

## Summary of macroeconomic effects of European standardisation

This is a summary of part 1 of the report Functions and Effects of European standardisation.

**European standards contribute to increased productivity in the EU and EFTA countries.** In an analysis of 19 EU and EFTA countries, we find a positive relation between the net stock of European standards and productivity. The result is robust across a variety of model specifications which control for variables such as labour input, capital services, patents, country-fixed effects, time-fixed effects, and recessions. The results indicate that a one percentage point growth increase in the stock of European standards is associated with an increase gross value added of approximately EUR 8.4 billion in the succeeding year for EU and EFTA countries.

**The main benefits of standardisation are realised downstream in the value chain.** We analyse both the effect of standards in each sector, and the effect downstream in the value chain. The productivity gains from standards seem to be largest in the sectors buying inputs from the sectors that apply the European standards. This is an important finding for policy implications, because it means that the largest benefits appear to be realised by firms which are not the ones undertaking the cost of standardising. This may have implications for the optimal level of subsidies for the development of European standards, and how European standards are priced.

**Both harmonised and non-harmonised standards contribute to productivity, but non-harmonised standards are found to contribute more.** European standards consist of both harmonised standards and non-harmonised standards. Harmonised standards are created on request from the European Commission – often to fulfil policy-related goals – while non-harmonised standards are developed from market forces, as standards normally are. We find that non-harmonised standards contribute more than harmonised standards do, but that harmonised standards also have a positive effect on productivity. The finding that harmonised standards appear to have a positive contribution on productivity means that they can be a suitable tool both for enhancing productivity and for ensuring other goals of the European Commission. It may be worth examining whether harmonised standards could be used as a tool to an even larger extent than today.

**European standards appear to contribute to increased innovation by creating a common platform from which firms can innovate.** We use data from the Community Innovation Survey (CIS) and perform a correlational analysis to shed light on how European standards may affect innovation. We find that firms in sectors with more European standards have more innovations that are world leading or new to the market, but fewer innovations that are new only to the firm. This may support two hypotheses. First, that European standards create a common platform, so firms do not need to perform firm level innovations already known to others. Second, that when the European standards push more firms up to the frontier, the number of firms which can make new innovations increases, which again leads to more innovation. This is not a causal finding but indicates that European standards can contribute to increased innovation. When planning on which areas to develop new standards, it may therefore be worth focusing on where European standards can disseminate a “best practice” for firms to innovate from.

**European standards develop alongside improvements in sustainability:** We examine the relation between European standards and Sustainable Development Goals (SDGs). We map the relevant European standards to each sustainable development goal and examine whether the trends in standardisation coincide with improvements in 13 sustainable development goal indicators. In general, the analysis shows that when the number of relevant European standards increases, the SDG indicator also tends to improve. The findings are in line with a hypothesis that European standards contribute positively to sustainable development.