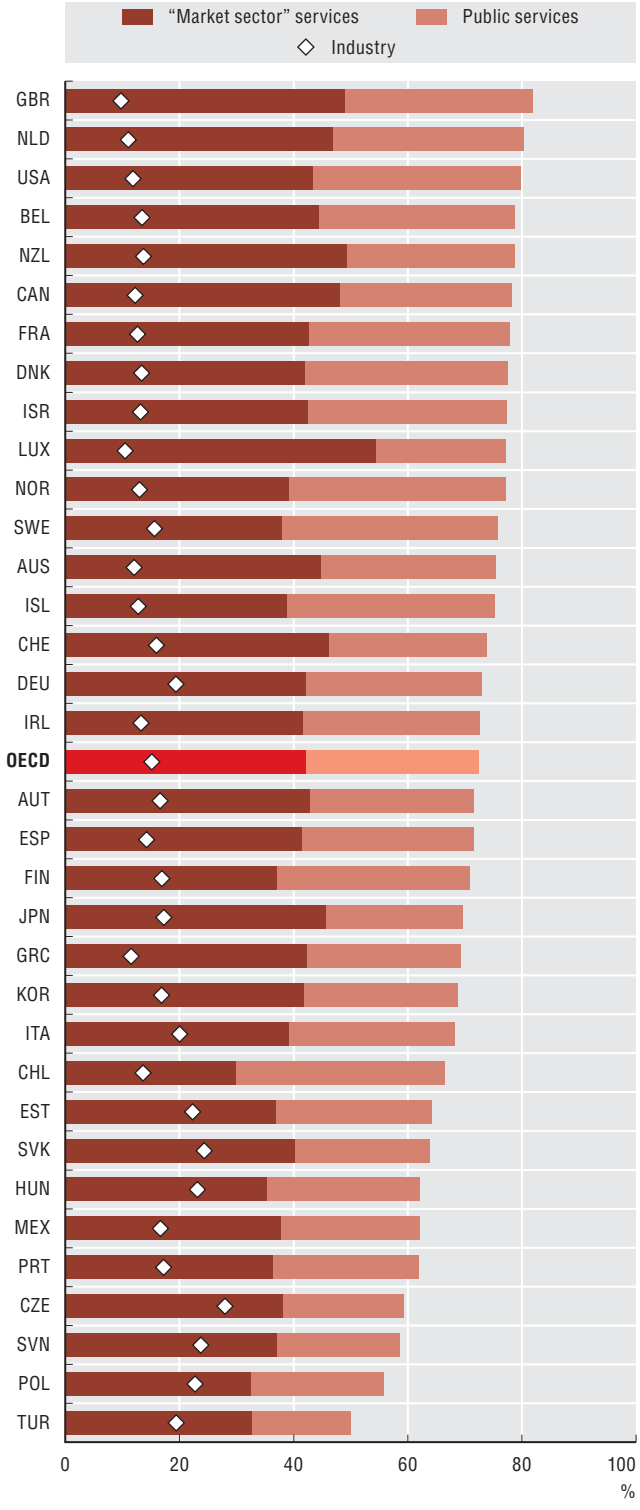
1. Employment

Employment in services, 2009

As a percentage of total employment



Source: OECD, Annual National Accounts Database, June 2011. See chapter notes.

StatLink http://dx.doi.org/10.1787/888932487552

With employment in manufacturing and construction being particularly badly hit during the recent crisis, the role of services in many OECD countries became even more significant. By 2009 services accounted for over 72% of OECD employment reaching about 80% in the United Kingdom, the Netherlands and United States. Public services continue to be significant employers; the OECD average was about 30% in 2009 and reached over 35% in some countries, particularly in Scandinavia. Countries that still have a significant industrial or agricultural base (such as Poland, Slovenia and Turkey), inevitably rely less on services; however, services are still responsible for over half of their employment.

All industries generate or exploit new technology and knowledge, but some are more technology- or knowledge-intensive than others. They are leading producers of high-technology goods and activities (notably services) that are intensive users of high technology and/or have the highly skilled workforce needed to benefit fully from technological innovations.

In general, the share of employment in knowledge-intensive services increased steadily between 2000 and 2008, mainly driven by business activities (*e.g.* IT-related services, legal, engineering and other technical services) and buoyant financial sectors. In a few countries these sectors account for over 20% of employment.

In contrast, the share of high- and medium-high-technology manufacturing in OECD employment has declined steadily in recent years due to rapid productivity growth and the continuing shift of such activities to non-OECD countries, including off-shoring by multinational firms. The decline has been particularly marked in Ireland and the United Kingdom, while the Czech Republic, the Slovak Republic, Hungary and Poland have experienced increases.

Definitions

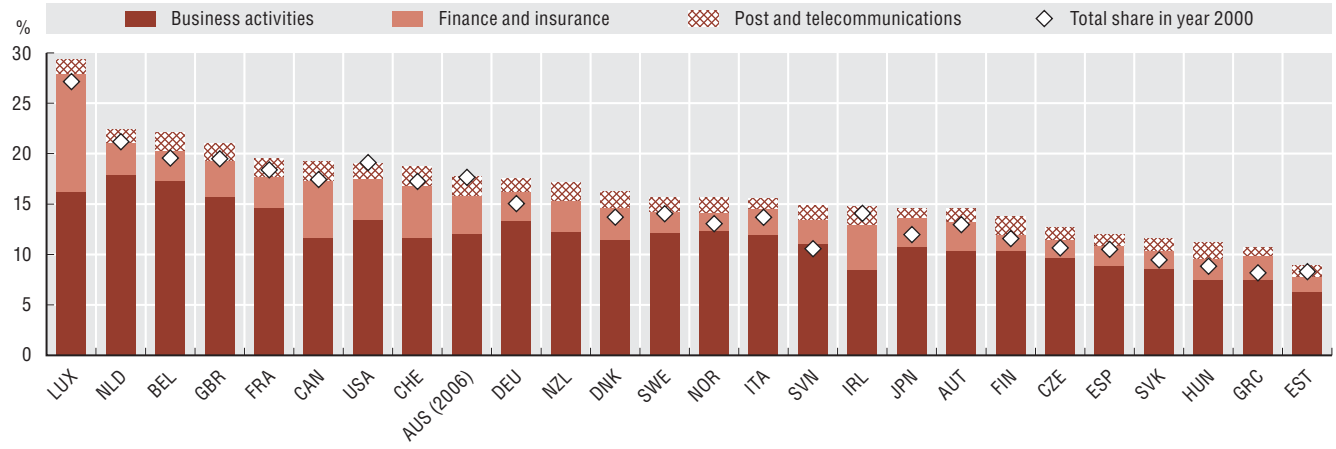
Market sector services are defined according to ISIC Rev. 3 Divisions 50-74; *public sector services* as Divisions 75-99: Government (75), Education (80), Health (85), Other community, social and personal services (90-93) and Private households (95); and *industry* as Divisions 10-41: Mining (10-14), Manufacturing (15-37) and Utilities (40-41).

Knowledge intensive "market services": Post and telecommunications (64), Finance and insurance (65-67) and Business activities (71-74).

High and medium-high technology manufactures: Chemicals and chemical products (24), Manufacture of machinery and equipment, n.e.c. (29), Electrical and optical equipment (30-33) and Transport equipment (34-35) – determined by analysis of industry R&D intensity (R&D expenditure relative to output) for an aggregate of OECD countries.

Employment in knowledge-intensive "market" services, 2008

As a percentage of total employment

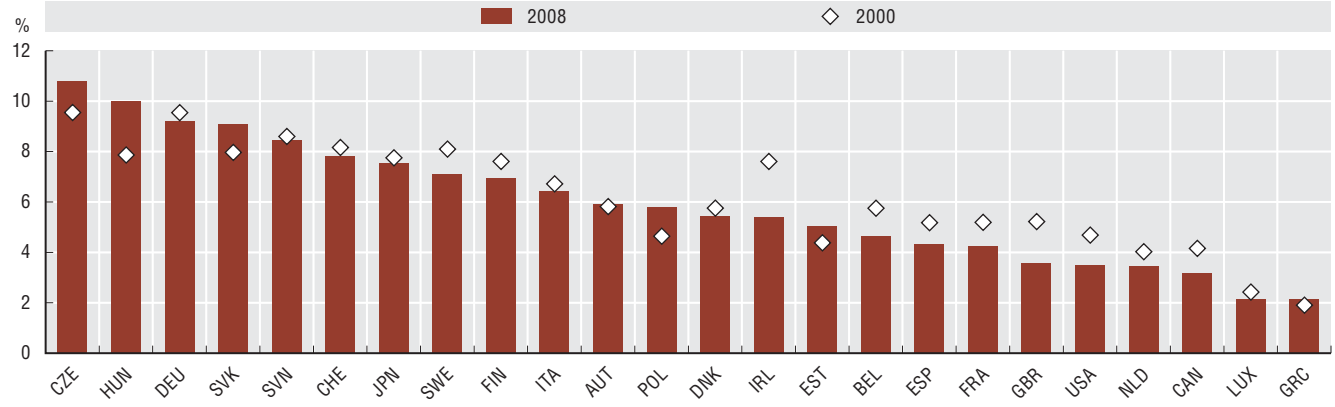


Source: OECD, Structural Analysis Database (STAN), May 2011. See chapter notes.

StatLink http://dx.doi.org/10.1787/888932487571

Employment in high- and medium-high technology manufacturing industries, 2000 and 2008

As a percentage of total employment



Source: OECD, Structural Analysis Database (STAN), May 2011. See chapter notes.

StatLink http://dx.doi.org/10.1787/888932487590

Measurability

Using an industry-based definition, the distinction between market and public services is an approximate one. In OECD countries, private education and health services are available to varying degrees while some transport and postal services remain in the public realm.

While there have been established methods for classifying manufacturing industries according to technological intensity (*e.g.* measurement of direct and indirect, or embodied, R&D expenditure relative to output), determining the "knowledge-intensive" services sectors has proved more challenging. As many services perform relatively limited amounts of formal R&D, other metrics have to be used, such as skill composition of the workforce and intensity of investment in ICT equipment. Recent work has focused on using data from innovation surveys. The development of such classifications also has to take into account the level of industry detail present in the data collections to be analysed.