantitative non-parametric analysis and complement this with a visual analysis. The results suggest that the concentration of KIBS, through the existence of technology parks, facilitates the advantages of agglomeration linked to specialization. Important differences exist between the localization patterns of different types of KIBS. For example, C-KIBS are heavily located in urban environments or large cities, while P-KIBS (professional KIBS) exist both in urban and non-urban environments. T-KIBS (technological KIBS) tend to be located closer to manufacturing activity, and to be able to prosper more easily in non-urban environments. Multilevel governance, including urban environments, is required for strategies that recognize the role of KIBS in territories' «smart specialization».

The fifth article, by **Aimar Basañez, Jon Barrutia and Arturo Rodríguez**, demonstrates that the services functions performed by KIBS are not exclusive to such firms. KIBS firms may be specialists in these services, but there are types of manufacturing company that also provide advanced services. These manufacturers' core competencies are, of course, those required for producing goods; but in addition, they may deploy some of the technological capabilities for other functions. The authors carry out a qualitative multiple case study of thirteen internationalized manufacturing companies located in the Basque Country. The technical experience of these companies is based on their accumulated know-how in uses, modifications and adaptations of existing technologies (at their company's scale). Thanks to their technological capacity, these manufacturers can innovate through advanced services, enabling the transfer of knowledge in the production and (regional) innovation systems in which they are located. All of the above poses new challenges for policy makers when designing policies aimed at promoting advanced services, since they should not only focus on KIBS firms, but also on all organizations that supply KIBS-type functions to others.

The next article is by **Francisco Callado, Marta Fernández and Natalia Utrero**. The authors address the impact of the offshoring activities of R&D services on the innovative result (product and process innovation) of KIBS and non-KIBS companies. Based on the information from the Technological Innovation Panel (PITEC), the panel includes both service and manufacturing companies and enables the identification of their innovation results and the import of technological services. The suggest that the offshoring activity is an important source of innovation for all companies. The knowledge transfer generated by the offshoring activity can be useful for the development of new products and processes in Spanish companies. However, this relationship varies across subsamples: the relationship appears to be stronger for manufacturing companies than for KIBS. On this basis, the authors conclude that KIBS could be less effective in transforming R&D services transferred from abroad in their innovation processes.

The seventh article, by **Jean Pierre Seclen** and **Pablo Moya**, considers how far KIBS in developing countries such as Peru, carry out internationalization activities. To do this, the authors use managers' responses to questions about their firms' expected increase in share of the domestic market, and expectations for growth in external markets. They analyse factors that positively affect expectations of KIBS' opening to the foreign market. The Peruvian KIBS are more oriented to their domestic market. However, the opening of their operations to the foreign market is influenced by three factors: the non-technological innovation (organizational and marketing) that their company performs; the level of education of their workers (higher education); and their customer relationships. These three factors can be considered to be drivers of the internationalization of KIBS – and, notably, the size, age, and type of KIBS do not influence these relationships. The challenge for the policy maker is to design dual policies: ones that support the promotion of KIBS innovation, and others that facilitate their insertion into both local and global supply chains. A highly qualified workforce is liable to be an intrinsic feature of all such policies.

The eighth article, by **René Castro**, **Valentina Schmitt** and **Elizabeth Aylas**, also addresses factors influencing KIBS' internationalization. The authors obtain a sample of 674 KIBS from the microdata available from the Peru's National Survey of Companies (ENE). The results show that digital capabilities (online purchases and use of software for purchase orders) and the innovations implemented by KIBS depending on their knowledge base, are factors that can explain the export performance of KIBS. P-KIBS and C-KIBS feature positively relationships between product and organizational innovation and export performance – to a greater extent than the T-KIBS. Therefore, these two factors are drivers of the internationalization of Peruvian KIBS, in particular, for indirect exports. The authors suggest that policy interventions should not only focus on promoting KIBS' innovation; but also, to consider KIBS' export potential, and role in boosting the local digital and innovation ecosystem.

In the ninth and last article, **Dimária Silva e Meirelles** and **José Geraldo de Araújo Guimarães** aim to identify the potential for the internationalization of T-KIBS (service activities with technological knowledge content) in Brazil. The authors propose a model that reflects the service process, and they identify the barriers to entry in services, and their use of digital technologies. The results show that although there has been a growth in Brazil's exports of some T-KIBS, it has been very small when compared with world leaders. There is considerable scope for improvement in the development of the necessary conditions for the growth of exports of this type of services.

This special issue involves the collective effort of the editors, reviewers and authors (to both of whom we are very grateful) to broaden the discussion and increase our understanding of KIBS. The aim has been to examine KIBS' own innovation and internationalization processes, the role that KIBS have in such processes of their clients – and to consider not only the industrialized world, but also in the context of emerging economies. We hope that these contributions will inspire more attention

to the issues considered, the implications for further research that they raise, and the challenges that may be posed to policy makers as we enter turbulent times in which KIBS may be called in to deal with many new business problems.

Along with the articles mentioned, this issue of *Ekonomiaz* also features two articles in our *Other Contributions* section.

Óscar García Vaquerizo, Javier Corral, Noemí Peña and Ainhoa Saitua address the increasingly significant topic of corporate social responsibility, more specifically environmental responsibility in this case. The authors analyse and measure the ways in which significant businesses in four different sectors of the economy (energy, industry, textiles and consumer goods) provide information on environmental issues in the non-financial statements (NFS) that they are obliged to submit. The article finds that although the level of information provided can be considered as good on average there are differences between the firms analysed. The identification of companies and sectors with best practices is intended to serve as a guide and support to help others draw up their own NFS.

The second and final article is by **Lucía Gorjón, Kristina Kallage and David Martínez de Lafuente**. They analyse the data provided by the Student Job Placement Survey conducted by the University of the Basque Country (UPV/EHU) to determine how different educational itineraries on the part of men and women contribute to gender gaps at work for young Basque graduates. They find that gender disparities do not take the form of lower levels of employment but rather of poorer working conditions (fewer working hours and lower wages).

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