Abstract for “Intangible Capital and Industry Productivity Growth: Measurement Methods and Policy Challenges”

Cecilia Jona Lasinio (Italian Statistical Institute and LUISS, Italy)
Carol Corrado (The Conference Board, New York)
Jonathan Haskel (Imperial College London, UK)
Massiliano Iommi (Italian Statistical Institute and LUISS, Italy)

The measurement of intangible investment has become a fundamental challenge both in the sources of growth literature as well as for national accountants since the seminal work of Corrado, Hulten and Sichel (2005) who estimated business intangible investment in the U.S.. At the moment, the biggest effort to measure intangible investment in an harmonized framework focused on the development of a methodology to estimate intangible capital for the aggregate business sector for the European countries and the US (INTAN-Invest; Coinvest; INNODRIVE). Other country estimates are available for Japan and Korea (Fukao et al. (2009) Pyo et al (2012)).

As overall business intangible investment is large and growing in advanced countries (Corrado et al 2013) the development of harmonized methods and measures of intangible capital at the industry level is essential for a deeper understanding of economic growth and to design macroeconomic policies aimed at stimulating sustained growth, competitiveness and sustainable development. A key policy issue is that investment in many intangible assets, such as R&D, design and new business processes may produce spillovers in the economic system thus stimulating economic growth. In this respect, industry measures of intangible capital are a crucial element to investigate the diffusion mechanisms of innovation across sectors and to define better economic policies.

Very recently, a few studies started to look at intangible investment at the industry level, for example Chun et al. (2012) and Miyagawa and Hisa (2013) measure intangible investment for 108 Japanese industries (JIP industry classification) while O’Mahoney et al. (2012) produce measures of intangible assets by 1-digit NACE industries for 14 EU countries (FP7 project INDICSER). In this paper we provide a contribution in this respect. We first analyze theoretical and conceptual issues related to the capitalization of intangibles at the industry level and we illustrate the INTAN-Invest methodology to estimate intangible capital expenditure at the sectoral level. We develop harmonized measures of intangible investment across countries and market sectors taking into account the consistency with National Account principles and with the INTAN-Invest business sector estimates of intangible capital (Corrado et al., 2012). New with this work will be improved INTAN-Invest measures that (1) better capture industry-level investments on own-account, (1) incorporate research on industry-level depreciation rates for R&D, and (3) improve the aggregate and industry representation of brand equity capital and brand investments. Then we provide descriptive evidence about the industry dynamics of intangible expenditure by each asset type across countries and we look at the role of intangible capital as a source of growth across 12 EU countries and the US in eight industries, over the period 1995-2010. Finally we evaluate how economic policy settings can be readjusted to favor intangible investment and to stimulate efficient reallocation of resources to new sources of growth.
References