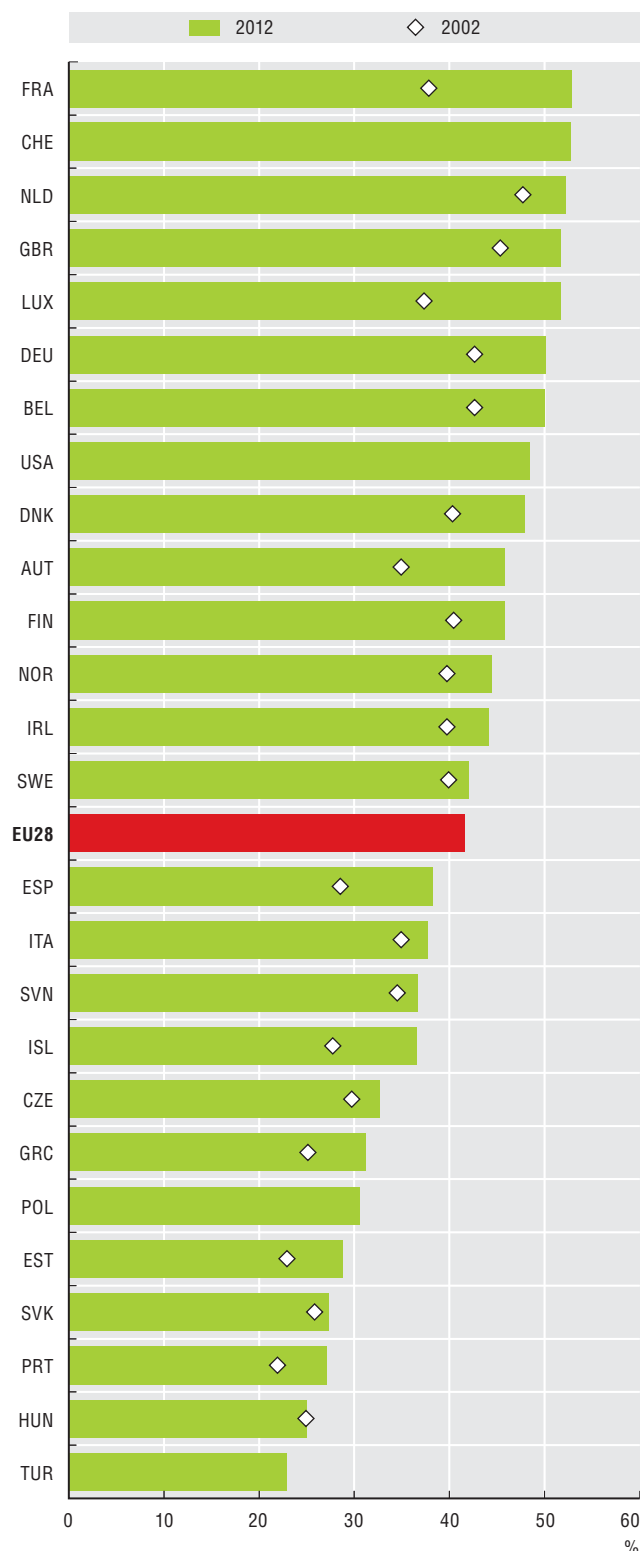


2. Services-manufacturing linkages

Services-related occupations in manufacturing,
2002 and 2012

As a percentage of total employment in manufacturing



Source: OECD calculations based on EU Labour Force Survey and US Current Population Survey, May 2013. See chapter notes.

StatLink <http://dx.doi.org/10.1787/888932904127>

Manufacturing production in many OECD countries has declined in recent decades so that, on average, services now account for about 70% of OECD GDP. In France, the United Kingdom and the United States, manufacturing accounts for only 10%, or lower, of total employment. In addition to the general decline, the scope and nature of manufacturing has changed in many OECD countries and now relies more on service occupations and inputs. This is due to the greater use of technology in production, the international sourcing of manufactured goods and a range of social factors (such as the changing skills of populations). Two indicators presented here provide insights into the interdependence of services and manufacturing industries.

Data on occupations show a steady increase over the last decade in the share of workers in manufacturing employed in occupations that can be considered services-related, such as managers, accountants, lawyers and IT professionals. In 2012, the share in Europe had reached about 41% (up from 35% in 2002) and varied between 25% and 53% across countries.

Estimates from the new OECD-WTO Trade in Value Added (TiVA) database reveal the amount of value added derived from services embodied in the exports of manufactured goods. In 2009, the services content embodied in manufactured exports varied between 25% and 40% across OECD countries, and between 1995 and 2009, it rose significantly in most countries. For many this was mainly due to increases in embodied foreign services. The sectors Wholesale and retail trade, hotels and restaurants and Business services account for the bulk of services embodied in manufacturing; business services posted the greatest increases between 1995 and 2009.

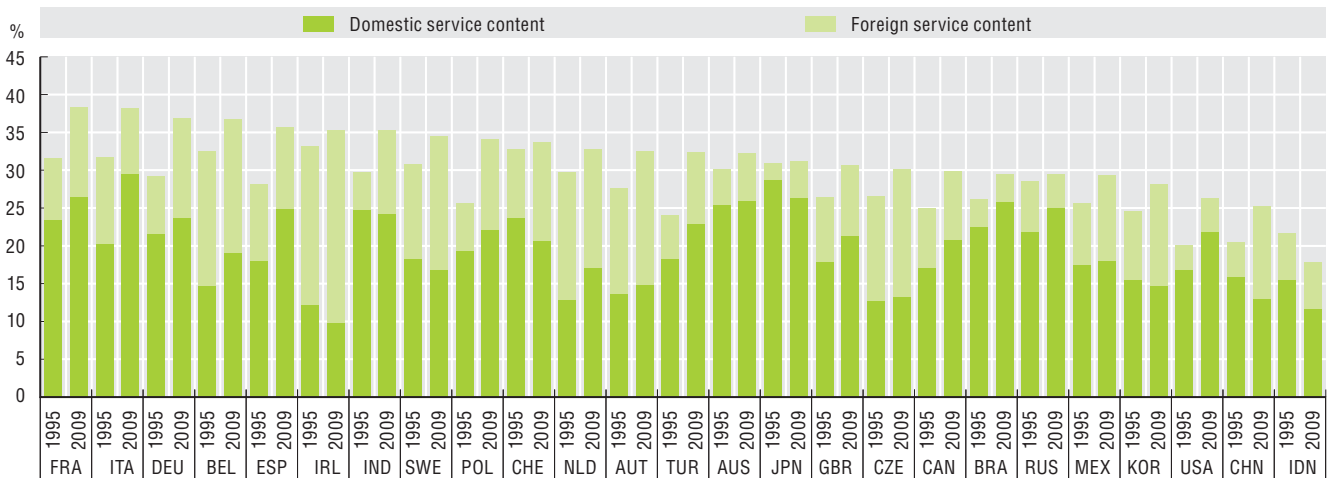
Definitions

Services-related occupations correspond to ISCO-08 (2002: ISCO-88) major groups 1, Legislators, Senior officials and Managers; 2, Professionals; 3, Technicians and Associate professionals, 4, Clerks; and 5, Service workers and shop and market sales workers. Manufacturing refers to ISIC Rev.4 (NACE Rev.2) Divisions 10 to 33 (2002: ISIC Rev.3/NACE Rev.1 Divisions 15 to 37).

For services content of exports, sectors of economic activity are defined according to ISIC Rev.3: Manufactures: Divisions 15-37; Construction: 45; Wholesale and retail trade, hotels and restaurants: 50-55; Transport and storage, post and telecommunications: 60-64; Financial intermediation: 65-67; Business services: 70-74; and Other services: 75-99.

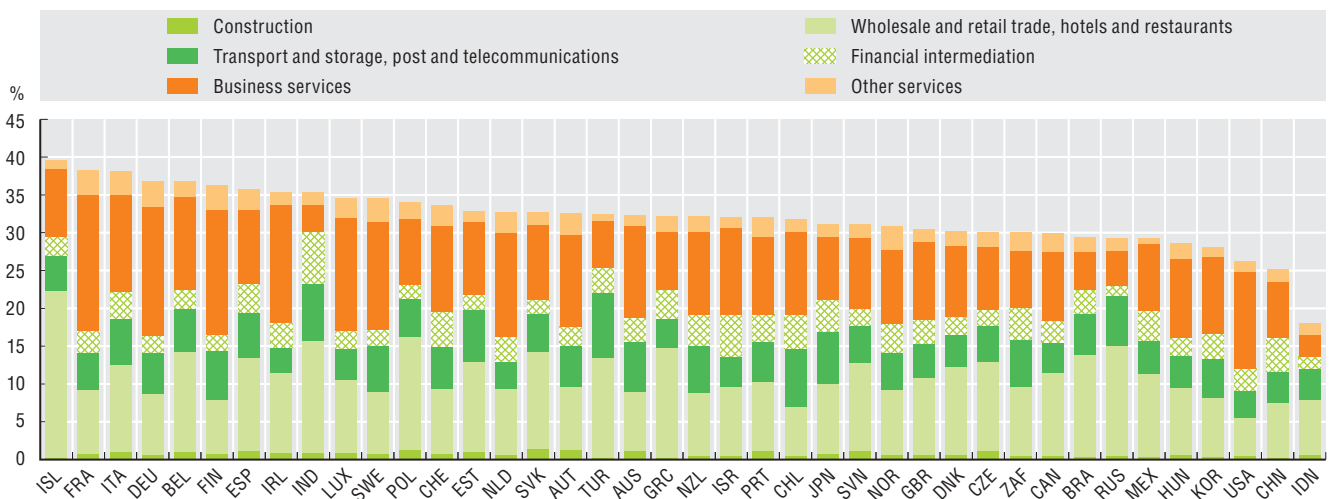
Services content of manufactured exports, domestic and foreign, 1995 and 2009

As a percentage of total manufactured exports

Source: OECD-WTO, Trade in Value Added (TiVA) Database, <http://oe.cd/tiva>, May 2013. StatLink contains more data.StatLink <http://dx.doi.org/10.1787/888932904146>

Services content of manufactured exports by type of service, 2009

As a percentage of total manufactured exports

Source: OECD-WTO, Trade in Value Added (TiVA) Database, <http://oe.cd/tiva>, May 2013. StatLink contains more data.StatLink <http://dx.doi.org/10.1787/888932904165>

Measurability

The indicators of service content of manufacturing exports are based on the global input-output system developed by the OECD, the Inter-Country Input-Output (ICIO) Database. This data set describes interactions between industries and consumers for 58 economies, 37 industries and 95% of global output. ICIO is very useful for policy analysis and aims at better reflecting: a) the significant contribution made by services in global value chains; b) the important role of imports for export performance; c) the true nature of economic interdependencies as reflected in bilateral trade balances in value added terms; d) the role of emerging economies in global value chains; and e) the impact of supply and demand shocks on downstream and upstream production.



From:

OECD Science, Technology and Industry Scoreboard 2013

Innovation for Growth

Access the complete publication at:

https://doi.org/10.1787/sti_scoreboard-2013-en

Please cite this chapter as:

OECD (2013), “Services-manufacturing linkages”, in *OECD Science, Technology and Industry Scoreboard 2013: Innovation for Growth*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/sti_scoreboard-2013-61-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.